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The Nation, Our Campus

ALVIN B. ROBERTS
Principal, Haw Creek Township High School, Gilson, Illinois

A detailed account of the workings of an elaborate and thoroughly established school-journey program.

Would you like to make a 2500 mile tour of the state of Illinois, visiting many of its leading scenic and historic sites, its most important industrial centers, its capital, and many other places of interest? Or again, would you like to make a 12,000 mile tour of west central, southern, east central, and northeastern United States, visiting not only scenic and historic points, but leading industrial and agricultural sections as well? Before answering either of the above questions, remember the only cost to you is board, lodging and entrance fees. Transportation is free!

Each student entering the Haw Creek Township High School may answer either of the above questions in the affirmative if he wishes to go and his parents give their consent.

The tours covering the state are made in a series of eighteen to twenty or more trips, ranging from a few hours to a full day. It takes the student the full four years to make the eighteen or twenty trips. The long tour is made up of four to twelve-day trips, given at the close of the school term. These average approximately 3000 miles each. Since most of the students carry their own lunch on the one-day trips there is practically no expense for meals, and nearly every place visited is free, so there is no expense for entrance fees. The average cost per student on the long tour is twenty-two dollars per trip. This includes meals, lodging, (first class hotels), entrance and guide fees.

It is not the purpose of the author to discuss in this article the value of the field tour, but rather to point out how the entire school curriculum may be enriched through it, and how an extensive program can be developed at an extremely low cost to the Board of Education and the students.

The tour program of this school is based upon the fundamental psychological principle that the child thinks only in terms of past experiences. Therefore, in order to make the classroom experience more meaningful, slides, motion pictures, and tours are used extensively. The motion picture and slide are an excellent means of preparing the student for the field tour. Motion picture films, slides, and flat pictures serve also as a fine method of reviewing and summarizing the school journey.

There are several factors favoring the further development of the tour program in the schools of our country. They are: (1) good highways, (2) rapid and cheap transportation, (3) favorable public opinion, and (4) cooperation of public and private concerns visited.

The idea of a comprehensive tour program for the students of this High School (average enrollment, 90), came into existence seven years ago when the Board purchased a bus for the transportation of pupils. The Board decided to make the bus available to all teachers for field work. The idea of the long tours was not inaugurated until the spring of 1937. Needless to say, the tour program has been revamped in many respects and is still in the embryonic stage.

When the tour program was first introduced, the instructors were asked to plan each trip so that the things studied in the field would correlate with the material studied in the classroom. Most of the instructors were well acquainted with places that could be visited. This is one of the major requirements for planning a successful trip. Each instructor turned in a list of the places he felt he wished each of his classes to visit. He stated the major objectives of each trip, and also the type of preparation he felt was necessary for the students to get the most from the tour.

From a study of the material turned in, it was decided that all trips in the freshman and sophomore years would be open to all students (except the trips in agriculture) and that all trips in the junior and senior years should be made according to different subject fields. Tours were so distributed as to prevent lopsided enrollments in elective subjects because of them.

Many of the details in planning the tour are worked out by the students. While this takes longer, it may be justified because the experience is valuable to them. Better cooperation may be expected from the students if they have a part in the planning of the driving schedule, lunch, rest stops, etc. A brief study of the following tours, showing the points of interest and areas studied, reveals a wide variation in the type and nature of the places visited. If one notes also the films used in preparing the students for the various tours, he sees...
that the motion picture and tours correlate very nicely in providing an enriched and varied background of real experience.

Short Tours

I. Galesburg Newspaper (Freshman Class—Community Civics—Conducted by Miss Scudder).
Film—"From Tree to Newspaper"—Study of methods of gathering news, local and foreign; the personnel; machines in the composing room; press in operation; vocational opportunities in the field.

II. Galesburg Post Office (Freshman Class—Community Civics—Conducted by Miss Scudder).
Study of the social and economic value of mail service; various classes of mail; volume of business; the personnel; methods of handling mail, both incoming and outgoing; opportunities in the postal service.

III. Galesburg Sewage Plant (Freshman Class—General Science—Conducted by Mr. Snyder).
Film—"Sewage Disposal"—Study of machinery; automatic recording instruments, automatic starting and stopping of equipment; chemical processes involved in sewage disposal; governmental services rendered; interdependence of members of any community and need of group cooperation.

IV. Lecvision Mounds and Strip Mine (Freshman Class—General Science—Conducted by Mr. Snyder).
Films—"Digging Up the Past," "Ittuminous Coal"—Study of life and habits of early inhabitants of this area; research methods involved in obtaining historical information; machinery used in the field and the tipple; formation of coal, leading into geological history of the area.

V. Kokuk, Colmar, Carthage, Nauvoo (Freshman Class—General Science—Conducted by Mr. Snyder).
Films—"Heat and Light from Electricity," "Evolution of Oil"—(Kokuk) generation of electricity; corporations in American industry; automatic equipment; engineering and vision required in planning and building such a plant; physical principles involved in generation of electricity. (Colmar) Oil fields—pumps at work; how oil is piped to central station; small refinery which makes fuel, gas, and kerosene. (Carthage) The old jail connected with the history of the Mormons. *(Nauvoo) The Joseph Smith home; site of the old Mormon Temple; other points of interest in connection with the Mormons.

VI. Laura (Sophomore Class—Economic Geography—Conducted by Mr. Snyder).
Advantages of piping oil over other means of transportation; replacing of man labor by machinery; study of Diesel engines; electric generators.

VII. Starved Rock (Sophomore Class—World History—Conducted by Miss Scudder).
Hennepin Canal; Starved Rock State Park; Deer Park.

VIII. Springfield and Old Salem (Junior Class—American History—Conducted by Mr. Roberts).
Films—"Abraham Lincoln" (2 reels), "Evolution" (3 reels). (Springfield) State Capitol Building; Houses of General Assembly; dome; underground passage to Centennial Building; Centennial Museum (Special attention given to the following: display of Indian relics in the North Corridor showing evolution of animals; natural habitat groups, such as the polar bear, deer, etc.; and the birds, eggs, and trees common in this area); Supreme Court Building, Apartment of the Judges; courtroom where judges meet; Lincoln Home; Lincoln Tomb; Governor's Mansion; statues of Richard Yates, Pierre Menard, Stephen A. Douglas. (Old Salem) The village made famous by the fact that Lincoln lived here for a period of seven years; early pioneer store, saloon, office, dwelling; plus farm, such as the Cooper show, wheel makers, tanner, etc.; typical furniture and materials sold by early pioneer stores and shop keepers.

IX. St. Louis (Junior Class—Biology—Conducted by Mr. Roberts).

Shore's Botanical Garden—Orchid room, Cactus plant, Tropical room (including coconut palms, date palms, banana, coffee, and rubber plants), Italian garden, Economic garden (rice, tobacco, sugar cane, cotton, broom corn, European methods of fruit growth), home and tomb of Mr. Shaw. Forest Park Zoo—Bear pits, sea lions, monkey house, primate or monkey house, lion house, outdoor group of birds, bird house, outdoor group of animals, giraffe, zebra, kangaroo, raccoon, prairie dogs, etc.

Jefferson Memorial—Statue of Thomas Jefferson, Lincoln's head, various buildings, Civil War period, equipment used by Perry on his dash to the North Pole, Indian relics of various periods in history from colonial times to the present.

X. Chicago (Junior Class—Biology—Conducted by Mr. Roberts).

XI. Hannibal (Junior Class—American Literature—Conducted by Mrs. Roberts).
Film—Mark Twain Pilts to La Grange College at Hannibal; Home of Mark Twain; Mark Twain Museum; Old Graveyard, Cardiff Hill; Mark Twain Bridge; Mark Twain Cave.

XII. Springfield (Senior Class—Civics—Conducted by Mr. Roberts).
State Capital: Historical dates; the complexity and scope of state governmental activities; the Legislative and Judicial Chambers.

XIII. Chicago (Senior Class—Economics and Physics—Conducted by Mr. Snyder).
Films—"The Story of the Spark Plug," "The Four-Stroke Cycle Gas Engine"—Board of Trade—Rapidity and extent of international communication via telegraph and cable; modern speculation and methods of dealing; verbal contracts which are binding; historical information. Rosenwald Museum of Science and Industry: A laboratory of physical and chemical apparatus and experiments; working models, such as airplane motors, coal mines and equipment, electrical experiments, electrical machinery and generators.

XIV. Peoria Caterpillar Tractor Company (Senior Class—Economics—Conducted by Mr. Roberts).
Film—"Behind the Scenes in the Machine Age" (3 reels), "The Manufacture of Sheet Steel and Tin Plate"—Labor saving devices; replacing man labor with machines; division of labor; regional division of labor.

XV. Soils and Crops (Trips to various farms in the community. Agriculture I Class—Conducted by Mr. Strubinger).
Film—"The Cycle of Erosion"—Soil testing, to acquaint the technique of taking soil samples; soil conservation, to see the modern means of saving the soil, terracing, contour farming, strip farming, etc.

XVI. Stock Judging (Trips to various farms in the community. Agriculture II Class—Conducted by Mr. Strubinger).
To see and examine stock to gain a knowledge of both desirable and undesirable characteristics, and to get an accurate picture of what the desirable types of animals actually are.

XVII. Springfield State Fair (Agriculture I, II and III Classes—Conducted by Mr. Strubinger).
To get the stock that is actually brought into the State Fair and see what types of animals various breeders are actually trying to develop. As at the International Livestock Show, to gain inspiration and incentives toward higher levels in our own work. At the State Fair there is a growing tendency for the bulk of the livestock shown to be that of the Union Clubs, 4-H and Vocational. An understanding of what others
are doing is, or should be, inspirational to us in our own work.

XVIII. Chicago International Livestock Show (Agriculture 1, II and III Classes—Conducted by Mr. Strubinger).

To see how animals are fitted for show; what show-animals actually look like; amount of finish which is expected; showing of animals in the ring; judging of animals; how an experienced judge actually does it; to compare various breeds of beef animals as they are seen in the show ring; exhibits of grain and hay.

The short tour program may be summarized as follows:

1. All tours are free to all students. Practically each place visited is open free of charge to students, with the exception of the Lewiston Mounds and the Livestock Show at Chicago. Each trip is made in one day. 2. The total mileage of all short trips is around 2500 miles. 3. Students must be members of certain classes in order to make these trips. The trips have been planned for numerous classes, so as not to have any one class "lop-sided" because of them. 4. The total cost to the District is less than 25c per student transported. 5. Each trip is conducted by the instructor of the class sponsoring the tour. The students are required to make some preparation for each trip and are encouraged to view it as a regular part of their classroom procedure, rather than as a special feature itself. 6. Preparation for some of the tours extends sometimes over a period of several weeks.

The Long Tours

The long tour presents many problems not encountered on the one day trips. Most of these problems may be classified under one of the following:


The conductor of the long tour will soon realize that the hours spent in planning and visualizing the tour in all of its various ramifications will aid greatly in its success. This is equally true in planning either the mechanical or educational phase of the trip.

The following are the major objectives of the long tour program:

To give the students a better knowledge, understanding and appreciation of (1) the more important geographic features of eastern and central United States, which have played an important part in shaping the history of our country; (2) some of the major events in the history of the United States by visiting many of the leading historic sites; (3) some of the leading statesmen, military leaders, and authors of the United States by visiting homes of these individuals; (4) the vast differences in similar occupations, such as, farming on the great plains in the central states, in the southern states, and in the states of the New England group; (5) some of the leading social problems of each region, for example, the negro of the South; (6) some of the problems of our leading cities, such as Boston or New Orleans, where one sees the foreign sections and tenement districts; (7) the leading industries of central and eastern and western United States; (8) the beauty of the United States by visiting some of its most scenic regions. (On each tour there are

Bits from the pictorial record of the Tours.
many minor aims too numerous to be listed in this summary.)

Natural Bridge, Washington, Mt. Vernon, and Gettysburg Tour (2160 miles) (Spring, 1937—Repeat, 1941)

Films used: "Thomas Jefferson"—"Virginia, The Old Dominion"—"George Washington, His Life and Times"—"Shenandoah National Park"—"Anthracite Coal."


Economic and Industrial Regions: Farming regions of Illinois, Indiana, and Ohio—Mining region of West Virginia—Orchard regions in the valleys of the mountains of Virginia—Tobacco producing regions of Virginia—Truck growing regions, Virginia and Maryland—Iron region of Pittsburgh.

Niagara, Boston, Montreal, and Quebec Tour (3208 miles) (Spring, 1938—Repeat, 1942)

Films used: "New England Shrines"—"Transportation on the Great Lakes"—"The Province of Quebec"—"The Puritans"—"Mohawk Valley"—"New England Fisheries" (2 reeds).


Economic and Industrial Regions: Automobile industry, Detroit—Truck growing region around Detroit—Flat farming region of Ontario—Orchards, especially grape, truck and small farming of New York—Fishing industry of Boston—Shipping industry, docks of Boston—Paper industry at Three Rivers.

Mammoth Cave, Chattanooga, Pensacola and New Orleans Tour (3010 miles) (Spring, 1939—Repeat, 1943)

Films used: "The Old South"—"The New South"—"The River"—"New Orleans"—"Cotton, From Seed to Cloth" (2 reeds)—"Stephen Foster"—"The Negro Farmer"—"Sugar Cane"—"Dixie" (3 reeds)—Yale Chronicles.

Points of Historic Interest: Vandalia, Old State House, State Farm, Old Cumberland Road, which had its terminus at Vandalia—Vincennes, George Rogers Clark Memorial Bridge, George Rogers Clark Monument, William Henry Harrison Home, Land Office where Lincoln secured his grant of land for his Illinois farm, First Library in Northwest Territory, Old French Church—French Lick, Indianapolis, Old Kentucky Home, Old Cathedral—Hodgenville, Kentucky, Birthplace of Lincoln—Mammoth Cave—Nashville, Tennessee, Hermitage, Home of Andrew Jackson, Replica of Old Greek Parthenon, Battlefield of Murfreesboro—Chattanooga, Tennessee, Battlefield, Lookout Mountain—Montgomery, Alabama, State Capitol Building—Pensacola, Florida, Naval Base—New Orleans, Louisiana, Site of Battle of New Orleans, French Section, Spanish Section—Vicksburg, Mississippi—Jackson, Mississippi, State Capitol Building.


Economic and Industrial Regions: Tobacco regions, Kentucky and Tennessee—Tobacco Warehouses and cigarette factories of Louisville—Cotton, Tennessee and Alabama—Fishing and commercial industry, Mobile and New Orleans.

Bad Lands, Black Hills, Yellowstone Park and Grand Teton Tour (3315 miles) (Summer, 1940—Repeat, 1944)

Films used: "Grassland"—"Yellowstone National Park"—"The Cycle of Erosion" —"Conservation of Natural Resources."

Points of Historic Interest: Territory included in the Louisiana Purchase—Portion of area explored by Pike—Portion of area explored and discovered by Clark's expedition to the Pacific Coast—Custer Battlefield—Portion of territory ceded to United States at the close of the Mexican War—Early fort in the Black Hills region near Rapid City—Scene

(Concluded on page 24)
Minnesota’s Growing Visual Education Service

PAUL VEBLEN
As Told by
ROBERT A. KISSACK JR.
Director of Visual Education, University of Minnesota

T IS only eight years ago that the Visual Education service at the University of Minnesota was born. But already it has grown to be one of the largest departments of its kind in the country and has finer equipment—and more of it—than any similar service in any other American university. It outgrew its first quarters in 1935 and is already cramped in the rooms it took over at that time.

The staff Robert A. Kissack, Jr. had under him when his service was established in 1932 consisted of only two men—electrical engineering students who worked part-time in the Visual Education department. Those three, given a few pieces of projection equipment, began the job of collecting and classifying educational movies, slides and other visual aids, and got under way a program of supplying classes of the new General college with illustrative materials desired by instructors. The project was intended to be on a merely experimental basis during its first year, but at the end of that year it had proved its worth and its continued existence was insured. Instructors in all parts of the University found the new service of such real value that in 1932-33 more than 290 showings of motion pictures and slides were made. Most of these bookings were in the General college, but the idea was beginning to spread throughout the campus.

Since then, the service has increased in scope. Last year the bookings topped 2,500 and the staff was more than 10 times the size of the original one.

But what sort of home does this enlarged but still typical visual education department have? If another school were to establish a similar service, what parts of that home would they find it profitable to copy?

Office

Headquarters of Minnesota’s Visual Education service are in Wesbrook hall, a building located conveniently near the center of a large campus. Here is filed all available information concerning slides, motion pictures and other visual aids that might be helpful to faculty members in any department of the University. From here all activities of distribution, production, projection and maintenance are directed.

Often as many as 22 classroom showings of pictures—sometimes five or six of them simultaneously—are handled by the projection crew. Merely to arrange the details of this complicated daily booking schedule requires the constant attention of Harold B. Jensen, an assistant of Mr. Kissack. A small rental charge is made when each motion picture or set of slides is shown, and within a few years this part of the service will become completely self-supporting.

Preview Studio

This 15 x 30-foot room, furnished with collapsible chairs, seats an audience of 24 persons. Nearly every

Left—Cine Special in home-made blimp for interlock sound shot. Center—Truck which is complete mobile sound camera unit, with specially built platform for camera in blimp. Right—Presto disc recording.
The raised 6-inch fireproof room is care-fully sound-proofed and is, in fact, a room within a room, with the inner walls separated several inches from the outer walls. Excellent acoustics are insured by the cork floor and acoustically treated walls and ceiling.

At the front of the room is a sound screen with a built-in speaker. There are three ventilation outlets in the ceiling and a series of inlets within the walls themselves. Because of the room's excellent sound insulation, it can be used for sound recording and camera work.

At the rear of the studio is a raised platform, accommodating four chairs and a long, narrow preview bench with an inclined surface. This surface is evenly lighted by a series of shielded, tubular lights, giving adequate illumination for reading or writing but not enough to detract from the illumination of the screen at the front of the room. During preview, notes are taken on the sources of the pictures, their condition and photographic qualities, direction, educational level and value, the teacher's comments and an analysis of the contents of the films. All this information is later transferred to special cards arranged in a master file system in the front office.

Projection Booth

The projection booth adjoining the preview studio is fireproof, ventilated, and has four projection ports and four observation ports of double glass. Soundproofing of this booth insures complete silence in the preview room during projection. Because of the four projection ports, programs can be conveniently shown in which four different kinds of films and projectors are used. The booth is provided with a film cabinet and facilities for rewinding.

Recording Booth

The recording booth, like the projection booth, is lined with sound-proof material. A large double glass window separates it from the preview studio, where microphones are installed for recording purposes when necessary. There are loud-speaker facilities for two-way communication between the recording booth and studio. A switch for the warning light outside the studio door—controlled also from the studio—prevents interruption during recording.

Most of the recording is done for the speech department, which sends over classes of students on a regular schedule. Each student has his voice recorded at the beginning and end of the quarter on a 6-inch acetate disc, which he buys at a very small cost for classroom and individual study. For the speech clinic, where speech defective are treated, 16-mm sound movies, also made in the preview studio, have proved quite successful. With the sound movies to study, students suffering from speech impediments can hear, see and analyze their difficulties and cure is thereby facilitated.

Students of Robert J. Sailstad, coordinator of speech in the General College, also see action before the Visual Education service cameras and are better able to correct their speech faults after studying motion pictures of themselves.
Film Vaults

The film vaults are provided for storage of all University-owned motion picture film. One has a capacity of 2,500 reels and the other a capacity of 750 reels. They are fireproof, and by means of special insulating and cooling systems both humidity and temperature can be maintained at most satisfactory levels for film preservation.

There is another storage room where numerous types of portable projection equipment, both for slides and movies, are kept. Stowed there too are screens, cameras, lights, microphones, amplifiers, and many odds and ends. The portable projectors are scheduled by Mr. Jensen for classroom use throughout the University to supply the needs of rooms where permanent installation of such equipment is not justified. The University has, at present, nearly 150 slide projectors and about 50 motion picture projectors of different types.

The University's portable public address equipment is also scheduled by the Visual Education service for use throughout the campus.

Cutting Room

In the cutting room—a long, narrow one—is an editing bench, complete with splicer and other necessary equipment. At one end is a small dark room in which loading and unloading of cameras is conveniently done.

Every attempt is made to keep the cutting room free from dust and dirt. Walls are painted glossy white, windows sealed, and clean air supplied by a special blower. As an additional precaution, all cutters wear clean gloves and laboratory coats when handling negative.

Shop

A small shop provides for the never-ending stream of repair, construction and maintenance jobs necessary by the servicing of so many different types of projection and amplifying equipment. It has also proved invaluable in the building of various equipment not available from manufacturing companies. In it, for instance, was constructed a lighting and power-distributing unit and switchboard with 20 outlets, extremely compact and easily transported for location shooting.

It is in these surroundings, which also include a shipping room and two laboratories, that the work of the University of Minnesota's Visual Education service is carried on. Other schools planning to establish similar departments would find it profitable to investigate those quarters.

How To Choose A Still Camera

A highly concrete presentation of specific points to be considered in the purchase of a camera.

M. RICHARD DICKTER
Furness Junior High School, Philadelphia, Pa.

by photoflood or of subjects involving slight motion?
A camera is needed with shutter speeds of 1/25, 1/50, 1/100 second or faster and an f6.3 or faster lens. Naturally, the faster the lens, the more expensive the camera.

3. Do I want to take pictures without a tripod under very unfavorable light conditions outdoors during the day or in generally poor artificial light indoors or outdoors at night?
A camera for these purposes must have a lens of speed f 2.8, or f 2 or even f 1.5. Such high-speed lenses are made only for the miniature cameras, that is, cameras taking pictures of size 21/4 x 21/4 or smaller. Extremely fast lenses for larger cameras would be too bulky and would have to be of such large diameters that their cost would be prohibitive. As faster film of good quality is placed on the market, there will be less and less need for the ultra high-speed lenses for all general purposes.

4. Do I expect to take fast action shots?
Then the camera should have fast shutter speeds of 1/1000 second, or even faster, and fast lenses if such pictures are to be made under unfavorable light conditions.

5. Do I expect to do much work for which careful composition is desirable, such as portraits and copying?
A camera with ground-glass focusing is advisable for such work to permit accurate composition. The image
as seen in the ground glass is the same size as it will be on the negative and very much as it will look on the final contact print. In addition, for copying, the camera should have at least a double bellows extension to permit real close-up work without auxiliary attachments.

6. Do I want a camera that takes interchangeable lenses, that is, lenses other than the one with which the camera was originally provided?

There are occasions when lenses other than the standard one are advantageous, or even necessary, such as telephoto lenses for "close-ups" at a distance or wide-angle lenses that will cover a greater area.

7. What size negative do I want my camera to take?

Negative sizes may vary from 35 mm. to 8" x 10", or even larger. Any camera will take pictures of only one size, or, in some cases, two at the most.

Miniature cameras and larger cameras each have their advantages and disadvantages. In general, they may be summarized as follows, although it must be remembered that all the items do not hold true for all cameras.

**Advantages of Miniature Cameras**

a. Convenient to carry around because they are small and do not weigh much.

b. Less noticeable, making it easier to take so-called "candid" shots. Any size camera, it should be noted, if it has a reasonably fast shutter speed and lens, will take a candid picture, provided the subject is not aware the picture is being taken or does not pose.

c. Ultra fast lenses, usually found only on miniature cameras, make possible snapshots under unfavorable light conditions.

d. The short focal length lenses that are standard for miniature cameras have great depth of field.

e. Film for miniature cameras is inexpensive.

f. The 35 mm. size is very convenient for making filmstrips.

**Disadvantages of Miniature Cameras**

a. If big enlargements of excellent quality are desired from the small negatives, a good miniature camera is needed, and good ones cost considerable money.

b. Do not have shifting lens fronts and shifting backs for correcting distortion.

c. Not particularly good for portraits.

d. To obtain consistently good results with a miniature camera it is necessary to develop considerable skill in using it and to exercise great care in processing the negatives and in enlarging them.

e. Because the contact prints are too small to be of much practical use, enlargements are necessary. The added expense of the more frequent enlargements to some extent nullifies the advantage in being able to use the relatively inexpensive film.

f. Difficult to retouch the small negatives.

**Advantages of Larger Cameras**

a. A cheaper large camera will do as good a job as a more expensive miniature camera and with less trouble.

b. Lenses to give negatives that will produce satisfactory big enlargements can be obtained more cheaply because they need not be as good. The negatives are large to begin with and so it is necessary to enlarge only a few diameters to obtain big enlargements.

c. Easy to make a satisfactory enlargement.

d. Less skill required for negative processing.

e. Easier to retouch negatives.

f. Shifting lens fronts and shifting backs available on some cameras.

g. The large-size ground glass found in certain of the larger cameras permit careful composition.

b. Better for portraiture and architectural studies.

**Disadvantages of Larger Cameras**

a. Inconvenient to carry around because of their large size and weight.

b. Because very fast lenses are unavailable, they are not as useful for snapshots in poor light.

c. Not as convenient for candid work.

d. The long focal length lenses used on the larger cameras have a shallow depth of field. However, this shallow depth of field may become an advantage in certain cases, such as when it is desired to blur a background.

e. Most of the larger cameras cannot be adapted for the making of 35 mm. filmstrips.

8. Do I want to be able to develop my negatives, or to change to other type films, before the roll is completed?

Then a camera that takes cut film or film pack is needed.

9. Shall I want to use my camera for special work, such as copying, photographing through a microscope, microphotography (photography of small objects), scientific work, etc.?

The camera must be of the kind that can do these special kinds of work and that will take the necessary accessories.

10. What type focusing do I want on my camera?

Cameras may be divided into several classes depending upon their focusing arrangements (all these types may be obtained in several sizes):

- **Fixed-focus Cameras.** These require no focusing—all objects from a few feet to infinity are in reasonably sharp focus. Examples are the box cameras and their "stream-lined" versions.

- **Non-automatic Focusing Cameras.** These cameras have to be focused but they have no focusing device outside of a distance scale on the bed of the camera or around the lens assembly. The distance has to be estimated or measured and the lens set at a point on the distance scale corresponding to the actual distance.

- **Coupled Range-finder Cameras.** A range finder is a device for determining distance accurately from the camera position. When looking through the range finder, one sees a double image or a split image of the subject. By manipulating the adjustment on the range finder the two images, or the two halves of the split image, can be made to coincide. The correct distance may then be read on a scale. If such a range finder is coupled to the lens of the camera, the lens moves back and forth as the range finder is manipulated and when the two images of the subject (coincidence type range finder) or the two halves of the image (split-field type) coincide in the peep window, the lens is automatically

(Continued on page 28)
An Assembly Project Developed By School Photographic Clubs

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"The pupils of Roxboro were in for a big surprise and an excellent assembly sponsored by the Camera and Visual Education Clubs."

The above title heading and excerpt, taken from a recent issue of our school paper, reveal the favorable reception of a joint club project which marks a forward step successfully taken by the photography clubs of our school. It is far more revealing if one is aware of the activities of these two clubs and the roles they have played in school activities. The pleasing reception of the clubs' work has prompted the sponsors to recount the history and activities of the clubs leading up to the consummative assembly in the hope that it may have some value to others.

The assembly was made up of two phases. The first part, programmed by the Camera Club, was made up of a series of lantern slides of scenes about the school. They consisted of pictures of our stage crew, teachers, football teams, basketball players, school officers and others. The second phase was a motion picture film taken by the Visual Education Club. This film included various classroom scenes and was highlighted by scenes taken of our annual Father and Sons Banquet attended by members of the Cleveland Indians Baseball Team and scenes from a surprise party given our principal, Mr. Davidson, on his birthday. Both phases were extremely interesting to the student body as evidenced by the enthusiastic reception. It was a surprise, indeed, to realize that the school's photographic clubs had produced such an assembly. Of course, the students had reasons to suspect something in the air for now and then they had witnessed various students busily engaged in snapping shots about the school and the use of photo-flood lamps after school hours. But now the air was buzzing with comments as to how and when the program was developed. The inquiries were so numerous and persistent that, we, the sponsors, were motivated to put our story into print.

As primarily established, the Camera Club was interested in the processing of films. With such an interest in mind it was first necessary to have a darkroom. After some searching, we were able to convert one of the school custodian's rooms into our laboratory. Fortunately, the school was being rewired at the time and the electricians accommodated us by wiring our darkroom with sockets which made possible convenient and proper lighting for our working bench. Next, various students worked during their free periods in making our laboratory absolutely lightproof.

Having our laboratory an accomplished fact, we now turned to the matter of equipment. Since the club had no funds and we did not favor assessing the members with dues, it became a voluntary matter. Each student brought some of the essential equipment for the use of the club. One loaned the trays, another, a printing frame, still another provided us with a ferrotype plate. And so it was until we had the minimum amount of working tools to develop and print. Finally, the club was ready to launch its work.

The club as such, held one meeting a week, yet we soon found it necessary to spend more time either after school or during free periods of the school day to meet the desires of the members to either learn the fundamentals or pursue more advanced work. Furthermore, an added incentive pressed us for time. A working agreement was made with our school paper to take the pictures to be used by the paper. Recognition for the pictures was made in the paper. Consequently, the
members of the club increased their efforts in order to receive recognition in the paper. The increased efforts resulted in additional experience. Yet, this work became a matter of routine and the club members looked to new interests. One such interest was the making of lantern slides.

Since we had a great many negatives of places and persons about the school we used them in the making of our first slides. Of course, our success was not instantaneous. After making a slide, we would project it in our club meeting room. Here it was that we were able to see the deficiencies of our slides and strive by discussion and investigation to find the causes of our troubles and remedy them. After several such post mortems we were at last able to produce good quality slides.

The Visual Education Club, as originally organized, felt that there were many worth while sound and silent motion picture films available which had high educative value, but were not entirely suited to regular classroom work. Another primary task of the club was to evaluate films which were not regularly used in the classroom, and to offer suggestions of films which seemed worth while in the regular curriculum, to the various departments of the school.

The club had not progressed far before several of the members became interested in knowing how these various pictures were produced. A small group wanted to make some pictures of our own. Consequently, we made an investigation of the minimum of materials needed, and the cheapest means of procuring worth while equipment since most extra-curricular activities in school are handicapped by finances.

We first secured a used Victor camera. Since most of the school activities are done inside the building, this necessitated artificial lighting. Photoflood light stands were made by mechanically minded pupils. Old music stand bases, which had been discarded by the music department, served as a starting point. Rods that just fit the bases were secured from the Board of Education. These would slide up and down to change the height and direction of the lights. The pupils made a U clamp from sheet copper to fit an ordinary key lamp socket and soldered the two together. This combination was attached to the end of the rod.

Ordinary 12 inch reflectors which made the "floodlight" stands complete were purchased. Recently, we have tried the new "photoflood" lamps with built in reflectors and we find that we get almost twice the amount of light with a bulb of the same wattage. This increased efficiency is extremely important in color photography since it requires comparatively "slow" film. Also, these lamps avoid giving a too heavy overload of the electric wiring.

In order to use the "photoflood" lamps efficiently (maximum life is six hours), the sponsor suggested to one of the boys that he make a series-parallel connection for three lamps operated by one switch. In the series connection the lamps were dim, but sufficient light was given for the setting. As a result, the shadows, reflections, and other important considerations could be studied without decreasing the life of the lamps to any appreciable extent. When the switch was pressed, the bulbs were then thrown in parallel (bright) for actually taking the picture. However, a short time should elapse after the bright lights are turned on before taking the picture to allow the participants to appear more natural.

Several other things which were not possible or practical to make had to be purchased. A camera tripod with a panning head, a good exposure meter (a necessity), and a table tripod were purchased second hand.

Films were purchased for the camera by small contributions of the club members. The pictures taken thus far have been mainly of the activities of many of the school clubs, assemblies, and athletics. One series of pictures was taken of the Father and Sons Banquet showing the awarding of letters to athletes and the pictures of several baseball celebrities who were in attendance. Trick shots are always fascinating to pupils.

When these films produced by the Visual Education Club were shown in the assembly, an attempt was made to have them similar to a talking picture. A sound machine with a microphone attachment was used for the projection of the films. Pupils commentators explained the pictures as they passed upon the screen. In order to give a background for the picture there was a musical accompaniment with the school electric phonograph. The volume was low when the commentator was speaking but was made much more audible between the remarks.

The impetus of the assembly has been obvious. Almost immediately, having taken the assembly reception as a vote of confidence in their ability, the clubs have turned to new plans and work. For example, before much time had elapsed, the Camera Club was approached for developing and printing service. One, in particular, was extremely interesting. The Red Cross Club, engaged in preparing an album of our school work to be sent to Hawaii, made arrangements for our club to take the school scenes for the album. One of the comforting results is that our problem of funds is rapidly being solved. It appears that the club will soon be providing for film service at a low cost for the student body. This is indeed encouraging for the club may become self-sustaining. Furthermore, it will permit us to expand. Already, we are looking forward to purchasing enlarger or else constructing one in the Industrial Arts Shop. At present, one boy is constructing a printing box. Another is learning to blue print. Yes, their interests are varied but they are eagerly pursuing them. One day in the future, we may hear of their names again.

Results of the club activities may be summarized as follows:

First, club members were rewarded for their efforts and with an increased appreciation and renewed confidence set out upon new fields.

Second, school-made pictures could easily be used for community publicity of school activities.

Third, various types of abilities and interests of pupils have been utilized in this project and the ability of eighth and ninth grade pupils to make the apparatus and actually take the pictures is surprising.

Fourth, evidence of the ability of junior high school students was attested to when these pupils presented their slides and films before a teaching methods class of a local university. Their enthusiasm and commendations were most hearty.
In the Agricultural Extension Department of Iowa State College, in 1924, were made two reels on the use of fertilizers, entitled "Pay Dirt." That same autumn, at the Indiana University extension division, the Athletic Department, cooperating with the Bureau of Visual Instruction, produced "King Basketball," the aforementioned picture on the fundamentals of that game, a film which stirred especially high hopes when outsiders learned that six prints had been sent to other universities, and that in three months 104 towns had rented it at two dollars per day each.

H. W. Norman, secretary of the Bureau, helped the day dreams along by proposing a concentrated effort to follow this example with productions in the departments of physics, geography, health, agriculture, botany, physical training and many others presumably needed. "Colleges and universities have specialists who can plan such films," he wrote in the Educational Screen for April, 1925. "Schools and organizations should offer encouragement when such production is attempted, by renting the material and offering constructive criticism. The development of visual education and the educational film calls for coordination of numerous educational forces."

But how ever useful these isolated efforts may have been, they were insufficient in number to give body to the visual education movement. Even granting the awakened sense of exclusively pedagogical requirements, one may say that in that period the need was much less for quality than for quantity. But, with insufficient funds, where was the quantity to come from if not from the old theatrical sources of supply? There were producers ready and reasonably well qualified to make subjects to order; but they had to be supported in doing it. Otherwise, Alfred H. Saunders might have undertaken the job through his Educators' Cinematograph Foundation, which, until mid 1927, was still listed on the building directory, at 70 Fifth Avenue, New York; Fred Lincoln of Boston, whose office, when he was associated with Parker, of Worcester, issued what are said to have been the first film teaching syllabi, might have done it; or there was Horace G. Plimpton.

In speaking of Plimpton it is necessary to use a longer breath, for that worthy gentleman has not previously been mentioned and he deserves identification. He was for seven years production manager of Thomas A. Edison's motion picture enterprises, with strong personal interest in the inventor's educational experiments. He prided himself later on having directed "at least one-third of the educational films in the library of the University of Wisconsin." (Aha! So that was how Edison came to compliment Dean Reber!) And, about 1915, I believe, he and some "qualified associates," as his opening prospectus stated, incorporated Plimpton Epic Pictures of New York.

Of the commercial interests which stood eager to provide the schools with reedited theatrical material—and these included the regular theatrical exchanges as hereinbefore mentioned—none appeared more successful for a brief time in contracting with an important school system, than T. K. Peters. In 1916, by my records, he had been production supervisor of the Florida Feature Film Company. According to his own statement, he began in pictures about 1898, and had taken his camera actively over some 90,000 miles in sixteen months, covering Europe, Asia and the Orient. He claimed to have been the first man in Egypt with a motion picture machine, and in 1920 declared that he had spent the preceding nine years preparing for the introduction of films into schools.

In the autumn of that same year he seemed securely in place as executive head of a film project exclusively to serve the New York City system. One may only guess how successful his service might have been for, after having tested some of his biological reels before classes in P. S. 45 in the Bronx, and Number 13 of a series, the tactical error of giving a large interview to the press. With incidental bows to Dr. Ernest L. Crandall and Miss Rita Hochheimer, who were reported to have been "most enthusiastic," he told a Times reporter that his films, correlated with the standard syllabi of the New York City Board of Education, would begin modestly with ten schools and spread thence to the others.

I believe that his pictures were acquired subsequently by Harry Revey in an enterprise to be described later in these pages.

Frederick Stephen Wythe

Those of Chicago and New York, who felt the responsibility of the visual education movement upon their shoulders, were curiously unaware of a remarkably well conceived and well developed school film enterprise which had originated as early as 1918 on the Pacific Coast, and which, but for some circumstances outside of itself, might have supplied the field heavily. Even the astute Harley Clarke seems to have missed it, despite the fact that its existence was called to his attention. An important educator on the Western seaboard had been noticeably cold to Clarke's S.V.E. product, and Clarke had written and asked him to suggest something better. The answer was a proposition to send him one of Wythe's civic series to use as a model.

Wythe—Frederick S. Wythe—a young San Francisco lawyer, was the principal figure of the undertaking. For reasons heretofore apparent, the reader may well pause to consider him. He was a native Californian, born December 29, 1883, at Placerville—Mark Twain's old "Hangtown"—near Sacramento. His father was a Methodist minister whose ancestors, a few generations back, had helped to settle New England when it was still called Northern Virginia. Beyond that the Wythes had been sturdy yeomen, in a line clearly to be traced to the days of William the Conqueror, that heritage, with some modern technical touches administered by the law school of the University of California, had produced a most promising new member of the Golden Gate legal profession.

The roster of his clients included some celebrated names, that of the "plant wizard," Luther Burbank, being, perhaps, widest known. There also was the Reverend Paul Jordan Smith, pastor of the Central Methodist Church in San Francisco. Smith's name may evoke no ripple of interest in this younger generation; but, in the years just before the World War, the national press, from West to East, featured it as the high symbol of a public sensation. Smith had come from Iowa, by way of Malden, Mass., to a horrified contemplation of the San Francisco fire of iniquity called the "Barbary Coast." He had initiated and led the crusade which finally wiped it out. The achievement brought him many proposals for additional reforms, including the idea of perpetuating the original example in a motion picture, that other communities
might profit readily from it. The idea came most temptingly in the shape of a scenario prepared by Grace Sanderson, a writer whose grandfather, I understand, had once been mayor of the city. Smith was intrigued, and worked out plans for the production, involving a professional cast headed by Crane Wilbur. The picture was actually made, and was released as "The Finger of Justice." By this time Smith was so interested that he resigned his pastorate and went East to arrange for worldwide theatrical distribution.

Wythe, as Smith's attorney, naturally had opportunity to see how the matter was negotiated and carried through. It made him realize the sociological potentialities of the screen—and he also saw some others. Moreover, Abbott, chief cameraman on "The Finger of Justice," talked to Wythe about the pedagogical possibilities of educational films, mentioning the name of a friend (a wealthy retired gentleman whose income was represented largely in profits from a motor he had invented for the Victor Phonograph Company) who, with a little persuasion, might entertain a proposition to the effect that he would do something.

The gentleman was at hand, living at San Rafael. To know Wythe was to understand how contact with a situation of that sort would stimulate his thinking processes. He was then, as he remained in later life, a man absolutely without the usual "concepts of wisdom." He desired, above all things, to learn; and he would learn from anybody, high or low, who had knowledge to offer. I remember his laughing remark to me when I first met him: "Be careful about exposing any useful information you have; I soak it up like a sponge." That was literally true; but Wythe's many and absorbing interests, above all things, did not just store information. His tireless mental process quickly digested, classified and applied it. For him to think of the educational possibilities of motion pictures, therefore, was for him to do something about it. With Lenwood Abbott as his associate in planning, he formed, tentatively, the Science Film Corporation. However, nothing came directly from that.

Wythe wanted to try out the idea, but where, he asked himself, was there a place in which an unpretentious film might be made to render a conspicuous service? And so, in the fall of 1924, the educational committees on Home Defense were urging all civilians to save for the sake of the soldiers overseas. One of the urgent pleas was to cultivate the home garden. And when Wythe went for advice to a professor at his alma mater, the University of California, it was suggested that he should produce a film on home gardening. He conferred about it with Charles Moore, head of the Home Defense group in the area, and that gentleman not only heartily approved, but assisted Wythe to make many helpful contacts.

So that picture was duly made, using "locations" in the suburban schools of Berkeley and Oakland, where Educators Wilson and Hunter, respectively, in charge of those systems, gave friendly pedagogical advice and hearty cooperation. As to funds, the Junior Red Cross supplied part of the money required to make it, and the Federal Government agreed to take $2,500 worth of prints, the University of California acting as treasurer.

Harry B. Wilson, superintendent of the Berkeley schools, was already enthusiastically interested in visual education. In 1922, he was to begin those tests and applications reported in a monograph published about 1924 by Educational Screen. His visual education department, headed by Miss Anna V. Dorris, was to attain a certain celebrity among educators. His discussion, Modern Methods in Teaching, written in collaboration with George C. Kyte and Herbert G. Lull, was one of the first substantial works on the specialized subject to be published in book form. By 1924 Wythe had multiplied beyond control in the young lawyer's blood. He decided, on the strength of this first experience from which he characteristically had gained about thirteeth what it would have brought to a less receptive experimenter, to plunge deeper into the work. He took an office from which the new enterprise might be more efficiently conducted, and, unable to be there constantly without neglecting outside obligations, approached a friend, an elderly, retired, former business executive from the East, to preside there for him. This once active gentleman, with time hanging heavily on his hands, gladly acceded. But he was too much interested in Wythe and what Wythe was doing to be just a figurehead. His identity explains much of that attitude, for he was John MacNair Wright, whose mother, Julia MacNair, the educational film historian celebrated for her school records. To further his purpose of real participation, he had conceived the idea that, while Wythe was developing the educational films business to a point of proper profit, there ought to be a subsidiary line to pay in the interval and he had determined that this expedition should be a film laboratory.

Wythe was not favorably disposed to the thought. As he said, it would be that much more to worry about—two businesses instead of one—and he surely had plenty, right then, to occupy his mind. But to Wythe the opportunity to build the laboratory at his own expense. When it came to that Wythe could no longer oppose his friend, so he worked with Wright at every available moment to make the laboratory a model institution of its unpretentious kind. I do not recall all of the details which have been told me about that laboratory from time to time; but one point I do remember is that the camera for shooting titles and doing trick photography, was made sufficiently large for a man to step inside to see how things were going on there. Anyone who has despaired over the backlog of a film on a reversed camera movement, or over a refractory take-up, will appreciate at once the great advantages of this arrangement. It came about merely because Wythe, characteristically refusing to take anything for granted, had asked himself why the interior of a fixed camera, which did not have to be carried around, had to be a tiny place, when a large, roomy one could be kept just as dark.

Wythe had organized as the F. S. Wythe Pictures Corporation; and he had done it with the great interest and attention of a number of wealthy San Franciscans whom he had met mainly in the Home Defense wartime activities. And presently they joined him in practical support. Among those who took shares were Charles Moore, who had been one of the heads of the Panama-Pacific Exposition; Alfred Esberg, the president of the Board of Education of the Schools of San Francisco; A. B. C. Dohrmann, head of the Pacific Coast Division of the American Red Cross, who was a nothing from Wythe for his mercantile store chain in that area; Robert Oxnard, important in the affairs of American Beet Sugar and after whom Oxnard, California, was named; and Tom O'Day, generous, broad-gauged owner and operator of the Hippodrome Theatre. Among the smaller investors was the board of the Sierra Educational News. Productions on the immediate working schedule comprised a series of films designed by Wythe to start school children on the road to better citizenship. In addition to the two garden reds, already made, there were about fourteen others in the plan. The two films so just a couple of this civics series at first, to see how they would measure up. To make them, Tom O'Day summoned from Los Angeles his friend, Jess Robbins, a veteran picture director. Robbins did the work faithfully and well, and would never consider an officer of this civics. The photographic results that far were so encouraging that work was commenced quickly on the others. This time the director engaged was MacMakin, from the staff of the old American Motion Picture studios at Santa Barbara; the cameraman was Karl Weidler.

Such a sort was not all which Wythe had sought. At the outset he had realized the need of expert pedagogical advice. On the recommendation of schoolmen who had assisted him on the garden films, he soon decided that the educational director should be Charles Stelbbs, then at the Bureau of Education at Washington. Accordingly, and without personal acquaintance with Stelbbs, he wrote to Philander P. Claxton, then national commissioner, but received only a routine acknowledgment of his letter. Undaunted, he contacted a friend of his father who happened to know intimately an officer higher than Claxton, namely, Franklin K. Lane, Secretary of the Interior, and asked him for assistance. This friend, explaining the circumstances and the complete worthiness of the enterprise to Lane, succeeded in bringing about the assignment of Stelbbs to the San Francisco district; and Stelbbs, therefore, actually did serve as educational director on the Wythe civics series. He served conscientiously, actively
and well. From that association Wythe soaked up professional information at the usual, astonishing rate. Stebbins, who had not been too happy at having been requisitioned from other interests in that summary manner, found himself relatively unhampered despite his irresistible scholarly interest; and he taunted Wythe, more than once, about his presumption in trying to produce educational films when he had had no training as a teacher. "All you know about pedagogies even now you have picked up from me," he glibly remarked to me one day, "Stebbins probably was right."

However, knowing Wythe and his citizenship pictures as I do, I believe, without in any sense meaning to deprecate the fine service of Dr. Stebbins, that Wythe himself, though in all probability to have occasionally demonstrated teaching force of the series. It was inherent in his original plan. Like the expert dramatist who sees a play as incomplete without the actors, and audience, he always thought of the classroom picture as being in itself a full visual situation; there had also to be teacher, classroom and pupils.

Seeing the finished citizenship reels without these related factors, therefore, was extremely disappointing. They seemed flat, uninspired, obvious—even amateurish. But put them in a classroom—where I have seen them so successfully demonstrated; have them carefully introduced, intelligently applied and wisely dismissed by an interested teacher; admit attention of youngsters at the stipulated age levels, and these remarkable films fairly grow with teaching life. Moreover, they afforded what extraordinarily few school films made under supervision of qualified educators ever have done before or since—they employed skillfully the long-neglected, but powerful factor so envied in the theatre, emotion.

Wythe’s progress, thus being made on the basis of intelligent forethought, was generally uneventful. There were, of course, unexpected complications. The most disconcerting probably was the sudden death, while asleep, of his first film business associate, the kindly, elderly John MacNair Wright. This occurred less than a year after the start of the enterprise. It left Wythe with the film laboratory which he really had never wanted. But Wright’s son came on the scene and, in the fine spirit of his sire, carried on the dead partner’s obligations until Wythe was able to arrange with his new associate to buy him out.

In that laboratory, by the way, was developed and printed a theatrical feature film starring Dorothy Revier, produced in San Francisco. The makers couldn’t meet the bill. But Tom O’Day loaned them a couple of thousand dollars to tide them over until they could regain their financial equilibrium. It was incidentally interesting, because that picture was one of those upon which the present, powerful Hollywood corporation known as Columbia Pictures, took its rise.

When the citizenship series was complete, and teaching syllabi had been prepared, Wythe’s production experience was temporarily over. He had now to prove his faith by selling sets to the schools. So he relinquished his camera to a law associate and took to the road for that purpose. He worked at this successive phase with his usual intelligence and unflagging energy; but it was not easy. He found himself trying not only to sell school films, but also an advanced visual method which had not yet been officially recognized by the educators. His demonstrations were admittedly brilliant; but the schoolmen wanted the supporting results of tests, for which there had been no time, and for which they naturally supposed the funds. Nevertheless, Wythe succeeded in selling one set to the Los Angeles public schools.

Then, hearing that visual education was booming in the East, he boarded a train with another set and came to New York City to try for better fortune. For the present, while he is in high hopes, and with plenty of humanly good reasons for being so, let us leave him.

Chapter VII—A Swarm of Specialists

There were certain kinds of producers with whose basic knowledge schoolmen in general could not presume to quarrel. All they could reasonably dictate would be the use of his material. They might tell a man who had spent the best years of his life photographing birds that they didn’t want his shots of orioles and owls on the same reel for showing in the identical lesson period; but, by and large, they would be obliged to admit that he probably knew more about the habits of both than they did. Or, if a given educator did know more about owls and orioles, but recognized the precious authenticity of this much already on the reel, he could realize that, without great expense and perhaps years of leave, he could not hope to duplicate the film. Hence the pictures made by these particular specialists gained a somewhat easier entrance and footing in the classroom.

The gifted Englishman, F. Percy Smith, who first conceived and developed and applied the photographic principles of compressed action—the "bud-to-blossom" man—was trained in teaching methods before he began his photographic work; but they were approaches peculiar to the English system and therefore did not dovetail into American curricula as native teachers wished. Even his reels, therefore, were altered many times from his original arrangements, making them conform with local and regional needs in the United States. But they have been pruned and recast more gingerly than has been done, say, with John Doe’s "Life on the Farm," upon which subject material equally good might have been obtained by almost anyone with a movie camera; and had Mr. Smith, or his representatives, insisted on a hands-off policy to preserve the integrity of his arrangements, the educators concerned probably would have yielded—because F. Percy Smith, with presumed flaws, is vastly better than no F. Percy Smith at all.

F. Percy Smith had many imitators, and/or emulators; and, as the volume of such material increased, the force of his possible insistence that no "reediting" be done, was necessarily lessened. But even the emulators, in his case, found the work tremulously difficult and out of all proportion to the comparatively small margin of profit; so that kind of picture remained a rarity anyway, and respect for it was generally maintained.

Smith’s position was especially strong in that his own, personal output was so tremendously large. Had he made only one or two pictures of this precious type, his work could not have been so effective in breaking down arbitrary oppositions to classroom uses of motion pictures. A convenient illustration of what might have happened is in the case of the Dr. Chances. Educators might have called an extra assembly of the children to view Dr. Chance’s notable film entitled "The Cuckoo’s Secret," but, with no successor of equal merit in the same department of learning, that, so far as the schools were concerned, was virtually the end of it.

Birds, Beasts and Flowers

"THE CUCKOO’S SECRET" was actually one of several remarkable studies of bird life made by different individuals in England, each for the purpose of settling some moot point about the habits of the given subject. It is singled out for mention because it became the best known of the group at that time, and also because it set the example for most of the others to follow. It was first shown in New York in the early summer of 1923, released by Bray; but, of course, it had been screened in London months before that. It was produced about fortuitously (it was not I who said by "Chance"), when the ornithologist who was to make it happened upon an English rural district in which cuckoos were unusually many. That was in 1918. He realized the possibilities and thought the long-disputed habits of the robber bird was exceptional, and spent several successive seasons studying them.

In 1921, with locations and circumstances carefully chosen, he engaged a cameraman to photograph the telltale situations shown. The film shows the bird laying its own egg for that of the intended foster parent, and the infant cuckoo ousting the proper children from the nest to obtain all the parental attention. He produced another picture record in 1922, using a slow-motion camera. He thus cleared up a highly debated matter and earned the encomiums of ornithologists throughout the world. Nevertheless, "The Cuckoo’s Secret" remains an irregular item for educational purpose. And it illustrates once more, the greater importance to the visual education movement of having fifty fair-to-middling reels covering the curriculum, than having just half-a-dozen masterpieces and no related subjects to bridge the gaps between.

(Continued on page 22)
Expanding the Classroom

In an effort to expedite the education of the youth, and to promote greater efficiency in teaching techniques, school rooms and school houses came into being. With the growth of formal education and the demand for increased education for the masses, the classroom too often became a place where lessons were assigned, and tasks performed solely for school room purposes. When the door closed for “school to take up,” the four walls of the room became barriers to the world of reality, and constituted inescapable boundaries to thoughts and actions. “Book learning,” lesson learning, and lesson re-citation flourished in the midst of abstractions and unrealities.

Many thoughtful teachers and constructive educators, while wholly cognizant of the importance and necessity for comparatively strict, formal classroom work in certain aspects of the educative process, have been continually striving to expand the classroom beyond its physical walls to the environment of persons and things in the complex social and economic structure of a world of realities in which the pupils live, and will continue to find themselves. Among other things, they recommend the school journey as a technique to achieve this objective.

The school journey, when properly used as a learning activity, constitutes an excellent means of expanding the classroom and providing for more direct sensory experiences with the realities of the environment than does the formal classroom work. The school journey provides sensory experiences, which constitute the basis for perceptual learning; gives concreteness to the materials used in the classroom; constitutes a means of clarifying concepts and an understanding of the principles involved in phenomena; and stimulates the interest of pupils in the work which they are undertaking, as well as widening the range of their interests. These broadened horizons may provide new experience realms in which discovered interests may lead to a whole host of purposeful activities.

The school journey technique can be employed in every subject of the school curriculum, and in practically every unit of every subject. Contrary to a common notion, the school journey does not of necessity have to be a “Trip to a Factory,” or a “Trip to the State Capitol.” The trip may be short or long, cursory or intensive. The teacher, however, in her lesson planning must decide on the outcomes to be acquired, and the techniques which will best achieve the desired ends. The classroom may be broadened by a few field trips during the term, or it may be expanded tremendously as is indicated by such course titles as: “A Field Course in Biology,”

Conducted by Wilber Emmert
State Teachers College, Indiana, Pa.

“Enriched Mathematics,” “A Field Course in Geography,” etc. Such course titles indicate that while the classroom will be used for some of the work, the greater share of the class time will be spent in actual functional relations with the materials of the courses in their natural settings.

The following accounts which follow indicate briefly what one school is doing in several of its subject matter fields to expand the classroom, with its accompanying benefits to the pupils.

Junior High School Mathematics

Interest and anticipations mount in the Junior High School mathematics classes as their work approaches the study of right angles, right triangles, and related problems. With the study of those concepts the classes always spend several days outside the classroom at different points on the school ground. Initial study, preliminary work, and some problem solving familiarize the pupils with the fundamental concepts and principles, and indicate how they can be used to solve actual problems of real life. Mastery of the instruments to be used in the field study is readily undertaken by the students, for they see the necessity of such knowledge. Pupils and teacher working together plan the problems to be solved, prepare data sheets, and organize the materials for each problem. Separate data sheets are prepared in advance for each of the measurements to be made. One for the height of the specified building; another for the flagpole problem; a third for the distance across a lake or river (in this case, across the street into an adjoining lot); etc. As indicated in the picture, some students are taking readings with the hypsometer, others are making measurements with the tape measure, while still others are securing data for another problem. Each group makes its measurements, takes its records for each problem, then is ready to make the mathematical computations. Either on the field or in the classroom the pupils work out the answers to their problems and can then check the accuracy of their
work by group discussions. The next step then, is the construction and solution of original problems. The results of this expanded classroom technique indicate that the mathematical principles are more clearly understood, skill in securing and recording data accrued, applications to life situations could readily be made, and that the interest generated assisted in carrying the students far forward into the next units of the course.

Sixth Grade Study Communication
To assist the sixth grade with its study of "Communicating With Our Neighbors," a number of museum units were set up in the school library. This work was done by the librarian, the English supervisor, the Art supervisors, a history teacher, and one of the science teachers. The librarian and the sixth grade teachers then arranged a schedule of class periods for this group to have exclusive use of the library for its work. In some cases the museum displays were set up in advance, and at other times, the pupils themselves assisted in making, securing, arranging, or labeling the items of the display. One major exhibit was "Development of Our Written Language," another, "Using Electricity for Communication," a third, "Sending Messages by Mail," another, "How Sounds Carry Messages," etc. In addition to the museum displays, the library reference work, and their construction activities, trips were made to the post office, the telephone office, the newspaper plant, etc., using the approved well-planned school journey techniques for these visits.

The accompanying picture illustrates one of the museum cases in which "The Development of Our Written Language" is delineated. During this phase of the study the children learned that after man had developed articulate speech, there came a need for a written language so that he could communicate with others at a distance, or at a later time through the use of written records. The children saw also that our spoken, written, and printed words are abstract symbols for concrete things. And that these symbols evolved through picture writing, Egyptian hieroglyphics, to our alphabet. They learned further, that in considering the development of our written records it is necessary to give attention to: (a) the material on which the written record is made, (b) the instrument used in making the record, and (c) the material of media used in making the record.

All these concepts were attractively presented in the exhibit, as will be seen by studying the picture. Briefly, on the upper shelf in the case and to the right is shown the picture writing of the American Indians (made by the pupils by cutting Chamois skin in the shape of a buffalo robe, then copying a message in pictures on it); the white stone of the bottom shelf contains Egyptian Hieroglyphics carved on it in 2200 B. C. (Egyptian Hieroglyphics constitute the transition between the picture writing and the early alphabets); Babylonian, Cuneiform writing, etc., are illustrated on the middle shelf; likewise on the third shelf is a page of 13th century, illuminated manuscript; and on the next to the bottom shelf will be seen some quill pens, a scroll, steps in the making of a book, and some printed matter. The wampum model in the upper shelf to the left was made by the pupils, using strips of Chamois skin threaded through short sections of macaroni. Proper labels and appropriate reference lists accompany each item in the display. Separate guide sheets and selected reference lists were given to the students for their use while studying this problem. Considerable attention was given to this problem because most of the other types of communication embody a written record in some fashion.

The other problems were appropriately studied in as much detail as deemed proper for sixth grade,

(Concluded on page 41)
The Literature in Visual Instruction
A Monthly Digest

Conducted by Elta Schneider

Administration of Visual Aids


A reply to certain limitations mentioned in a previous article by Clyde K. Miller. The article has most value for teachers in Ohio. Others will be interested by the unusual service rendered by the State Visual Education Department to the schools of that state. The director of the state service, in this article, reveals that in one year 90% of all requests were granted for the dates wanted, 5% were booked for second choice, dates listed by the applicant, and only 5% had to be rejected. Films reach the school a day in advance of the showing, to permit preview by the teacher.

In answer to Mr. Miller's complaint about the vocabulary limitations of subtitles on films, the author wisely explains that films can change the grade placement in which certain topics may be presented because vocabulary levels do not exist for pictures. The meanings of the pictures sometimes reach the child before his vocabulary can give him labels (words) to designate the things he sees, but more frequently the visual experience hastens his vocabulary enlargement.

The caution is again made that films and other visual aids are merely a visual track to the mind, and not a separate entity to be taught as visual education or visual instruction. What is actually meant by audio-visual aids is instruction conveyed by visual communication.


A detailed report of the progress made by the Greenwich schools in organizing its audio-program with the help of a teacher's part-time attention. The budget is approximately $800 or $92 per student for materials other than the purchase of machines. An increasing library of purchased films is being built up and a small number of free and rented films supplement them. Read the original article for further information.


The story of Superintendent D. H. Boon of Cass County, Texas, who was able to provide films for the children of that rural country through a traveling film unit, transported by truck. The truck serves as a library and film service, and it can reach four schools a day without strain on anybody. It is hoped that there is a direct relationship between the selection of films and the children's curricular experiences, but no mention is made in the article of this aspect of the program.

School-Made Films and Other Visual Aids

Local Industries Help Make Film Material—Harrison U. Wood, Racine, Wis.—Occupations, 19:180-3 Dec. 1940

An excellent article, describing in full a project in which lantern slides were made to describe some of the basic occupations in local industries. The author is principal of the Franklin Junior High School, as well as chairman of the civic development committee of the local Association of Commerce. He secured the cooperation of the superintendent of schools in planning and organizing the plan. A committee of teachers, supervisors and counselors set out to plan the details. They decided to produce lantern slides, rather than film strips or motion pictures. About 30 to 35 slides for each industry would be included. A long-range program was carefully prepared by this committee. The next step was to seek cooperation from local industries to defray cost and help to permit the photographing. Eight copies of each set of slides was needed to supply all of the junior and senior high schools in Racine. A science teacher in the junior high school was to be in charge of actual photographing. He was a member of the planning committee and spent seven weeks during the summer preparing for the project.

A list of slide sets to be prepared during the next five years is given. This article should be read in its entirety for further details.

Teaching with School-made Films—William G. Hart—Scholastic, 37:5-T, November, 1940.

The outcomes to be expected from a well-planned film-making program, illustrated by the experiences of some high school students.

Lantern Slides Teach Business—Alexander Selwyn, Franklin K. Lane High School, N. Y.—Nation's Schools, Dec. 1940, p. 53

The teachers of business training made a survey of teaching aids available in that field and proceeded to make slide sets of those topics that seemed especially necessary. The lantern slide was selected after a trial with film strips. The lesson units dealt with mailing, telegraph, savings banks, banking, etc. Charts, cartoons and other materials are included in the slides.


The activities of a local amateur movie-making group in Kearney, N. J. in which no member is over eighteen years of age. A national Amatuer Movie Producers of America organization has been organized, consisting of other juvenile amateur movie groups in the country. Eight groups comprise this national organization: Century Films, Santa Ana, Calif., Continental Pictures; Empire Pictures, Chester, Pa.; Modern Films, Stillwater, Okla.; Pixelated Pictures, San Antonio, Tex.; Skyline Productions, Kansas City, Mo.; Trans-National Pictures, Youngstown, O.; and United Pictures, Buffalo, N. Y.

Techniques of Utilization


How an intermediate group of children were guided in their understanding of the relation of the moon to the earth by using a sound film, "The Moon."


A summary of the types and uses of slides.


This is one of the best accounts to appear recently in a unit of work developed by a group of high school students on a vital modern problem. The background of the students, the nature of instructional aids used, the activities of individuals and of the group are all clearly indicated in the brief space of the article. A listing of films found helpful in the study is appended.

They Want to Know—R. L. Currie, Wilmington, Delaware—Social Education, 4:466-9, November, 1940.

The twelfth-grade class in social studies began its study of the community with the showing of the March of Time film on "Juvenile Delinquency." The subsequent discussion brought out many questions dealing with the effects of slums, disease, penal reform, housing, social service, rehabilitation programs and the organizations at work in each field. From this discussion, the students proceeded to get information from first-hand contact with city officials as far as possible. They made a study of the city (Concluded on page 30)
Among Ourselves

To the Members of the D.V.I.:

The program of the winter meeting of your Department is printed in these columns for your consideration and approval. It is hoped that many members will show their approval by attendance at the meetings although it is realized that many others who might wish to attend are prevented from doing so because of the distance to Atlantic City and because of other responsibilities.

Even if you cannot be at Atlantic City there are others from your school system or institution who probably will be there. Why not let them know about the meeting of your Department and urge them to attend?

Yours sincerely
Paul C. Reed, President

PROGRAM

Winter Meeting of the Department of Visual Instruction
February 24, 25, 26—Atlantic City—Hotel Traymore

Monday, February 24

First Session 9:30-11:30 a.m.—Submarine Grill
Greetings from the New Jersey Visual Education Association—Arthur M. Judd, President, New Brunswick, N. J.
President’s Report: The Challenge of the Unsolved Problems—Paul C. Reed

Criteria for Selecting Motion Picture Projection Equipment—John A. Maurer, Chairman, Committee on Non-Theatrical Equipment, Society of Motion Picture Engineers

A Critique of Summer Courses in Visual Instruction—Floyd E. Brooker, American Council on Education

Business Meeting

Luncheon—Informal—Form your own party and eat where you wish

Second Session 2:15-4:30 p.m.—Submarine Grill

Theme: Visual Aids in Defense of Democracy

Address: Education in Defense of Democracy—Ralph W. Tyler, University of Chicago

Report: The Visual Aids We Have: A Verbal and Visual Review—Blake Cochran, American Council on Education

(There will be a screening of some of the best films related to the theme of the meeting.)

Discussion: What Shall We Do with Materials Available? What Should We Do to Stimulate the Production of Needed Materials? What Precautions, if any, Should Be Taken in the Use of these Materials? Can These Materials Be Used to Coordinate the School and Community Program for American Defense?

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by James D. Finn
Colorado State College of Education, Greeley

Tuesday, February 25

Third Session 9:30-11:30 a.m.

9:30-10:00—Rose Room—Introducing the Chairman of the Group Meetings to follow. Each will present briefly the problems and questions to be considered in his meeting.

10:00-11:30—Group Meetings

Group A—Rose Room—Can the Schools be Better Served? A discussion of the problems of visual aids distribution—B. A. Aughinbaugh, Chairman, State Director of Visual Education, Ohio

Group B—Fountain Room Balcony, East—What Visual Aids are Schools Producing? Including a discussion of “school-made” motion pictures—William G. Hart, Chairman, Dearborn, Michigan

Group C—Fountain Room Balcony, West—How Can We Bring About Better Utilization of Visual Materials? A discussion of pre-service and in-service training—Ford L. Lenler, Chairman, University of Michigan

Fourth Session—Luncheon Meeting

12:15-2:00 p.m.—Submarine Grill

Reports of the Morning Group Meetings by the Chairmen

The Wartime Use of Motion Pictures in Britain—Richard Ford, British Library of Information

Fifth Session 2:15-4:30 p.m.—Submarine Grill

Theme: Free Materials—A Blessing or A Blight for Education?

A Symposium of Ten-Minute Opinions—Edgar Dale, Chairman

O. H. Coelhn, Editor, Business Screen Magazine

John E. Hansen, Chief, Bureau of Visual Aids, University of Wisconsin, representing a state film library point of view

Boyd B. Rakestraw, University of California, representing another film library point of view

Godfrey Elliott, Director, Audio-Visual Aids, Mercer County Schools, Oakvale, West Virginia, representing a point of view of the public schools

Ernest LaFollette, John D. Pierce Junior High School, Grosse Pointe, Michigan, representing the teachers who use free films

William H. Hartley, State Teachers College, Patterson, New Jersey, presenting standards for evaluation

Edgar Dale, presenting a preliminary summary leading to general discussion

General Discussion

Wednesday, February 26

9:30-12:00—Meeting of the Executive Committee

Meeting of the Committee on Field Experiences

Meetings of other Committees as called by Chairmen
New England Branch

Bridgham, E. T.  Walthingham, Conn.
Brown, Elizabeth  West Medford, Mass.
Bryan, S. W.  Stamford, Conn.
Buckingham, B. R.  Quincy, Mass.
Campbell, L. H., Hingham, Mass.
Chambliss, A. E., Williamsburg, Va.
Dee, Richard F., Boston, Mass.
Palmer, H. C.  Jewett City, Conn.
Payne, N. H.  New Lebanon, Conn.
Potter, A. M.  Lee, Me.
Rimland, Alfred  Marlboro, Mass.
Roberts, T. E.  Pembroke, Mass.
Rumelin, Paul  Boston, Mass.
Sabel, R. G., Plainville, Conn.
Sawyer, E. P.  Drums, Pa.
Smith, Donald W., Durham, N. H.
Smith, Florence  West Hartford, Conn.
Smith, Howard A., Quincy, Mass.
Smith, R. B., Bellows Falls, Vt.
Stanley Bank Corp., Portland, Me.
Stuart, M. A., Shrewsbury, Mass.
Swift, Arthur F., Amherst, Mass.
Van Riper, E. H., Quincy, Mass.
Wallace, Earl, Franklin, Mass.
Wheeler, E. F., Breitl, Conn.
Willard, Addie Winthrop, Mass.

Louisiana Branch

Armstrong, B. G.  Ruston
Athenee, A. J.  New Orleans
Blevins, Mr.  New Orleans
Bryan, Wm. J., Natchitoches
Butterfield, Wm. B., New Orleans
Behrman, H. S., New Orleans
Bolster, Lucille  New Orleans
Capron, Rose  New Orleans
Cawthon, Ardis  Ruston
Cahill, Mary N., New Orleans
Cook, Mrs. Carmen  Ringgold

Krasner, Abraham  Boston, Mass.
Lawler, E. A., Lawrence, Mass.
Lyon, L.  Wilton, Conn.
Lyon, J. H., Thompsonville, Conn.
Manter, Mildred E.
March, L. S., Melrose, Mass.
Mather, Kirkley  Cambridge, Mass.
Moyer, J. A.  Boston, Mass.
Mulvihill, Claire  Greenwich, Conn.
Nangle, K. Louise, Lynn, Mass.
Northcutt, J. W.
O'Neill  New Bedford, Mass.
Paine, A. A.
Pennell, A. A.
Perry, E. W.
Palma, York, N. Y.
Smith, Donald W., Durham, N. H.
Smith, Florence

Notices from the Field

Middle West

Approximately 150 persons attended the visual aids section meeting of the Iowa State Teachers Association in Des Moines on November 7. The teachers left the meeting with the pleasant feeling of enjoying a successful program suited to their needs.

The Visual Instruction Service of Iowa State College announces that it has just experienced the greatest year of distribution in its history. They also notice a more intensive use of the visual aids distributed, as well as more thought given by teachers to their application in teaching. (These notes were furnished by H. L. Kooser, Director of Visual Instruction Service, Iowa State College, Ames, Iowa.

From Mr. K. D. Nicholson, County Superintendent of Schools for Polk County, Iowa, comes the following interesting story of the development of their visual aids project.

Polk County is composed of eighteen town and consolidated schools and sixty-four rural schools. Omitting Des Moines, the Superintendent's office tried to work out a sound visual education program. Directors and superintendents of all town schools were called to the office for a conference and demonstration of the value of the sound motion picture projector as a classroom teaching device. Schools agreed to buy one 16 mm. sound projector on a cooperative plan. The amount paid by each school depended upon the average daily attendance. In no case did it exceed $35.

This participation fee enticed schools to the use of a sound projector for a half day every other week.

A WPA employee was obtained to operate the machine and take it on a circuit of the schools in the county. The schools agreed to pay the mileage at the rate of three cents, and the WPA his salary. The operator was responsible for keeping the machine oiled and cleaned, and had charge of receiving and mailing out all films. In addition he kept an attendance record at each showing and a record of the classes seeing each particular film.

A committee of teachers, representing senior high, junior high, and elementary schools, meet each semester and select the films to be used the following semester. The films are rented or borrowed for a two-week period and in all cases a special rate is given. Each circuit averages a selection of from six to eight films. At the beginning of each semester, all schools receive a bulletin listing the films that are to be shown on specific dates. A description of the film is included and recommendations for the film's use are made. Manuals are mailed whenever available and charged to the individual schools. Cost of the films for any one circuit is divided equally among the schools participating.

This program has been in operation for three years. It has proved very successful and inexpensive. A record of expenses and receipts is kept in the Superintendent's office and a statement sent to each school after three circuits. Film cost per school averages about sixty cents. Transportation for each school is fifty-three cents. This means that for $1.13 a school

Membership—Distribution by States

Alabama (1), Arizona (1), Arkansas (0), California (32), Colorado (7), Connecticut (21), Delaware (1), Florida (10), Georgia (5), Idaho (0), Illinois (36), Indiana (10), Iowa (7), Kansas (5), Kentucky (3), Louisiana (56), Maine (2), Maryland (1), Massachusetts (43), Michigan (16), Minnesota (15), Mississippi (1), Missouri (4), Montana (0), Nebraska (5), Nevada (0), New Hampshire (1), New Jersey (14), New Mexico (0), New York (96), North Carolina (8), North Dakota (3), Ohio (47), Oklahoma (2), Oregon (3), Pennsylvania (24), Rhode Island (1), South Carolina (4), South Dakota (2), Tennessee (6), Texas (13), Utah (2), Vermont (1), Virginia (3), Washington (3), West Virginia (8), Wisconsin (11), Wyoming (1), Territory of Hawaii (3), Dist. of Columbia (9), Canada (4). Total: 551.

Lynch, James Perry  Ruston
Marshall, Donald  New Orleans
Mecklenburg, R. C.  Crowley
McDonough, No. 11 School
McDuff, E. A.
Meek, W.  Lake, Providence
Moore, Loretta  New Orleans
Mount, R. H.  Ruston
Newton, R. F., New Orleans
O'Neal, Bernice  Ruston
Robert, W., New Orleans
Rogers, Myrtle  Monroe
Simpson, A. B., Natchitoches
Smith, Anna Green  New Orleans
Smith, R. L.  Frankfort
Sutton, R. O., Ruston
Thompson, C. T., Estherwood
Walker, Perry  New Orleans
Waisen, J. W.  Iowa
Verner, Angelina  New Orleans
Waxman, E.  Lafayette
Woodard, Helen  Ruston
can have the use of from six to eight films and the machine for one-half day every other week. Schools are encouraged to order for their own use specific films to be available on the day when the machine is in their school.

The program is not perfect. Teachers have use of the films only at the time specified. They are unable to show the films, in most instances, more than once and often the film doesn’t come at the exact time that they are studying a specific unit. To educate the teachers to the program, demonstrations on proper use of films are held, and helpful books and manuals made available.

Robert Shreve reports from Milwaukee that a city movement is on foot to censor all films shown in the public schools. This is due to the fact that a film received by a junior high school from the German Railways Information office allegedly on Wagner and music turned out to be a description of Hitler enjoying Wagnerian opera. The film was shown in a Polish school and resulted in a violent demonstration by fifty students.

An interesting sidelight on the Fourth School Broadcast Conference is the report that J. Robert Miles of the Evaluation of School Broadcasts project at Ohio State University is preparing a catalog of about one thousand electrical transcriptions that are available commercially. The catalog will not only list prices and sources, but will also give an evaluation of each record.

Action pictures of Racine industries, showing the varied crafts and trades, have been prepared as vocational guidance aids in the Racine public school system, under the direction of Harrison U. Wood, Principal of the Franklin Junior High school. A group of lay citizens is cooperating with the students and school authorities in compiling this helpful information. It sounds like a good public relations program to further cement fine relationships between the school and the community.

Metropolitan Area

The New York Metropolitan Branch reports a meeting November 14 at the Central Needles Trade High School at 225 West 24th Street, New York City, for the purpose of showing primary grade teachers 16 mm. sound material in the primary field. The following films were shown "The Policeman," "An Airplane Trip," "Minor Duck in I Love to Make Music," "Bird Sanctuary," "Wake Up and Seed," "A Day at the Zoo," "In Our Pond," "Lincoln in the White House."

A great deal of discussion followed, and the meeting was considered a success by all those present. The program was under the direction of Pauline Bashkowitz, Chairman of the Program Committee, and Rita Hochheimer, Chairman of the Executive Committee. (News from the Metropolitan branch is supplied by Mrs. Esther Berg, Corresponding Secretary.)

4. The students’ names are listed in order as the preparatory work is completed, regardless of his class ranking.

5. Each instructor is responsible for certain presentations of the preparatory work and other materials to be given on the trip. This includes work in the field of history, geology, sociology, literature, economics, etc.

6. The total cost to the Board is less than eight dollars per student carried.

7. A student making all four of these tours will have traveled approximately 12,000 miles. The approximate cost to the student will average from eighteen to twenty-five dollars per trip. The total cost of the four trips to any one student will range from eighty-five to ninety-eight dollars.

It is very gratifying to the author, the instructors, and the Board of Education to see the program operating on the present basis. The ever increasing enrollment for the Saturday trips, and not only an increase in enrollment for the long tours but a greater number of students enrolling for two or more, seems to indicate public support and approval.

It is the aim of the Board to develop the long tours to the point where practically every student enrolled can make at least one of them. The author also hopes to develop the preparatory and follow-up activities to such a point that the Haw Creek Township High School can offer one-half unit of credit in Field Study that will be accepted toward graduation for the work done on each of the long tours.

The Nation, Our Campus

(Concluded from page 8)

of rich gold mining section in Black Hills—Conservation Projects, such as: Great Shoeestone Dam near Yellowstone Park, National Forests, Numerous Indian Reservations.

Economic and Industrial Regions: Farming and Ranching in Wyoming and South Dakota—Mining regions. Pueblo and Rapid City.


Practically all films listed in preparatory material were secured from the film library of the University of Illinois.

In summarizing the long tour program, the following points may answer some questions which may have come to the reader’s mind concerning student preparation, cost of the tour, etc.

1. The long tours are open to Seniors, Juniors, Sophomores and Freshmen, with preference given to the upper classmen.

2. All students are required to make suitable preparation in order to be eligible for the tour. At the present time, the preparation required is approximately the amount of work required in the ordinary half-unit course.

3. The students are required to do a certain amount of follow-up work after making the tour. If this work is not completed satisfactorily, the student is not eligible for any of the following tours.

4. The students’ names are listed in order as the preparatory work is completed, regardless of his class ranking.

5. Each instructor is responsible for certain presentations of the preparatory work and other materials to be given on the trip. This includes work in the field of history, geology, sociology, literature, economics, etc.

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Illustrate Your Experiments
to the entire class with this
Spencer Science Projector

Here are but a few of the experiments which can be most effectively dramatized by projection to the entire class with this Spencer Model B Delineascope.

1. Magnetic lines of force (illustrated above)
2. Properties of magnetic fields.
   a. Oersted's Experiments
   b. Motion of a magnet in a magnetic field
3. Surface tension
   a. Soap film experiments
   b. Mercury Ameba
4. Mechanics
   a. Hooke's Law
   b. Elastic limit
5. Polarized light
   Majority of the many phenomena
6. Electrolysis
   a. Polarization at anode
   b. Crystal growth
   c. Farady Effect
7. Precipitation Experiments in Chemistry
8. Thermometer and other meter readings
9. Contours of insects, small animals, plants, etc.

Details too small for the class to see in the experiment itself, are readily observed when magnified through projection. Transparent materials can be projected in true colors. The contours of opaque materials can also be projected. When motion is present it is shown vividly on the screen.

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MICROSCOPES
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PHOTOMICROGRAPHIC EQUIPMENT
REFRACTOMETERS
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PROJECTORS
A large and enthusiastic group of school film makers attended the Second Conference on the Educational Production of Motion Pictures, held under the joint sponsorship of the Bureau of Educational Research, and the Department of Photography of Ohio State University, and the National Council of Teachers of English, at Columbus, Ohio, on November 10 and 20. Dr. Edgar Dale of the Bureau of Educational Research was general chairman of the conference.

W. W. Charters, Director of the Bureau of Educational Research opened the conference with an address of welcome to the participants. Mrs. Helen Rand Miller, chairman of the Committee on Standards for Motion Pictures and Newspapers of the National Council of Teachers of English, presented greetings from the National Council. Your department editor summarized “The Story of Educational Film Production 1939-40.” This was followed by a panel discussion on “The Function of School-Produced Films in Public Relations.”

Members of the panel were: G. L. Crutcher, Louisville, Ky.; Donald Eldridge, High School, New Haven, Conn.; Godfrey Elliott, Public Schools, Oakvale, West Va.; William G. Hart, Bureau of Educational Research, Ohio State University; L. C. Larson, Extension Division, Indiana University; Charles Vance, Fourth Street Elementary School, Columbus, O.; William S. Wagner, Elementary School, Montpelier, O.; Roy Wenger, Bureau of Educational Research, Ohio State University. Among the films shown during the discussion were: The Sentinel (New Haven, Conn.), Our Children Learn to Read (Dearborn, Mich.), and First Film (Long Beach, Calif.).

Floyd Brooker of the Motion Picture Project of the American Council on Education, was the first afternoon speaker. In discussing his topic, “The Educational Implications of the Curriculum Production of Motion Pictures,” Mr. Brooker stated that eight films were completed in a filmmaking project at Denver, Colorado. Four of these were made with sound; the others were silent. Three other films were begun but not completed. The speaker described in detail how the films were taken and pointed out many of the fruitful results of the project. Selected Denver films were shown.

“The Ohio Project on Cooperative Production of Safety Films by Schools” was the next discussion topic. Dr. Edgar Dale spoke on “The Purpose and Organization of the Project.” Dr. Dale suggested that persons in other fields form similar cooperative groups to work on such subjects as recreation, libraries, extra-curricular activities, and citizenship. William G. Hart presented the basic technical problems of the project and showed how they were solved. Participants in the project who discussed its problems were: Gordon P. Corbett, Roosevelt School, Parkersburg, West Va., Godfrey Elliott, Oakvale, West Va., Schools; Richard Horn, Junior High School, Galion, Ohio; Antoinette Lowry, Bexley Elementary School, Columbus; Clyde K. Miller, High School, Dover, Ohio; Ross Stooksherry and George Tate, Board of Education, Dayton, Ohio; Charles Vance, Fourth Street Elementary School, Columbus, William S. Wagner, Montpelier, Ohio, Elementary School.

Following a paper on “Biological Film Production at Rutgers” by Earle B. Perkins, Rutgers University, the conference members attending a showing of Pare Lorentz’ The City.

The Tuesday evening session consisted of specialized clinics on: Planning the film and writing the scenario, Photography, and Publicizing and Distribution.

At the Wednesday morning meeting, F. W. Davis, Chairman of the Department of Photography, Ohio State University, described the organization and administration of a University film production service; Dean Postle of the Ohio State School of Dentistry related his experience with the production of dental films; and Lloyd Reber of the Ohio.

Making a teaching film on the use of the wood lathe—Grosse Point (Mich.) Junior High School.

By HARDY R. FINCH
Head of English
High School, Greenwich, Conn.
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State Photography Department gave a report on "How We Photograph Football."

Professor Justus Rising of Purdue University used the conference members as students in a demonstration of the teaching of engineering drawing by means of films. (Professor Rising's paper on "How We Make and Use Engineering Drawing Films" may be found on pages 414-16 of the December, 1941, issue of Educational Screen.) John H. Lewis of Princeton University showed a film used in the teaching of mathematics and read a paper on the production of films of this type. A handbook for school production units made by students of the Fieldston School, New York City, was presented to the conference by Charles Cook, a Fieldston instructor.

The afternoon program had five topics. The first, "Producing 16mm. Sound-on-Film" was discussed by Ross Stooksberry and George Tate of the Dayton, Ohio, Public Schools. Raymond Arn, Film Associates, Dayton, related the technical problems of 16mm. sound-on-film and demonstrated equipment used by him in sound work. "The Production of Films for Classroom Use" was the topic of Ernest LaFollette, Grosse Point Junior High School, Grosse Point, Michigan, who showed a film on the operation of a lathe. George F. Johnson, Agricultural Extension Agent, Pennsylvania State College, told how films of 4-11 Club activities were taken.

"Problems Involved in Filming 16mm. Color," the closing talk of the conference, was given by Lloyd Reber. A paper on "Teacher Production of Educational Films" by Kenneth F. Space of the Harmon Foundation, was filed for printing in the proceedings of the conference.

Bound copies of the "Proceedings of the Second Conference on the Educational Production of Motion Pictures" will be available in mimeographed form at $1.25 each. Orders should be sent to the Bureau of Educational Research, Ohio State University, Columbus, Ohio.

"School-made Motion Pictures and Their Use" was one of the topics discussed at a section meeting on motion pictures at the annual meeting of the National Council of Teachers of English in Chicago on Friday, November 22. The section meeting was sponsored by the Council's Committee on Standards for Motion Pictures under the chairmanship of Mrs. Helen Rand Miller. Dr. Ernest Bernbaum of the University of
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Illinois presided. The principal speaker was Dr. Edgar Dale. On the discussion panel were: Miriam B. Booth of Erie, Pa.; Godfrey Elliott, Oakvale, West Va.; Dr. Helen Clifford, Lowell Junior High School, Long Beach, Cal.; Lillian E. McNulty, Barrett Junior High School, Louisville, Ky.; Maribel Richardson, G.C. Murphy Junior High School, Atlanta, Ga.; Donald Eldridge, New Haven, Conn., Public Schools; and your department editor.

For those who are planning to make a public relations film, Recording Thru Movies (400), offers excellent advice. The film, made by Godfrey M. Elliott, Oakvale High School, gives examples of particular areas in which public relations films may be used to advantage.

How to Choose a Still Camera
(Continued from page 12)

set at the proper focus for the object. Incidentally, the coincidence type range finder is optically more correct than the split-field type and is easier on the eyes.

View Cameras. These cameras have a ground glass permanently fixed in the back of the camera or provision for slipping in a ground glass panel when needed. Focusing is done by watching the inverted image on the ground glass, as the lens is racked back and forth, until the image is sharp. Ground-glass focusing is not as needle-sharp as focusing with a range finder, but it permits careful composing by making it possible to see the image the same size, and in much the same way, as it will appear in the final contact print.

There are several disadvantages in connection with these cameras; the image is inverted; the focusing has to be done with the lens wide open to give maximum brilliance on the ground glass and then the lens stopped down to the opening to be used in making the exposure, a procedure that slows the work; the film cannot be in the camera while focusing; focusing should be done with the camera on a tripod; the image is not visible while the exposure is being made.

Single-lens Reflex Cameras. The photographer can look into the hood with which these cameras are provided and see the image right side up and full size on a horizontal ground glass. No tripod is required for focusing with these cameras. Also, the film is in the camera while focusing because an inclined mirror reflects the image away from the film to the ground glass. When the picture is snapped, the mirror swings out of the way just before the shutter opens.

This type camera has some of the same disadvantages as the view camera in that the focusing has to be done with the lens wide open to give maximum brilliance on the ground glass and in that the image is not visible while the exposure is being made.
The single-lens reflex camera has other disadvantages inherent in the reflex type. It is rather heavy and bulky. It is more complicated than the view camera and therefore more liable to get out of order. Most reflex cameras do not have a long bellows extension for copy work, found in some of the view cameras. If the single-lens reflex camera has a removable lens, and if the necessary tube extensions can be obtained or made, this difficulty can be overcome.

**Double-lens Reflex Cameras.** This type camera is like the single-lens reflex in that, by looking into the hood of the camera, the photographer sees the image right side up and full size on a horizontal ground glass. However, the double-lens reflex is provided with two lenses, one for taking the picture and one for viewing the image on the ground glass. The viewing lens has an unadjustable aperture as large, or even larger, than the largest aperture on the taking lens. Therefore, the image on the ground glass is always at its brightest, even though the taking lens may be set at a small aperture for the proper exposure. The image can also be seen before, during, and after the exposure.

The double-lens reflex lacks one of the advantages of the single-lens reflex in that it is not possible to judge the depth of field on the ground glass with it. In the case of the single-lens reflex, the photographer can open or close down the diaphragm of the lens and observe the depth of field on the ground glass at any particular lens aperture. It is impossible to do this with the viewing lens of the double lens reflex because of its unadjustable aperture. The double lens reflex has another disadvantage not encountered in the single-lens reflex—parallax becomes an important problem to be taken into consideration with the former at close distances.

Incidentally, these double-lens reflex cameras are now available in simple, inexpensive fixed-focus models, if desired.

It should be understood that a camera that is to accomplish a combination of the purposes listed must contain the necessary combination of features that have been described.

A final warning: do not expect to find the “ideal” camera, one that possesses all advantages and no disadvantages. There are a few cameras on the market that approach this ideal but none as yet that have attained it.

Before buying your camera, decide what types of photographic work you will most likely do, list, on the basis of the information supplied in this article, the desirable features a camera should have for these types of work, and then look for a camera of good construction and made by a reliable manufacturer that contains as many as possible of these desirable features. A comprehensive photographic catalog or directory will help considerably in your search for this camera.
The Literature in Visual Instruction
(Concluded from page 28)

government, of local industry, the effect of housing on delinquency, agencies at work on crime prevention. With respect to public welfare, a group found the film “Three Counties Against Syphilis” a graphic presentation of that particular problem. These and many other activities helped these high school students to understand some of the grave problems which their generation must meet.

Use of Newer Types of Instructional Materials — (In Twelfth Yearbook, Dept. of Supervisors and Directors of Instruction of the N.E.A., 1940, Chap. XIV—Lillian A. Lamoreaux, Director of Curriculum, Santa Barbara, Cal.)

Good concrete examples of use are drawn from the experiences of that school system in cooperating with Charles Hoban and his evaluation of films study.

Social Effects of Films

A Unit on Propaganda Analysis—Fenton A. Gage—Social Education, 4:484-8, November, 1940.

This helpful guide to a study of the ways in which communication agencies affect our opinions gives special attention to the role of the motion picture and radio.


The production of the series of short films now distributed as the “Human Relations Series” is one of the outstanding achievements of the Progressive Education Association’s Commission on Human Relations. There are over 50 subjects covering the range of human behavior from the young child in his family, to the older child and his group, the young person choosing his life work, and so on.

The films are now especially significant for the defense of democracy.

To live successfully in a democracy one must be able to take responsibility, to make well thoughtout decisions, to stand on one’s own feet, to cooperate in solving community problems—to have a strong personality. The overburdened, anxiety-ridden, insecure and poorly educated are the first to seek dictators who relieve them of making decisions and taking responsibility for intelligent planning and cooperation. The incidents depicted in the films can successfully be used to bring about an understanding that results in wholesome personality.

The films are now available to schools, with helpful study guides and stenographic accounts of previous student discussions.

Maps

The Use of Maps in the Classroom—Arthur Carthew, Los Angeles City College—The Business Education World, 21:223, November, 1940.

A timely discussion of the ways in which maps found in newspapers, magazines and almanacs should be used; also the importance of the automobile road map.


The reason why the map is given less attention in these days of sound films is not that it is less important, but that it is misunderstood. They are used more often on public buildings, at fairs and in popular exhibits for more decorative, semi artistic rather than for educational purposes. Maps help to replace a vague concept of location, space, distance in our view of our local, state, national, or international community by one that is clear, systematic and economical. We can learn to use map symbols in our mind, just as we use word symbols for thinking.

Ten rules for using maps in the teaching of social studies are given.

Teacher Training

Some First Steps—W. Gayle Starnes—Scholastic, 37:10-17 December 16, 1940

Some sound advice “to find ways and means which will encourage teachers to utilize these audio-visual aids materials in such a way that their pupils will derive the maximum benefit from their use.” The three steps suggested are: 1) Create in teachers and administrators a realization of the need for in-service teacher education in the use of audio-visual aids; 2) Have at least one person in the school who is thoroughly trained; 3) Hold a meeting of all teachers in the school; 4) Conduct a second meeting for those teachers who are interested. Care should be taken not to move too rapidly in the development of the program.

Libraries and Visual Aids


A review of the trends in the development of scientific aids to learning that involve the transmission of knowledge.

An interestingly-written summary of ways in which the library can serve as a vitalized center for adult education through films, phonograph records, slides, filmstrips and the like.

Pictures


Gives helpful advice on the principles of selection, sources and techniques of mounting, labeling and filing of flat pictures.

Pictures Teach History—Clarence Stegmeier, Harvey, III.—The Social Studies, 31:298, November, 1940.

Art pictures were transferred to the walls of a shop room and converted to a frieze that depicted scenes of American history. The pictures used are colored copies of famous originals and are very accurate in details.

Sources of Materials


An alphabetical listing of pamphlets and other aids helpful for teaching geography. The criteria used by the author for inclusion were: he had examined the material and found that it contained valuable information; the material was available to teachers.

Film Information Service—a monthly bulletin listing new commercial and industrial films or selected older films for school programs. Subscription $1.00 a year. Each subscriber will be privileged to write regarding film problems.

Address Film Information Service, 535 Hearst Tower Bldg., Baltimore, Md.


Bell & Howell’s new 8-page quarterly publication is a newsy bulletin, which aims to serve visual educators more completely than the Filmo Topics department “Motion Pictures in Education” could do within its space limitations. The first issue of the new organ features an article by W. Gayle Starnes, “Looking into the Future,” which discusses the role of motion pictures in education. There is a short article on the use of the film by athletic coaches, and departments entitled “Notes from the Screening Room,” “For Operators Only,” and “New Visual Education Tools.”

Bell & Howell state that all schools and educators previously receiving Filmo Topics have been placed on the mailing list for Filmo Visual Review.
THE EXPERTS who have so enthusiastically "taken to" the RCA 16 mm. Sound Film Projector include experienced men and women in schools, colleges, industrial organizations, film laboratories and producing companies. They are located not only in this country, but in India, Colombia, Australia, Canada, and many others as well.

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Sound really lives when you use this projector, thanks to film take-up equalizer and superb electrodynamic speaker. Pictures are more sparkling because of oversize reflector, condenser and objective lens, which provide more even light on the screen.

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Modern schools stay modern with RCA Tubes in their sound equipment
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Control of Body Temperature (Eripi) 11 minutes, 16mm sound, sale price $50.00. Teacher’s Guide to be furnished.

In this film laboratory demonstrations, animated diagrams, microcinematography and normal cinematography combine to give a scientific explanation of the control of body temperature in warm-blooded animals. In the first scenes men are seen in environments of widely varying temperatures. Next a recording thermometer reveals a man’s temperature throughout 24 hours. Temperature chamber experiments draw a distinction between warm-blooded and cold-blooded animals. Foods are designated as the source of body heat. Human body temperature is contrasted in states of relaxation and exercise, and the effects of extreme heat and cold on the body are demonstrated. An animated diagram reveals the working of a sweat gland; the effects of low and high humidity upon body cooling through sweat evaporation are explained. Next the work of the hypothalamus is demonstrated. An analogy is here drawn between the function of a thermostat in keeping house temperature constant and that of the hypothalamus in keeping body temperature constant. Animated diagrams then reveal in detail the workings of the body’s control mechanisms: excessive heat causes increased heat loss and decreased heat production; cold, the opposite. These effects are exemplified, and the film ends by saying that the temperature control mechanisms of the body operate together to effect a triumph over temperature variations.

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Many other exclusive features make the Holmes sound-on-film projector the eminent choice for visual education and entertainment. It’s the only machine of its class equipped with the superior Rausch & Long aspheric type condensers. Large diameter of sprockets makes them easier to place film around — brackets hold 1600 foot reels.

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Amplifier is attached to projector. For sound films, unnecessary to remove amplifier when running pictures in various class rooms and auditoriums. Ask for Demonstration

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Division of General Extension,
University System of Georgia, Atlanta

COMMITTEE OPINION—A very good film for use in physiology and biology classes; should be valuable also in general science, hygiene, and, to a more limited extent, psychology. The film is technically excellent in every way, and the various cinematic devices in it are used to maximum advantage. It should have some value at junior high, with major effectiveness at senior high and college levels.

White Flood (Garrison) 2 reels, 16mm sound, sale price $90.00. Apply to distributor for rental rate.

An impressionistic presentation of the geological effects of the Ice Age, and a study of some glaciers which exist today. As the film opens, a brief explanation of the structure and formation of our earth is followed by an explanation of the erosive actions of atmosphere and water. Then the film enters upon its theme by explaining that another important erosive agent is ice, the "white flood." The beginning of the Ice Age is depicted; man of that era is shown, and the advance and retreat of the great ice coast over the continents. It is explained that after the Ice Age life slowly returned, and that we still live in that springtime. But all around, in the strewn boulders and the soft round hills of our earth, we may read its history. And in Alaska we may study existing glaciers to learn the laws and movements of the ice. Here there is an especially beautiful series of scenes showing views of ice-walls, glaciers, and ice-covered mountains in Alaska. The complete life history of one glacier is shown, from its birth in snowfalls high in the mountains until it breaks up into icebergs at the ocean’s edge. In closing the narrator states that glacier formation is governed by delicate climatic changes and that man’s life hangs in this balance between the elements and the earth.

COMMITTEE OPINION—This film should be valuable in geology classes, and of some value as well in geography, economic geography, and physical science studies. Though its specific educational application is limited, it should help to develop an appreciation of the vastness of nature. Photography and sound are good; musical background to narration is well chosen.

Boy in Court (NPA) 11 minutes, 16mm sound, sale price $25.00.

Uses a dramatization of one delinquent boy’s rehabilitation to tell the story of the juvenile court and probation. As the film begins three boys are discovered attempting to steal a car. One of them, Johnny, is caught and arrested. The narrator questions his fate: will this lead to another career of prison and crime? Fortunately, for Johnny, the answer is "No," for his case is assigned to a modern juvenile court. Johnny is interviewed and tested; a trained case worker investigates his home background, "the gang," and his school situation. And so, still somewhat resentful of efforts in his behalf, Johnny is placed upon probation under the supervision of a case worker, who slowly begins to build a new world for the boy by improving his home, by leading him to attend church, to take up hobbies, and to improve in school. At the end of a year, "the gang" and all it stands for forgotten, Johnny reports to the judge again and is congratulated for his improvement.

COMMITTEE OPINION—In the opinion of the Committee, this is an excellent film for community usage, with adult audiences, in stimulating interest in, and providing information about, probation work. Although the Committee does not consider it entirely suitable for use in secondary schools because of the possibility that it may contribute undesirable ideas to youthful minds, it should be valuable for college use in connection with delinquency problems. Technical production (by Willard Pictures) is excellent in all respects.
The Policeman (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's Guide to be furnished.

Demonstrates to the elementary child the work of a city policeman. As the film opens, Policeman Jim Barnes leaves his home to report for roll call at police headquarters. After assignment of duties, the work of the police all over the city is shown in a series of scenes. Next Officer Barnes is seen as he takes up his duties, at his assigned post on school traffic duty. Brief safety lessons for children on bicycles and on foot are presented here. After school begins, Officer Barnes returns to patrol duty and is called to climb a tree and rescue a woman's kitten. On patrol in his car, he discovers and returns home a lost boy. Finally, he chases and apprehends a reckless driver who has been reported by an alert schoolboy.

Committee Opinion—in the opinion of the Committee, which included four elementary teachers, this is a fairly good film for elementary use in connection with safety, social studies, and vocational guidance. It was noted that in one or two instances the patrolman himself failed to observe the best safety practices. The film is within the experiences of the elementary child, and it should contribute to the formation of favorable attitudes toward policemen. Photography is good; organization and sound are adequate.

Buenos Dias, Carmelita (Baptista) approx. 15 minutes, 16mm sound, sale price $50, rental $5. Teacher's Guide and preparatory lessons furnished.

Designed for use in the second year of high school Spanish instruction, this film consists of a simple story accompanied by narration in Castilian Spanish. The story tells of an attractive but rather lazy high school girl, Carmelita, who sleeps late and loafers on the way to school. Arriving long after Spanish class has begun, she is at first untruthful in excusing her tardiness, but then she repeats and tells the truth. No words from the Kenniston Merit Lists are used in the narration, which is spoken very slowly and distinctly. Brought to especial attention in the film are the Spanish numerals, telling time in Spanish, and many idioms and descriptive terms.

Committee Opinion—in the opinion of a special reviewing committee which saw this film, it is an excellent film for second-year classes in Spanish at the high-school level. It should prove very valuable also for use in junior high classes and in college classes. The film probably would be of some value also in first-year classes, especially in college. It should prove effective in fostering and stimulating the students' desire for additional Spanish study. Photography is adequate; sound is good.

Testing the I. Q. (W&G) 15 minutes (375 feet) 16mm silent, sale price $23.00.

Produced in the Psychology Laboratory of Columbia University to demonstrate the administration of the Revised Stanford-Binet Intelligence Test and the calculation of the I. Q. After an introductory outline, a psychologist administers Form L to a five-year-old girl. The film shows only the tests passed, beginning at the four-year level and running up to the seven-year level. Titles and tables show the scoring standards. Finally, the I. Q. is calculated.

Committee Opinion—Should be of some value for college and normal school classes in psychology, educational psychology, and educational tests and measurements. The attractive child who is taking the test is at ease throughout, which sometimes is not the case in class demonstrations. The class should be given considerable preparation before the film is shown, and a discussion will be needed following the showing to clarify the points brought out in the film. Photography is fair; there is a need for more clarity in the extreme closeup shots of the tests and scoring.

Producers Named Above
Baptista, C. O. Baptista Film Laboratory, 325 West Huron Street, Chicago.
Erpi, Erpi Classroom Films, Inc. 35-11 35th Ave., Long Island City, N. Y.
Garrison, Garrison Film Distributors, Inc., 1600 Broadway, New York, N. Y.
NPA, National Probation Association, 50 W. 50th Street, New York, N. Y.
W&G, Warden & Gilbert, Psychology Laboratory, Columbia University, New York, N. Y.

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Grant for Motion Picture Research

An initial grant of $1,000 has been made by Coronet Productions, Inc., to Indiana University for educational motion picture research. Coronet Productions have offices in Chicago and a production studio at Glenview, Illinois. The results of the research will be used by Coronet as a basis for planning and producing educational motion pictures for classroom use.

The research will be supervised by staff members of Indiana University, and its purpose under the terms of the Coronet grant is to analyze the curriculum content of grades 1-12 in order to determine those topics for which motion pictures may provide a more adequate experimental background for classroom instruction. The project is to be administered by a committee composed of Dean H. L. Smith, of the University's School of Education; Professor R. E. Cavanaugh, Director of the Extension Division; Mr. L. C. Larson of the Bureau of Audio-Visual Aids and the School of Education; and two additional members of the School of Education faculty. The two other members of the committee are Professors Carl G. F. Frazen and Velorus Martz.

University professors will begin work immediately on four studies recommended by the local committee and accepted by Coronet Productions for providing information which their company must possess in order to develop plans for a systematic program of educational film production. Professor W. W. Wright will supervise an elementary grade study designed to identify topics included in grades 1-6 which may be presented successfully by educational motion pictures. A project in the social studies area for the purpose of ascertaining which social science situations are taught most often in grades 7-12 inclusive will be directed by Prof. I. O. Foster. Professor Melvin S. Lewis and Mr. John H. Dillon will supervise a study in which it is planned to determine the basic understandings and skills that are considered most important in the field of business education. Dr. Karl Booskeller will supervise a study designed to identify, within the area of group games, folk dancing and fundamental rhythms, the activities which are most frequently used in each grade of the elementary and secondary schools.

Experiment to Revive Old Photoplays

A nation-wide experiment to determine the possibility of substituting older "A" pictures for current "B" pictures and of using recommended older theatrical films for a planned series of students' matinees, around which curriculum units in photoplay discrimination will be built, will be tried during the academic year 1940-41 under the auspices of the motion-picture committee of the N. E. A. Department of Secondary Teachers.

School authorities, in co-operation with theatre managers, will select ten photoplays to be shown during the school year on one afternoon or one Saturday morning each month. The films thus revived will serve as the basis of a new course in "Types of the Photoplay." The experiment is under the supervision of Dr.
Notes

William Lewin, of the Weequahic High School at Newark, in cooperation with Josephine Allensworth of Memphis, Tennessee, chairman of the Departmental Committee on school-and-theatre cooperation.

Films for the series will be selected from a recommended list of 76 photoplays. Among them are such films as: Victoria the Great, Snow White, Abe Lincoln in Illinois, Quality Street, Mutiny on the Bounty, A Tale of Two Cities, Romeo and Juliet, Pygmalion, Goodbye Mr Chips, Heidi, Stanley and Livingstone, Young Mr. Lincoln, Wells Fargo, The Buccaneer, Les Misérables, Tom Sawyer, A Midsummer Night's Dream, The Life of Emile Zola, Robin Hood, etc. Where suitable arrangements cannot be made with a theatre, it is planned to show 16-millimeter versions of some of these photoplays in classrooms and school auditoriums.

Educators interested in the experiment should write to Mr. Lewin for complete information and the list of recommended films.

School Broadcast Conference

In Chicago, December 4, 5 and 6 the School Broadcast Conference held its fourth annual meeting, with Harold W. Kent of the Radio Committee of the Chicago Board of Education acting as chairman. Purpose of the three-day conference was to provide "a meeting place for educators, broadcasters, and directors of radio in education who are putting the programs on the air and for all those interested in the utilization of radio programs," as well as to provide "a laboratory for the nation where we may note the development and demonstration of the use of radio in education."

Speakers at the general sessions included James R. Angell of NBC, and Gladstone Murray of Canadian Broadcasting Corp. Closing session of the conference featured a panel discussion on "Methods by Which Radio Implements Democracy" with the following participating: Chairman, C. A. Siepmann, Harvard University; Lynan Bryson, Chairman, Adult Education Board, CBS, George V. Denny Jr., Moderator, America's Town Meeting, NBC; and Raymond Gram Swing, News Commentator, Mutual.

Classroom demonstrations on the utilization of various types of radio programs filled most of the daily sessions. Many of the demonstrations were presented by an actual class group from the schools of Chicago and suburbs. Acting as chairman at these "laboratory" sessions were: Clifton M. Utey, Director, Chicago Council on Foreign Relations; Wilbur Brancham, University of Chicago; Dudley Crafts Watson, Chicago Art Institute; Agnes Adams, National College of Education; Donald Cawelti, Winnetka Public Schools; Elizabeth Wells Robertson, Art Director, Chicago Public Schools, and Gerhart Wiebe, Ohio State University.

Several afternoon meetings of the Conference were devoted to work-study groups considering these phases of radio in education: Transcribed radio programs, radio in the activity program, elementary school radio, radio writing (professional clinic), a central

"Early Settlers of New England"

1 of 51 Instructional Sound Films on Social Science

What it does: Reinacts the lot of Salem's hardy pioneers about 1626. Types of people; the proximity of their bark wigwams and dugouts to the seashore; their dependence upon sea food and corn for food; the need for mutual assistance; division of labor; care of the sick; problems of crop cultivation; relationships with England; and the background beginnings of American democracy are portrayed.

Scope of use: From the intermediate grade level upward. 1. In Elementary Social Studies and American History courses to develop an understanding and appreciation of the conditions through which the American colonists lived. 2. In Sociology and Economics instruction to provide a means of contrast with today's social and economic order. 3. In home Economics and Home Making courses to depict the habits of early American home life and family relationships. 4. In Americanization classes and General Adult Education to inculcate a wholesome regard for the American heritage.

Instructional Sound Films for use in:

| SOCIAL SCIENCE | 51 films | PHYSICS | 12 films |
| BIOLOGICAL SCIENCE | 12 films | CHEMISTRY | 6 films |
| PLANT LIFE | 9 films | ART | 6 films |
| ANIMAL LIFE | 28 films | MUSIC | 5 films |
| ASTRONOMY | 4 films | CHILD PSYCHOLOGY | 13 films |
| GEOLOGY | 9 films | TRACK AND FIELD ATHLETICS | 4 films |

Erpi Classroom Films Inc.

ES 1-41
35-41 Thirty-sixth Avenue, Long Island City, N. Y.

Gentlemen: Please send me descriptive material on our films including the Integration Chart which shows graphically the extent to which each film correlates with different courses.

Name ____________________________
Position __________________________
Address ____________________________
16 MM Sound

FILMS For HISTORY CLASSES

<table>
<thead>
<tr>
<th>Causes and Immediate Effects</th>
<th>Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>of the First World War</td>
<td>2 reels $4.00</td>
</tr>
<tr>
<td>Highlights of Lincoln's Career</td>
<td>1 reel  2.00</td>
</tr>
<tr>
<td>Mr. President</td>
<td>1 reel  2.00</td>
</tr>
<tr>
<td>Puritans of Mass. Colony</td>
<td>2 reels 4.00</td>
</tr>
<tr>
<td>Our Constitution</td>
<td>2 reels 4.00</td>
</tr>
<tr>
<td>Our Monroe Doctrine</td>
<td>2 reels 4.00</td>
</tr>
<tr>
<td>Seeds of the Constitution</td>
<td>1 reel  2.00</td>
</tr>
<tr>
<td>Story of Our Flag</td>
<td>1 reel  2.00</td>
</tr>
</tbody>
</table>

Write for complete list of educational films and catalog of entertainment subjects.

AUDIO-FILM LIBRARIES
661 Bloomfield Ave., Bloomfield, N. J.

✓ As the January number of EDUCATIONAL SCREEN goes to press we have one 16mm sound print of

ABRAHAM LINCOLN

starring Walter Huston (running time 90 minutes) open for the entire month of February at a rental of $20 per showing. The print will be rented to schools which are not far from Chicago by air or railway express. Exhibitors pay express both ways. In applying for the film please specify hour of showing and give us as many alternate dates as possible. Rentals this year after March 1 will be $15.00.

SEND FOR OUR 1941 CATALOG

INTERNATIONAL FILM BUREAU
59 East Van Buren Street
Chicago, Illinois

HOW THIS GENERATION CAN IMPROVE THE NEXT

Visualized Lecture Series

providing new light on Modern Race Decline and Means for Race Betterment.

Developed from field studies among 14 primitive races in different parts of the world. The data are available in 8 illustrated lectures in either film strips, 2 x 2 glass slides, or standard glass slides, with descriptive manuals and an illustrated outline.

1. Sketch of primitive races studied
2. How primitive races have prevented tooth decay
3. How faces of primitives were more beautiful before than after modernization
4. Facial beauty lost in one generation and greater injury to later-born children
5. Animal defects from foods of parents and mutual re-

FOR DETAILS WITH DESCRIPTIVE LITERATURE WRITE:

Dr. Weston A. Price, Dental Research Laboratories
8026 Euclid Avenue, Cleveland, Ohio

CHILD HEALTH

Training and Character Building Films
1 reel each, 16 mm Silent or Sound, 8 mm Silent

BEFORE BABY DOLLS, BABY'S FIRST YEAR, GROWING UP, LIFE OF A HEALTHY CHILD, THE ROAD TO HEALTH AND HAPPINESS

Authentic educational subjects, prepared in collaboration with leading health authorities.

FOR SALE OR RENT

HEALTH FILM SERVICE
First Nat'l Bank Bldg.
Salem, Oregon

MAKE YOUR OWN

TYPEWRITER SLIDES

For Screen Projection

USE RADIO MATS
on sale by Theatre Supply Dealers
Write for Free Sample

RADIO-MAT SLIDE CO., Inc.
1819 Broadway, Dept. V, New York City

radio workshop, radio production (professional clinic), in-school workshops, evaluation-utilization, occupational program, parent-teachers association, teacher training, the safety program, and foreign language.

The Conference was significant for the high degree of cooperation between the production and the utilization ends of radio in education. There was much practical value in the classroom demonstrations, most of which allowed time for discussion and questions afterwards.

N.Y.U. Film Library

A non-profit film rental library has been established by New York University, Washington Square, New York City, to distribute educational motion pictures to schools and educational groups. Beginning with a nucleus of the fifty-five 16mm, films in the Human Relations Series, and the films produced by the Educational Film Institute—"The Children Must Learn," "And So They Live," and "Valley Town"—the library will add other films, selected particularly for their timeliness and technical excellence. The venture will be managed by a university staff committee headed by Professor Herbert B. Dorau, Alice Kellner, now on the faculty of N.Y.U., is one of the committee.

More Cooperative Film Libraries Established

Every month brings news of the inauguration of cooperative film library enterprises throughout the country. State Teachers Colleges at Ada and Durant, Oklahoma, are sponsoring such projects to increase the effectiveness of their services to surrounding schools and communities. Teacher training in the use of visual aids in the classroom is to be emphasized also. Dr. O. L. Parker will have charge of the library at Ada, and Dr. Ralph J. Shaw at Durant.

Use of Modern Art Museum Programs Increasing

Approximately 325 colleges, schools and other educational and cultural groups are now renting films from the Museum of Modern Art Film Library in New York City. These films cannot be used for moneymaking purposes, nor for benefits. Most requests come from the English, foreign language, sociology, and writing departments of educational institutions.

Eight series of films are now available: "A Short Survey of the Film in America"; "Some Memorable American Films, 1896-1935." "The Swedish Film";
“Post-War American Films”; “The Film in Germany and the Film in France”; “The Work of D. W. Griffith, 1907-1924;” “Non Fiction Films;” “The Russian Film.” From five to eight programs of approximately two hours length each, constitute each series. Patrons of the service must book the films by series of programs.

Series of Local Conferences
Dr. John Hollinger of the Department of Visualiza-
tion of the Pittsburgh city schools, and Herbert T. Olander, Instructor in Audio-Visual Aids at the Uni-
versity of Pittsburgh, have arranged four Saturday morning conferences on audio-visual aids, designed largely for teachers and administrators in the local area. The first conference was held January 18th and had as its theme “The Administration of a Visual Aids Program.” On February 15th “Visual Aids in Safety Education” was discussed. The third conference on March 15th, will be devoted to “Visual Aids in the Teaching of Science,” and the final one, on April 26th, to “The Library in Relation to Visual Aids.”

School Recordings Evaluated
The evaluation of educational recordings has been undertaken by the Association of School Film Librar-
ies in cooperation with Dr. L. Keith Tyler of the Bu-
reau of Educational Research of Ohio State University. The evaluations will be made available, in catalog form, to members and subscribers of the Association. A pamphlet, entitled “Educational Recordings for Classroom Use,” containing titles of about 375 record-
ings for school use, has been prepared as a first step in the project. It may be obtained for fifty cents from the Association’s headquarters at 9 Rockefeller Plaza, New York City.

Motion Pictures and Defense Activities
Dr. Leo Rosten, former professor of Economics at the University of Chicago, has been appointed Chief of the Motion Picture Section in the Division of In-
formation of the National Defense Commission, with Hollywood as his headquarters. His duties will be to assist producers in the production of defense pictures, and in the selection of picture material utilizing defense activities. Just previous to this appointment, Mr. Rosten had been making a sociological study of the film industry, under grants from the Carnegie and Rocke-
feller Foundations, results of which will be published soon.

NEW RELEASES
in 16 mm. Sound Film of
OUTSTANDING FEATURES

MEN ARE NOT GODS
Featuring Miriam Hopkins as the impulsive secretary to a dramatic critic. She alters one of her employer’s harsh reviews with surprising results. With Gertrude Lawrence.
3 Reels

KNIGHT WITHOUT ARMOR
A thrilling war story of Countess Alexandra, portrayed by Marlene Dietrich, as the lady in distress and Robert Donat as the modern-day knight who comes to her rescue.
11 Reels

THE MAN WHO COULD WORK MIRACLES
H. G. Wells’ comedy of a timid clerk who turned into a man of might and miracles. Starring Roland Young.
9 Reels

The RETURN of the SCARLET PIMPERNEL
Starring Barry Barnes and Sophie Stewart. 10 Reels

MURDER ON DIAMOND ROW
Based on one of Edgar Wallace’s greatest detective novels, featuring Edmund Lowe. 8 Reels

THE GAIETY GIRLS
The happy story of a merry millionairess and a coy girl. Starring Patricia Ellis and Jack Hulbert. 8 Reels

The PRIVATE LIFE of DON JUAN
Douglas Fairbanks in one of his typical swashbuckling, dazed roles, replete with vigorous swordplay and breath-taking stunts. Stars Merle Oberon, Binnie Barnes. 10 Reels

Visit our Booth No. H-12 at the A.A.S.A. Convention, Atlantic City, N. J.

Send for catalog of 2000 Educational and Entertainment subjects — for rent or sale.

WALTER O. GUTLOHN, Inc.
35 West 45th Street Dept. E-1 New York, N. Y.
New Company to Film Plays in 16mm

Theatre-on-Film, Inc., has been formed recently by Joseph Pollak to screen outstanding Broadway plays in their entirety exactly as they are originally produced and directed, with their original casts, settings, and costumes, and to make them available for educational and non-theatrical showings. Cities and towns throughout the country will now see on the reel, in 16mm film, plays which until now have only been visited by road companies, the vast audiences throughout the nation have not been permitted—so much as a glimpse of a stage play.

A scene from the film

"Journey to Jerusalem"

The company's program for the coming season will consist of four to six productions, each made in accordance with the highest standards of theatre technique. The first production, Maxwell Anderson's The Journey to Jerusalem, has been completed. This play was selected by Theatre-on-Film as its initial production because of its individual and particular fitness for the cultural, religious and social fields. It is hailed by the New York critics and the public as a dramatic masterpiece. It is a moving story of the journey of the Boy Jesus to Jerusalem, and the revelation to him by a Zealot from the hills that he was the Messiah, and that it involved suffering and death. The film runs for 100 minutes.

With their productions, Theatre-on-Film, Inc., will perpetuate on film the great art of the living drama. Its aim is to enrich the world by creating a permanent library of great plays comparable to the existing store of recorded great music, fine literature, and the masterpieces of art.

Films Incorporated, 330 West 42nd Street, New York City, makes the following announcement:

World in Flames—a full length documentary feature, picturizing world events of the past ten years leading up to the present crisis—will shortly be available in 16mm sound form. Of this film the United Parents Association of New York City, Inc., says: "The picture is an excellent historical document portraying actual scenes during the past ten years that lead up to this world catastrophe. It is sincerely hoped that our children view this film and learn to know how this modern madness came about." To this statement are added the recommendations of President Roosevelt, Wendell L. Willkie, Secretary of Navy Knox and many other famous American leaders who urge that every American see this enlightening film.

This vivid historical chronicle of the years 1920 to 1940, produced by Paramount, was created because the editors felt the need of making the story of our times more clearly understandable to the people who are the actors in the drama. In the commentary dedicated to "free people" they have shown how the world depression fathered the drive to dictatorships; how the dictatorships thrived on the world's weakened democracy; and finally how the revitalized tide of democratic faith has begun to fight back. Complete description and rental information can be secured from Films Incorporated.

Schools wishing to conduct programs on History, Democracy, National Defense and Patriotism will find a new listing published by Films Incorporated entitled "American Films," extremely helpful. This leaflet will be furnished upon request to Films Incorporated.

Garrison Films, Inc., 1600 Broadway, New York City, offer the following new films for rental or sale:

Sunk by Submarine—1 reel, 16mm sound. A documentary record of the actual conduct of submarine warfare as compiled from World War I scenes and the years following. It shows submarines, conditions, preparation for attack, attack itself and its consequences.

Toys from Odds and Ends—1 reel, 16mm silent. Subject No. 7 in the series of Handicraft Teaching Films produced in cooperation with the Universal School of Handicrafts.

Bouncing—1 reel, 16mm silent—Produced by Techfilm. This subject portrays the nature, structure and function of the lungs.

Our Bill of Rights; Our Declaration of Independence—two films in the American historical series, produced by Academic Films.

Scholastic Coach Magazine, 220 East 42nd Street, New York City, has produced a 16mm moving picture analysis of volleyball techniques and fundamentals, with the approval of the Volley Ball Sub-Committee of the National Section on Women's Athletics of the American Association for Health, Physical Education and Recreation. Josephine Burke, a member of the Sub-Committee, took personal charge of the direction, and students of the Department of Physical Education at Hunter College (New York) were the demonstrators.

Techniques in Volley Ball for Girls—1 reel, silent—is the title of the film. The game is thoroughly covered under these headings: Serves—Underhand, Overhead, Assistant; Handling the Ball—Low, Chest High, High; Taking the Speed out of the Ball; Setting Up the Ball for a Teammate; Playing the Ball Off the Net; The Smash or Kill; Blocking the Ball; and Team Play. The film employs both normal speed and slow motion photography to solve the problems of modern volleyball technique and strategy. As an aid to coaching the value of these slow motion scenes can hardly be overestimated. (Rental, $2.00 per day, plus 50c handling charge.)

American Institute of Baking, 9 Rockefeller Plaza, New York City, is arranging showings of a new motion picture, available free to schools, parents, civic clubs, consumers, and bakers, entitled:

Give Us This Day . . . The Story of Bread—30 minutes, 16mm sound—replete with educational information about one of our most important foods. The history of bread-making, with scenes of ancient Egypt, Greece, Rome, the Middle Ages, the French Revolution. The film depicts how bread was made in grandmothers' day, and how it is prepared today in modern sanitary bakeries. From the mixing of the flour to wrapping of the loaves. The composition and food value of bread, and its place in the daily diet are explained.

(Concluded on page 40)
not until the invention of the sound motion picture that Equal
National Opportunities could be provided in such a dynamic manner
without the schools of America. Every school, regardless of size,
and, limitation of physical environment or finances, may now provide
learning opportunities with the aid of Amprosound 16 mm. motion
projectors. In collaboration with educational film libraries, a
plan may be devised which will make an outstanding contribution to
school and community. Ampro Educational Dealers are trained espe-
cially to provide service and information on all phases of Visual Education.

The Large Users of Ampro Projectors

Thousands of schools, colleges, universities and libraries are using Ampro silent and
projectors. Here is a partial list of educational, industrial, governmental and other
Ampro projectors who have re-ordered again and again — on the basis of the
value of their original purchases. Some of these customers have
been users of Ampro projection equipment for years: Boards of
Education in New York City, Chicago, Detroit, Kansas City
and hundreds of other cities—Allis-Chalmers
American Air Lines, Firestone Tire & Rubber Com-
pany, General Motors, General Electric
Company, General Tire and Rubber Company, Massey
Company, Mead-Johnson Company, Shell Petroleum,
Inc., General Motor Acceptance, Servel (Electrolux),
V-Thebusch, Inc., Stewart-Warner, Illinois Bell Tele-
scope Corporation, Wright Air Field, Collins
man, Barrett Company, Union Carbon & Caribb
Cheese Company, Keystone State Amusement Company,
Theady, Walgreen Company, Williams Pictures Produc-
CC. Camps in Sparta, Wis., El Paso, Tex., Phoenix,
Columbus, Ohio, Fort Bragg, N. C., Ideal Pictures
U. S. Navy Recruiting Service, U. S. Dept. of the
Army, U. S. Dept. of Agriculture,—
any other city, state and national government
agencies.

To see the
Ampro Dis-
strakes J 45-47.
Exhibit of
ac difficulties
School Ad-
ners. Nation-
Atlantic City,
25-27, 1941.

Amprosound Model YA — the versatility of
Amprosound projectors permits their use
in classrooms or auditoriums with 750 or
1000 watt illumination. With a microphone
the Amprosound provides a public address
system for auditoriums, gymnasiums, and
outdoor activities. With a phonograph turn-
table, even the smallest school can enjoy
recorded music in connection with various
school functions. Be sure to see an Ampro
demonstration before deciding on projection
equipment.

Read for
Ampro Catalog

The complete line of Ampro 16 mm.
16 mm. silent, and convertible to sound
Thousands of Ampro projection systems
providing splendid service in schools all over the
find out what they can do for you.

AMPRO CORPORATION, 2839 N. Western Ave., Chicago, Ill.

Please send me new Ampro Catalog. I am particularly interested in:

□ Ampro 16mm. Silent and Convertible to Sound Projectors
□ New Amprosound 16mm. Projectors

Name ____________________________
Address ____________________________
The work called Wax—seen third is the in the nomination shown by Wells' remedy as the biggest traffic proceeds to re-live Henry Cabbage's earliest "Panay" is pictured. which Britain's Arts reference DcVry's English) come, affected number reflecting Live Wells' series Two the teachers East notable part It is the horse. the Following Japan country. to inspecting war-torn countries as the Following de-Hemisphere war and in Supreme court of state of Gardens and truck patches of the United States and Europe. Particularly interesting are the closeup shots showing the insect's voracious consumption of living plants.

The March of Time, 369 Lexington Avenue, New York City, has prepared a Study Guide to the current March of Time film, entitled:

Arms and the Men—U.S.A.—showing the complete story of the draft—how the men live and train—and many other phases of the nation's huge defense program. The Study Guide has been issued to assist teachers of current events and history classes who wish to use the film, after it is seen at the local theatre, as a basis for classroom discussion. The Guide contains quiz questions and answers based on the film, bibliography of reference material for further study, and a work plan. It may be obtained free from local theatre managers, or by writing to The Study Guide, March of Time.

The Educational Screen

The DeVry Corporation, 1111 Armitage Avenue, Chicago, reports the following advantages to their rapidly growing 16mm sound Educational Film Library:

Chinook's Children—in which Almiral Byrd's famous lead dog plays the important role.

South America—depicting the activities of the entire continent.

Palestine—describing the old and new Holy Land.

A copy of DeVry's latest Film Catalog will be sent free upon request.

Nu-Art Films, Inc., 145 West 45th Street, New York City, are the exclusive distributors of a number of very unusual single-reel subjects.

Oddities in the Law—presents the idiosyncrasies of the traffic laws of several states. For example, in Milwaukee, a vehicle can park only two hours, unless it is hitched to a horse.

Life Cycle of the White or Cabbage Butterfly—is a scientifically valuable exposition of the life cycle of this insect which is found in the country gardens and truck patches of the United States and Europe. Particularly interesting are the closeup shots showing the insect's voracious consumption of living plants.

The International Film Bureau, 59 East Van Buren Street, Chicago, has just published its 1941 Catalog of 16mm and 35mm rental films for entertainment and education, which lists carefully selected films in the fields of Art, Geography, Economics and Government and Sports. An impressive list of French features (subtitles in English) is included, as well as a series of short French Teaching Films, and films in German and Spanish.

Newly added also to the Bureau's library of outstanding feature films are the Alexander Korda productions of Private Life of Henry VIII, The Ghost Goes West, H. G. Wells' Things to Come, Kipling's Elephant Boy, Rembrandt, The Scarlet Pimpernel, and Catherine The Great. The Count of Monte Cristo, Last of the Mohicans, and several others of recognized merit, are also listed.
In and For the Classroom
(Continued from page 19)

with the classroom expanded to include the whole community for sensory contacts in a number of experience realms.

Classes Visit Weather Station

The problem, "Weather and Climate," is dealt with in some form or other in practically every grade of the public school. This consideration is appropriate because of the importance of the effects of weather and climate on our lives and activities. This unit provides numerous occasions for expanding the classroom beyond the four walls of the building. Generally speaking, the items considered include the measurement of temperature, radiant energy, forms of precipitation, types of clouds, why the wind blows, the barometer and air pressure, storms, high and low pressure areas, weather maps, and weather forecasts. Food, clothing, shelter, communication, and transportation are all seriously conditioned by the influences of weather and climate. Practically every one of the topics mentioned might be made the occasion for trips outside the classroom for definite sensory experiences, but perhaps the matter of weather forecasting is the most appropriate for such activities because it embodies all the others, and requires daily excursions for record taking. A series of consecutive daily readings provide the data for weather forecasts. Taking the readings is not difficult, but the correct interpretation of the data presents a challenge to the forecaster. His predictions pitted against the actual weather occurrences are a test of his thorough mastery of forecasting techniques.

Classes can set up their own "weather stations" with only a limited number of instruments and charts. However if a weather station is conveniently at hand, a few trips to it for study under the direction of the teacher or the weather station supervisor will give concreteness to the classroom material, assist in clarifying concepts, and promote a better understanding of the principles underlying the phenomena of weather and climate.

The accompanying picture indicates a demonstration of weather forecasting by the "weather man" at his station. The data sheet presents the records, together with the interpretation in the form of the weather forecast for the day.

Weather Observations

<table>
<thead>
<tr>
<th>Time of Reading</th>
<th>Date</th>
<th>Temperature</th>
<th>Precipitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 AM</td>
<td>Nov. 28-40</td>
<td>22°</td>
<td>0.01 inches</td>
</tr>
<tr>
<td>Hourly recording (past 24 hours)</td>
<td></td>
<td>8 AM 33° 10 PM 28°</td>
<td></td>
</tr>
<tr>
<td>Maximum for past 24 hrs.</td>
<td>29°</td>
<td>8 AM 33° 10 PM 28°</td>
<td></td>
</tr>
<tr>
<td>Minimum for past 24 hrs.</td>
<td>22°</td>
<td>12 Noon 30° 2 AM 26°</td>
<td></td>
</tr>
<tr>
<td>Highest recorded for mo.</td>
<td>67°</td>
<td>12 Noon 30° 2 AM 26°</td>
<td></td>
</tr>
<tr>
<td>Lowest recorded for mo.</td>
<td>22°</td>
<td>12 Noon 30° 2 AM 26°</td>
<td></td>
</tr>
<tr>
<td>Date recorded</td>
<td>Nov. 28-40</td>
<td>-8°</td>
<td>-8°</td>
</tr>
<tr>
<td>Date recorded</td>
<td>11-27-40</td>
<td>12-6-40</td>
<td>12-6-40</td>
</tr>
<tr>
<td>Highest recording for Nov.</td>
<td>78°</td>
<td>8 AM 29° 8 AM 29°</td>
<td></td>
</tr>
<tr>
<td>Lowest recording for Nov.</td>
<td>-8°</td>
<td>8 AM 29° 8 AM 29°</td>
<td></td>
</tr>
</tbody>
</table>

Temperature at reading 22°
Minimum recorded for past 24 hrs. 22°
Highest recorded for mo. 67°
Lowest recorded for mo. 22°
Date recorded 11-27-40
Highest recording for Nov. 78°
Lowest recording for Nov. -8°
Among the Producers

SVE Kodachrome Slide Catalog

The Society for Visual Education, Inc., 100 East Ohio Street, Chicago, has just issued their first catalog of 2x2 Kodachrome Slides. It is an impressive and comprehensive compilation of slides assembled expressively for classroom use. The thousands of transparencies listed in the 62 pages represent only the nucleus about which the library will be built during the coming year. A second section of this catalog is already in preparation and will appear within a few months.

The catalog has been developed primarily for use in the schoolroom, and the individual slides are listed alphabetically following the following curricular headings: Fine Arts, Geography (Foreign and United States), History, Literature, Natural Sciences, Patriotism, Recreation and Travel, Religion, Sociology, Transportation, and Water Safety. Despite the current world crisis, the Society has been fortunate in acquiring Kodachromes of almost every foreign country, photographed in natural color on the actual location pictured. The foreign slides feature places of interest, historic and geographic, and costumes and manners of the people. Prices are 50c each for slides in Eastman cardboard Readymounts, or 60c each mounted in the new S.V.E. glass Slide Binder.

A separate listing of their "Library of Religious Filmstrips and Kodachromes" (Catalog 1940-41) has also been compiled by the Society, presenting material recently acquired or revised. The Filmstrips are classified under Religion in Art, Episcopal Sets, Peace, Temperance, Sermons, Sunday School Lessons and Bible Study, Geology of the Holy Land, Life in Biblical Times, Missionary Study, Hymns.

De Vry Movie News

The De Vry Movie News, published by the De Vry Corporation, 1111 Armitage Avenue, Chicago, Illinois, is now ready for distribution. Of particular interest and value to those in the Visual Education Field, this well printed, newsy, pictorial publication is sent Free to those requesting same.

Music Note Pitch Teaching Device

A novel musical instrument has been designed for teaching music in the classroom. It is pleasing to the eye, compact and portable, measuring 30" x 36", and at a finger touch becomes a dynamically animated object displaying the note on the chart reproducing the correct tone desired at the same time, thus appealing to the three senses, sight, hearing and touch. It shows the student of music with his own eyes, what he may expect to hear with his ears.

The Notation shown on the chart was arranged by Milo Fields, a music teacher connected with the public school system in Wells County, Indiana. The construction of the keys and air chamber were fashioned by an accordion manufacturer, Cris Zuercher, of Berne, Indiana. The tones are produced through tongue reeds, giving them pleasing organ-like effects. The face of the chart is so designed that every detail to be taught may be plainly seen. The range is from low B-flat to A, covering the range of the average soprano voice. Chords may be demonstrated without moving a single part. The science of chord construction may be vividly impressed upon the pupil, as the tones may be prolonged or suspended indefinitely. The different scales are printed on the chart, thereby giving the key signature of any chosen scale. The correct relation of notes, sharps and flats to one another are clearly shown.

Vocational Guidance Slidefilm

A sound slidefilm, entitled "Youth in the Market Place," is a welcome addition to the limited number of visual aids available for vocational guidance work. This film, produced especially for high school and college students, pictures a young man's introduction to the seven major basic qualities essential for finding himself in the world of work, and is drawn from hundreds of actual incidents. It points out the real need of youth, and suggests a virtually untapped field for educators and others who wish to help meet that need.

Complete sound and projection equipment is shipped if desired, along with the picture, by its producer, A. Gordon Bradi, 818 Judson Avenue, Evanston, Illinois.

2x2 Slide Sets

Full double 35mm size 2" x 2" slide sets—twenty mounted slides in a set—are offered by Art Slide Company for one dollar a set. Titles of some of the sets indicate the subject-matter: "Country Roads and Paths," "Flower Collection," "Trees," "Lakes and Streams," "Table-Top Antics," showing comical antics of puppets, "Assorted Views" (2 sets compiled as samples of the photographic quality of the slides), and consisting of scenic, travel and pictorial subjects. Three sets of Art Slides, ten slides to a set, furnish art studies of the female form for the use of art students and teachers.

Complete information on the slide sets, 100-watt Vokar projector, and outfit for making 2x2 slides, can be obtained from Art Slide Co., Sippo Lake, Canton, Ohio.

Motion Pictures—Not for Theatres

(Continued from page 17)

From the standpoint of visual education, not only may the picture plan to be too restricted, but the producer's sphere of operations may be needlessly narrow—needlessly, that is, if the producer expects to make the living he is entitled. Robert Bruce, it will be recalled, was too canny to limit even his first motion picture to the vicinity of his ranch, although his original thought had been to attract the Eastern dudes to it. Nevertheless, one finds able motion picture photographers giving their time to such an important tourist center, specializing in "views" of the local "sights," the postcard puritique commonly part of the business.

This observation is possibly belied by the records of the Yellowstone Park Film Company, which was founded in 1917, and Best's Studio at Yosemite National Park, in California, which has produced a long series of reels concerning that area. I don't know. Perhaps Best's had more than ordinary sightseeing interests. I am not forgetting that Arthur C. Pillsbury made some of his finest flower pictures in a secluded studio at Yosemite. So the Yellowstone concern seems a better case in point. It was headed by Howard Eaton, a well known guide to the Yellowstone country, with W. S. Berry, a photographer and gardiner since about 1902, as secretary and manager. To be sure, there is an inexhaustible supply of photographic material in both of the wonderlands mentioned; but how are organizations which merely capitalize the landscape in its scenic aspects—flicker theatrical and non-theatrical interests being what they are—to make their specialties pay? If they had enlarged their spheres to cover all of the national parks, or even had added a few more to make a regional group, they surely could have found a more receptive, steadier market. Results might still have been cursory, but they would have been less repetitious, too. In other words, the fiddler would have more tunes in his repertoire. For it is a fact, now iterated several times in these pages, that just a few subjects are of small value to either the producer or the field he serves, whereas a large and varied supply of even ordinary ones, justifies organization and maintenance.

(To be continued)
Also for the Visual Field —

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A Letter to the U.S. Post Office

At the suggestion and example of our good friend, B. A. Aughinbaugh of Ohio, we personally have sent to the Classification Division, U.S. Post Office Department, Washington, D.C., the following letter:

"We wish to place on record an application to have the postal rate on exposed-and-developed, non-inflammable, educational motion picture film made the same as the present book rate. We base our application on the fact that it is the content, not the physical format, which determines the classification of 'books.' Catalogs, for example, may look like books but the postal regulations say they are catalogs. Educational motion pictures may not look like books but they have the same content as books—hence by implication the educational motion picture is a 'book.'"

The advantages to the visual field of a lowered postal rate on teaching films are obvious. Enough thousands of letters of the above import and purpose would mightily increase the chances of such a change. Such letters will implement strongly the D.V.I Resolution now driving toward the same goal. Why not get out the old pen and paper right now?

A Matter of Typography

We are experimenting a bit this month with the set-up of one of our regular departments, "The Literature of Visual Instruction" (Pages 66-68). Titles of articles cited, with all reference data on each, are grouped together at the beginning, forming a quasi Table of Contents, or Index to the literature of the month. Under each entry, that receives extended comment by the departmental editor, is a reference in parentheses to a numbered paragraph. These paragraphs follow the Index, in numerical order, with the article title repeated for each.

The change aims to serve a twofold purpose. First, all readers can see at a comprehensive glance, within the compass of a half page or so, the total utterance of the field for that month, and may read Miss Schneider’s comments in any order dictated by interest or inclination. Second, for those readers interested chiefly in special aspects of the field, the new arrangement greatly facilitates selection and directs these readers instantly to the subject matter that particularly appeals to them. Whether the new arrangement is retained, or the former is resumed, will be determined by the tenor of our mail in coming days, weeks or months.

At Least a Second Term

The Atlantic City meeting on February 24 to 26 gives every promise of being a notable success, thanks to the excellent program, able management and skillful promotion achieved by the present administration of the Department. We are already disturbed by the thought that this administration's term is supposedly half over already. It has gathered a deal of momentum in its six months. Why lose this elan, as usual, at the June elections? Why not President Reed and Secretary Bowen for a second term? A "second term" is just nothing at all these days! Our vote for Reed and Bowen may be counted now!

The Program Reprinted

And speaking of Atlantic City, the program for the D.V.I winter meeting regularly appears in our January issue, giving supposedly adequate "advance notice" to allow readers to lay plans to attend. There is, however, a surprisingly widespread tendency among our "last-minute-men" to rely on the February issue for this information. In deference to this worthy minority we reprint the program, exactly as in January, on page 71 of this issue.

N. L. G.

The National Film Evaluation Project

progresses steadily, with the Judging Committee functioning more smoothly and efficiently than ever. The first "Film Evaluation Supplement to 1000 and One Films" (50 films evaluated on 50 F. E. Cards for 50 cents) appeared in November last. We have not space to print the enthusiasms it has evoked. To judge from the present influx of Score Cards, the second Film Evaluation Supplement (another 50 films) may appear within 60 days. And the Judging Committee is the cause of it all!

The Project is becoming more ambitious. We now see no reason why every film-using school should not be represented on the Judging Committee—by one or more of its faculty, serving a single year or indefinitely. Many of the present Committee are beginning their third year as active judges, scoring a minimum of 20 films a year. Hence

A Cordial Invitation

to every teacher using 10 or more films per semester with classes—in any subject, any grade, anywhere in the 48 States—who is willing to score them on the Standard Score Card of the Project:

Join the national Judging Committee—at no cost, minimum effort, and maximum satisfaction to yourself in having a share in this unique service to the entire field of visual instruction.

- A postcard request will bring you full information by return mail.
The Factor of Selection in the Use of Visual Aids

In a majority of cases the failure of visual aids to make an appreciable contribution to the work of the classroom is attributable to poor selection on the part of the teacher. Textbook teaching in this country has progressed to that point where textual material is subjected to the most vigorous scrutiny and appraisal. The selection of textbooks is entrusted to carefully chosen committees who devote much time and effort to the task. The relation of the textual material to the actual work to be done by the class is carefully studied by the teacher. She subject the text to critical analysis, and weighs its possibilities from every angle. It has come to occupy such a place of importance in the scheme of instruction that she measures the success or failure of her teaching in terms of so many pages or chapters mastered by her pupils. Whether the time and energy thus expended are justified by the results is beside the point. No teacher expects to get very far with her pupils who has not at her command a vital, well-organized body of textual material. She does not deceive herself into thinking that she can “make bricks without straw.” She has no illusions as to the need for carefully chosen materials rich in teaching value, if there is to be any learning.

Discussing present-day tendencies in unthinking selection of pictorial materials, with a single striking example of right teaching procedure.

DANIEL C. KNOWLTON
Professor of Education, New York University

In nine cases out of ten her attitude is just the reverse in connection with the use of visual materials. It apparently is not a matter of moment whether the picture is trivial or inconsequential, or contains but a fragment of information; it is “a picture” and for that reason great things are expected of it. She would not think of placing before her class a page of text containing a single item of information of questionable value. She is not satisfied with a series of trivial and inconsequential statements. Her demands are for something almost encyclopedic in its content and scope. Textbooks now on the market, whatever their subject matter, fairly bristle with data and generalizations. No such demand is made of a picture or visual aid. Little attention is given ahead of time to its content; none at all to the organization of that content for instructional purposes. This is all the more strange when our textbooks have attained to such a point of technical organization for instructional purposes.

Perhaps the reason for this uncritical attitude is the tendency to relegate the visual aid to a subordinate place in the scheme of instruction. Like the frosting on the cake it can be omitted if the recipe be a good one. Too often the visual material must
find a place after the teaching procedure has been carefully mapped out. It is the last element to be introduced, and so is the first to be discarded. On the other hand, nothing must be allowed to interfere with the textual material selected. Until visual materials are given the same opportunity to contribute to learning as has been accorded the textbooks they will continue to occupy an insignificant place in the instructional program. There will not be the same challenge for critical selection as confronts the teacher in the case of the textbook. Not all teaching calls for visual aids, but present day teaching demands the use of much more visual material than is now employed. Each teaching situation must be appraised from the standpoint of the curriculum materials likely to prove the most effective, whatever their nature. Visual materials must not be overlooked in such an appraisal. When this is once recognized, the same care must be exercised in selecting them as marks the selection of a bit of text.

As has already been noted, two things must be considered: the content—i.e. the actual information conveyed by the visual aid—and the organization of this data. One is just as important as the other. Perhaps organization—and this is just as true of textual material—is the more important of the two. To begin with, however, there must be something to organize. Organization on the other hand, is often a question of a flat picture against a stereograph. Again it may be a projected picture as against one incorporated in the textbook as one of its many illustrations. The advocacy by many of our leaders in the visual field of certain forms of visual aids, such as the slide or stereograph or the motion picture, has given rise to the impression that there is a preferred form of visual material. The truth is that each is most effective when used in that relationship to which it is best suited from the standpoint of content and form. Aside from its bearing on the teaching of art the uses of a painting, for example, are limited. This use may hinge upon the fact that it is the work of an artist of some particular school. It is most effective where the contribution of the artist is more or less identical with the response sought by the teacher from the pupil, but she must be clear as to what she seeks from it. A picture like "the spirit of '76" is limited to a few very specific uses. But there is still another consideration: teachers must be clear as to the added contribution which a picture of this sort may make to a teaching situation when embodied in slide form and projected, or if incorporated in a motion picture.

There are situations where a motion picture is the most effective form of visual aid; there are many others where the textbook illustration meets every demand. Until the teacher has compared and evaluated the results of the uses of the same picture in these many forms; until she is in a position to appraise the relationship of one form of visual aid to another, she is likely to blunder along with ineffective material. The idea that one visual aid may be substituted for another so long as it embodies the same data, has long since been exploded in the light of classroom practice. There is still a tendency to make a complicated visual aid, such as a motion picture, perform the work characteristic of simpler forms, such as the slide and map, in addition to that for which it was primarily designed. It is but additional evidence of an uncritical attitude on the part of the teacher responsible for the selection of this material.

The results which follow the introduction of carefully selected visual materials into the work of the classroom will repay the time and energy spent in the critical appraisal suggested. The other day a sixth-grade teacher showed me a photograph which at once attracted my attention. She had been presenting a series of history and geography units covering the exploration of the North American continent. She had just completed a unit on Renaissance Spain, and another on the Spaniards in the Southwest. She was planning for a study of Elizabethan England, and this was to be followed by a unit on English exploration. Although a comparative stranger to the possibilities of visual materials, she was anxious to try her hand with pictures. The picture which she proposed to use was in the form of a bit of statuary. At either end of a chessboard sat two figures. One was Queen Elizabeth, the other King Philip II of Spain. The board between them, instead of being covered with the conventional pieces so familiar to lovers of the game, was strewn with tiny ships. To one familiar with the happenings of the time it was a most illuminating presentation of the situation. Would it convey to sixth-grade boys and girls the same insight into the period?

There was much in the picture itself to warrant a favorable answer. It was the kind of a scene to arouse interest. It was one that coincided closely with the experiences of the group. The royal players, the pieces used, the possible moves, the interest of the players in the game, their own interest in games, the incentives before the winner—these were some of the focal points about which the related data might readily be assembled. What form of picture would best serve the teacher's purpose? It was agreed that the slide would serve best as the picture was to be used as a means of introducing the unit. This would enable the teacher to focus the entire attention of the class on the material. The children were permitted to comment freely upon what they saw, and to ask questions. The teacher interjecting now and then a helpful word, or suggesting helpful sources of information.

Four weeks passed. The final work of the unit was the writing of a drama which was presented before the whole school in the auditorium. Although this centered largely about the person of Francis Drake, it was the general consensus of opinion that the success of the unit was due largely to the international chess game with which it had been launched. As the diminutive Elizabeth and her Court struttet across the boards discussing her relations with "my dear cousin," the influence of the picture was constantly in evidence. This particular teacher needed no further proof of the potency of visual aids. The battle was more than half won when she made her choice.
Audio-Visual Aids and National Defense

THE people of America are giving serious thought and effort to the problems of national defense. But too many of us are inclined to believe that all we need is a large armed force and the mechanical equipment to make it effective in fighting the enemy. That is a short-sighted view and one that the people of England and France entertained—to their everlasting regret. National defense in a world of power politics requires strong allies, friends who will protect the flank and rear when the fighting is out in front. The democratic nations of Europe thought they had them but they spent more time in attempting to out-maneuver each other than they did in cementing closer and more dependable alliances. They did not realize that unless there is an honest and sincere effort to understand and help each other, allies will fall apart at the first sign of self-interest or a powerful adversary. Today no alliance in Europe, even among the Axis powers, is sincere or lasting.

For us in the western hemisphere, the tragic fate of Europe has presented a problem and taught a lesson that not even the wilfully blind can miss. We, too, must have allies and faithful ones if we are to be free from constant threat and possible attack. Fortunately, we are not entirely without them. We can depend upon the cordial relationships we have built up with our neighbors to the north. In spite of the Revolutionary War, and the War of 1812, when we were on opposite sides, Canada and the United States have lived for over a century in mutual trust and friendship.

Would that the same could be said for our relationship with the Pan-American countries to the south! Here, our history has not been one to inspire confidence in each other. The North American has been so sure of himself that he has taken Latin America too much for granted. The Latin American, on the other hand, has looked with suspicion upon the Colossus to the north and has feared the possibilities inherent in his might.

Today, we can no longer take our neighbors to the south for granted. From a purely selfish angle, if for no other, it is no longer safe for us to neglect them. We must learn to understand them and must find ways and means to convince them that they have nothing to fear from us. Unless we do this, and speedily too, we may find the Monroe Doctrine a scrap of paper to be torn up like the other public documents and national policies of the nations in Europe.

That is why the schools of Portland, a port which has had an extensive commerce and contact with Central and South America, are now undertaking a program of education designed not only to acquaint our young people with the beauties and cultures of our Latin American neighbors, but also to give them a speaking and hearing knowledge of the Spanish language. It is indeed surprising that in the western

Portland pupils learning a living language by live methods.
half of the world which, unlike the eastern, needs but two languages—English and Spanish—to make any citizen intelligible to the other, practically no effort has been made to teach those two to every child.

It is true that our high schools have taught Spanish for many years, but this has been to only a few of our children, and at that for only a short time. Today, hardly a single graduate of our high schools or colleges can speak any modern language fluently or understand a native unless by some good fortune he has either lived in a bi-lingual home, or traveled abroad.

It is in the hope of correcting this condition that the Portland Public Schools have undertaken a somewhat revolutionary program of building a foundation of ear-and-tongue training in Spanish before the student enters the high school. Portland has created, and published, a series of phonograph records in basic Spanish which, with the accompanying manual should go far to create a substitute for a Spanish language environment. These records are distributed to the elementary schools and wherever possible to the homes of our students. In both places they serve as a self-teaching device. They can achieve satisfactory results with hardly any outside aid. If these records are played often enough, in the home, or, if in each special Spanish class or extra-curricular Spanish clubs, they form an important part of the curriculum or program, they should succeed eventually in training the ears of our children to recognize instantly a basic Spanish phraseology and with some practice to be able to repeat it.

In these days of restricted budgets, the matter of economy is of the greatest importance. To hire any large number of extra teachers is out of the question for elementary school Spanish. Few communities have the necessary funds; however, these phonograph records could easily serve as a more or less adequate substitute; if the school authorities in any community really become enthusiastic and show an interest in the project it is possible to make of this phonographic ear-training a highly effective addition to the traditional pedagogy.

Of course the Portland Schools are not satisfied merely with language training. The times demand a broader program—and one with a more immediate response. National Defense demands that we promote such an understanding of the scenic wealth, the commercial possibilities of Pan America, and the delights of their art and music, that our people and those of Pan America can really visualize each other’s problem and participate in each other’s culture. For this reason we stimulate the study of Pan American geography and through our music and art departments present courses in Latin American music, costumes, art products and crafts.

However, to return to the records, the crux of the problem lies in a greater mastery of the Spanish language. Nothing so acquaints an individual with the atmosphere and personality of a foreign scene as a visit to this country and a little conversation with its inhabitants. Once our students acquire a greater mastery over the spoken tongue, they will be ready for the vast tourist migrations which, in former years, were turned to Europe and Asia.

A casual glance over the subject matter of these records will make evident how practical it is. Every record contains sentences and phrases which would be of direct use to anybody visiting our neighbors to the south. Such subjects as “The Family,” “Numbers, Dates, and Time,” “Money and Measures,” “Apartments and Hotels,” “Meals,” “Traffic Regulations,” “Mexican Schools,” etc. give an idea of the fundamental importance of the contests. Thanks to the happy collaboration of a considerable number of school people as well as local citizens, the school authorities are able to issue the entire set in an album, and a sixty-five page
Use of Natural Science Sound Films
In Primary Grades

CARL T. COBBS
District Sup't, Little Lake School
Whittier Union High School District, California

Many sound films have been made for use in the classroom. These films have been intended to fill a vital need. Many opinions have been given speculating on how well the need was filled. Experimental evidence has been given for some films on the higher grade levels. Experimental evidence is lacking on most sound films which could be used to meet the interest on the primary level. The picture is a language in itself and has been used by man ever since he has attempted to communicate with others. Motion pictures have been used effectively to teach natural science to the intermediate grades. Properly projected films have proved satisfactory to all the primary grades. Both silent and sound pictures have proved beneficial.

The purposes of this experimental investigation was to teach three short natural science units to grades one, two, three and four and compare the differences in total learning made by an experimental group who had the rather technical sound films as supplementary teaching material, and by a control group who had every privilege except the use of the three sound films.

The materials used were a sound projector, three sound films, with one on plant life and two on animal life, a portable four by six foot beaded screen, California Test of Mental Maturity—Short Form for equating intelligence (Pre-Primary, Primary and Elementary), a unit of instruction (including a manual for each film for the experimental group only), and three original tests (one for each unit of study).

Six schools were chosen where grades one, two, three and four were available for the study. There were three control schools and three experimental schools, respectively. The regular teachers of the grades mentioned were accepted. Each group took the same six weeks to complete the units of study. The units of instruction, which included the continuity of the films, were the guides for the teachers and the control schools. The control teachers asked and were granted permission to use other aids. They consented to stay within the time limit and not look at the handbook or the film.

A concise and concrete summary of an experimental investigation completely described in a thesis presented to the University of Southern California in partial fulfillment for a Master of Science Degree.

Until after the experiment was completed. Three ERPi educational natural science talking pictures, "The Frog," "Leaves," and "Butterflies," were used, plus a teacher's handbook for each film to supplement the unit of instruction for the teachers of the experimental schools.

The mental maturity tests were given the first week of the experiment. The experimenter devised a true-false test for each of the three units of study. Each unit test contained fifty statements based upon the words of the sound films, wherever possible, and included in part the interest in the picture content. Both the control group and the experimental group were given the same test in the same way the same week. Every teacher of every grade tested the statements to her class and each child marked his answer to each statement on his own test. The immediate and recall tests were identical.

In every case the immediate test was given the third period of each unit study. Thirty minutes a day two days a week for a period of six weeks was taken for the complete study, except for the recall tests. The teachers were permitted to answer questions after each test and to accept any contribution brought in as a natural interest follow-up of the children. Additional teaching of the units was forbidden.

The differences in intelligence between the experimental and control groups of each of the twelve groups selected for comparative purposes are as a whole relatively insignificant. Therefore, intelligence is a controlled factor throughout the present study and variations in the responses of various groups to the different tests cannot be attributed to this factor.

The test pertaining to frogs justified the following conclusions. In comparing experimental with control groups:

1. The average scores of the experimental groups excel those of the control groups.

2. The most significant differences in average score between experimental and control groups occurs in the second, third and fourth grades.

3. In general, the boys of both groups and of all equally important ones are neglected. Eventually, we hope to have a large number of sound films depicting the life and activities of our Pan-American neighbors. With that as a form of vicarious travel and a subject knowledge of Spanish to understand the sound track on the film we will have gone a long way not only to make our people more bi-lingual, but to tie North, Central and South America into a hemisphere with a united culture. This will result in making us impregnable to the attacks of foreign enemies; it will also enrich our lives and increase our enjoyments.

Manual containing literal translations, simple grammar, additional exercises and conversational material for the nominal sum of $2.50. Once this material has been absorbed, there is nothing to prevent the issuance of supplementary sets from time to time.

 Mention should also be made of the large collection of pictures, films, slides, and exhibits on Spanish American subjects which are made available to the pupils of our schools through the activity of the Visual Education Department. It would be a mistake to spend so much on one phase of the subject that other and
grades slightly excel the girls in average scores.

4. In general, the average score of all groups increases according to grade level which fact is noticeable in the experimental group.

5. The responses of the various groups show little variation when results of the immediate test were compared with those of the recall test.

The test pertaining to butterflies justified the following conclusions: In comparing experimental with control groups:

1. The average scores of the experimental groups with one exception, excel those of the control groups.

2. The greatest differences in average score between the experimental and control groups occur in grades two, three and four.

3. In general, the girls in every grade of the experimental group made the higher scores of both groups on the immediate test while the boys of every grade of the experimental group made the higher scores on the recall test.

4. In general, the scores of the girls and boys of the experimental group excelled the scores of those made by the control group in grades two, three and four.

5. A significant fact is that there was no appreciable difference between the average scores made on the immediate and recall tests by any grade of either group.

5. Generally, the average scores of all groups increases according to the grade level and the increase is particularly noticeable in the experimental group.

6. The responses of all groups show little variation when the results of the immediate test are compared with those of the recall test.

The reactions secured from all groups by means of true-false tests dealing with each unit are summarized as follows:

1. The results of all the tests show that the pupil response was good for the sound film "Leaves," better for the sound film "Butterflies" and best for the sound film "The Frog."

2. The experimental groups of each grade excel the control groups in average scores made on both immediate and recall tests.

3. The difference in average scores of all experimental groups as compared with all control groups is in nearly all instances of statistical significance.

4. Generally, there exists very little variation in average scores in so far as the sex of the participants is concerned.

5. Generally, the average scores of all groups increases according to the grade level. The increase is particularly noticeable in the experimental groups.

6. The responses of all groups show little variation when scores on immediate and recall tests are compared.

7. The intelligence quotients of each comparative group are equivalent.

The data presented in the present investigation seem to justify the following conclusions:

1. The three sound films were valuable as teaching aids in presenting natural science to primary children.

2. The three sound films were good educational factors because each established and maintained the interest of the pupils in the presentation of rather highly technical scenes and explanations.
AN INCREASING number of colleges and universities throughout the country are using 16mm films to illustrate course subject matter, following the lead of the secondary schools where there is even more widespread use of motion pictures in classrooms. In the latter, films of a general educational nature were used originally as entertainment at the general school assembly; now we find in addition, motion pictures used to supplement specific course work. Producers and distributors have made available a great many pictures, some good and some bad, and there is no lack of quantity and variety of illustrative material. The chief need at the present time seems to be the maintenance of a high standard of quality in these films.

The institutions of higher education have been slower to adopt the use of motion pictures in the classroom and laboratory because there is a lack of suitable films. Excerpts from theatrical productions have been prepared for educational purposes, but these at best are only a makeshift. Films of a scientific nature have been made by educators and scientists, and although accurate scientifically, they are often of poor photographic quality. The ideal situation would be for the large motion picture producers, with their great resources and highly skilled technicians, to collaborate with scientists and educators in producing films specifically for colleges, universities, and secondary schools. The field is strictly comparable to the publication of textbooks, and as much care and skill is required in producing a suitable film as in writing and publishing a worthwhile book.

The University of Chicago, with the cooperation of Erpi, has pioneered in the production of educational subjects, and other universities have followed with creditable films designed to supplement particular courses. Through these universities, or the commercial distributors, films may be rented or purchased for use with courses in art, history, literature, foreign languages, geography, geology, physics, chemistry, biology, and even mathematics. Many other subjects, too numerous to mention, are represented on celluloid as well as on the printed page.

Of all subjects, biology in its broadest sense, lends itself unusually well to pictorial representation. From the time a student begins his elementary course, until he becomes a professional teaching or research biologist, or a practicing physician, or a commercial research staff worker, or a veterinarian or a psychologist, or a museum field naturalist, he is confronted with innumerable diagrams, drawings, sketches, and photographic representations of gross microscopic structure and function. Descriptions of anatomical parts, functional activities, environmental relationship, genetic make-up, the course and treatment of mental and physical disease, are supplemented in textbooks and monographs by many line drawings and half-tone cuts. Yet these fail to impress upon the mind one very important characteristic of living things—action.

Motion pictures, and especially those in color, bring to students interpretation of biological phenomena in a vivid and striking way. Too often preserved specimens lacking their natural color are the only materials to be found in the laboratory, and even with living specimens present, they cannot always be demonstrated conveniently to large groups. Then too we have in the motion picture camera a means of speeding up or slowing down the apparent rate of biological processes so they may be studied effectively. As examples, the growth of plants under experimental conditions may be speeded up by means of time-lapse photography so that the actual growth movements may be studied; embryological developments may be watched on the screen; rapid movements such as the beating of cilia, the contraction of the muscle fibers, the locomotion of protozoans, may be slowed down to the point where an accurate analysis of the process may be made. In this way the motion picture camera serves as a valuable research tool.

Realizing the value of this important adjunct to the study of Biology, Rutgers University a little more than two years ago added its new Department
of Biophotography. This work really began in 1931 when the noted photonaturalist, Norman McClintock, came there with his motion picture equipment, including elaborate time-lapse control mechanisms, to continue his photographic studies of flowers, insects, and wild animal life which he had carried on at the University of Pittsburgh. Following his death early in 1938, the writer organized the new Department and equipped a laboratory for an expanded program.

The purpose of the Biophotography Department is two-fold: (1) to produce instructional motion pictures, chiefly of college grade, in the field of Biology and related sciences, and (2) to use the motion picture camera as a research tool in the analysis of biological problems. The results of this work, in the form of motion picture film, are considered equivalent to the publication of teaching and research material in the scientific journals. Made available to secondary schools, colleges and universities, and to medical and other professional schools, the scope of dissemination can be as widespread as in the publication of printed matter. At present the Department is distributing its own productions under the name of Rutgers Films.

Now ready for distribution are fifteen new Zoological films, most of which are in color. Others are in preparation, as well as a series in Botany with time-lapse films on plant growth completed, a series in Psychology, and a great number of surgical films soon to be announced. The latter are entirely in color and will be available only to medical schools and the medical profession.

The unusual clarity and high magnification of the operative field in these surgical films has been made by a new operating room dolly. This is the invention of Dr. Marshall Smith, New Brunswick surgeon, who is directing the surgical films. The camera and cameraman are supported above the surgeon’s head by a duralumin framework which is rigid and portable. It is entirely self contained in regard to lights and accessory camera equipment, and the sterile field is completely protected from contamination. This piece of equipment is indispensable where serious operating room photography is attempted.

Particularly noteworthy on the strictly photographic research side, is the development at Rutgers by Clinton P. Veber, of a remarkable “Time Telescope” which controls the camera in making time-lapse pictures of growth and other slow processes. The exposure is controlled automatically by a photo-electric device, and the time-lapse interval can be set for any desired duration of time. This makes possible the fully automatic, even, exposure of any length of film without manual or mechanical control. This machine is invaluable in the production of plant growth motion picture studies.

The laboratory, known as the McClintock Memorial Laboratory occupies one floor of a large brick building and is well equipped for current production. Inasmuch as all work is now being done in Kodachrome, the facilities for processing film are restricted to short test strips and to the making of titles and animations in monochrome.

No attempt is being made to produce sound films because of the present tendency for the lecturer to add his own commentary to instructional films, in Biology at least. A full resume of each film is being prepared, listing titles and a description of each scene, so the lecturer may use this as a study guide while pre-viewing the film. He may then cut the film to suit his course, or vary his comment from time to time to emphasize certain parts. A sound film does not lend itself to this degree of flexibility.

The fundamental idea back of the work being done at Rutgers is to create a motion picture textbook in these subjects, whereby the visual record will parallel textbook material and can be used to supplement the methods of teaching now in vogue. A series of coordinated films in one particular subject, with suitable comment by the lecturer, is much more effective than many disconnected subjects.
MOTION PICTURES—NOT FOR THEATRES

By ARTHUR EDWIN KROWS

Dr. Raymond Lee Ditmars was distinctly a specialist producer who had made hundreds of subjects important to natural science courses in the schools and whose authoritative line in his own field was scarcely to be challenged. As a scientist, he ranked first as a curator of reptiles; but he confined himself to reptiles in his film work, he would not have rendered more than a small fraction of the important service which he has given to the non-theatrical field these many years. It was estimated, in December, 1935, that, during just the preceding twelve months, approximately 90,000 school children had viewed the films he had made, distributed by the New York Zoological Society.

He joined the staff at the Park in 1908; and I find particular interest in his story of how it came about, because, in that period, I was playing "cops and robbers" with other lads of my own age, in the 324 acres which the founding Society was preparing to fence in. I remember very well, indeed, the temporary cabin which was the first headquarters in the field, with the bear cub chained to a tree branch of it I believe the theatre also a young wolf and a snapping turtle. At that time Ditmars, about twenty-two years of age, was a reporter on the New York Times. The city editor, recalling that the young man was interested in animals—he had had several years' experience as an assistant curator of entomology at the American Museum of Natural History—sent him up to the cabin in the Bronx one Sunday afternoon to see what was going on there. But, in the course of the Ditmars interview with Director Hornaday, Ditmars revealed his personal interest and was promptly engaged to assist in making the Park one of the most notable of its kind in the world.

In 1913 he erected a small studio at the rear of his home at Scarsdale, New York, for the production of animal movies. The films were used first in his lectures. But in 1916 they became especially well known to theatricalgoers as a series entitled "The Living Book of Nature." In successive numbers, under that name, they ran for more than three months at the Strand Theatre on Broadway, and then were distributed to the rest of the country through educational exchanges. Earle Hammons, head of the releasing concern, observed at the time that the posters prepared for this series, were the first ever to be especially designed for an educational subject—that is, which were not mere photographic enlargements. I feel that this claim might be disputed; but I am not prepared to enter contrary evidence.

In 1921 Ditmars began releasing a longer series through Pathé the same year in which he achieved additional fame for supervising the assembly of Urban's "The Four Seasons." And, in the concluding month of 1922, he aroused a storm of controversy recalling the torrent of invective and praise which had broken over Darwin, Haeckel and others of that once radical group, by exhibiting a film on "evolution" at All Angels Presbyterian Episcopal Church in New York City.

William Lovell Finley, and his wife, Irene Finley, were known on the lecture circuits for their superior wild life films, especially of birds, before Universal acquired Bray's "Pictographs." Much of Finley's work has been done in company with his son-in-law, Arthur Newton Pack, editor of Nature Magazine.

Motion pictures of wild life in general were made by many transient photographers—sometimes Hollywood cameramen on vacation, unable to resist pleasant opportunities for "shots." One such was William E. Hudson, newsreel man. But films produced in such circumstances have necessarily been more remarkable for their camera work than for their amount of important information about their subjects. Naturally, material of that sort, may be appraised better by closer students in those particular lines. The specialists, therefore, have remained unshaken in their position and not too many in number.

The reference to "Hollywood cameramen" implies, of course, those connected with the professional, amusement studios. As a matter of fact there are scientific photographers who maintain headquarters in Southern California mainly to avail themselves of the facilities and resources enjoyed by their theatrical brethren. The Clifton-Allen Wild Life Pictures emanate from that area, and the Allen brothers who produce them, William H. and George E., have done other useful scientific work in recording on film evidences of the life and antiquity of the west coast of the continent from Alaska to Central America. They are native Californians, long known as lecturers on animal life and primitive people.

An interesting story in this department of picture-making, is that of Norman McClintock, of Newark, New Jersey. His father was Oliver McClintock, a well-to-do carpet and rug merchant of Pittsburgh, who trained and employed him in his own line. In his early manhood young Norman had been taught by the fascination of amateur still photography, and he dabbled in it, with the amateur's usual limited equipment. In 1908, however, when he was about forty, he narrowed to the special work of photographing wild animals in motion. He was so absorbed in it by 1914 that he resigned from his father's business to give it his full attention. His chief difficulty, he found, was coming close enough to his timid subjects, so he concentrated his efforts still further by employing telephoto lenses with which he could photograph them from a reasonable distance. He did not originate the method, but the problems still to be overcome in it, and to McClintock are now attributed various improvements in the technique.

In 1917 he took up big game photography on the same principle, producing a number of interesting films which he
used to illustrate popular lectures given by himself. About 1925 he joined the University of Pittsburgh faculty, with the title photo-naturalist, a helpful and convenient term apparently of his own devising. In 1931 he found a similarly described post at Rutgers College.

It seems inevitable that the man of scientific bent who takes up motion picture photography and, instead of depending on a professional cameraman for his results, is obliged for his own success personally to study the technical details concerning lenses, photographic emulsions, laboratory processes, actinic values and so forth, will branch out, sooner or later, into time-lapse subjects and microphotography. McClintock conformed with the rule, and presently became a specialist in that study of the adaptation of plant life to its environment which is called ecology. His larger results were shown in numerous time-lapse studies of the vegetable kingdom. Industrially he was known also as "photo-biologist" to Koppers Research Corporation. It was following 1898 that Dr. Earle B. Perkins organized the Department of Biophotography at Rutgers.

No American has had greater success with the time-lapse method than Arthur C. Pillsbury, of Berkeley, California, a widely known, popular lecturer in his especial line of botany. He was born at Medford, Massachusetts, of parents who both were physicians. Taken to California in 1883, he presently entered Leeland Stanford University where he became a classmate of Herbert Hoover, majoring in engineering in 1894. His invention of a panoramic still camera, with a swinging lens, for his appointment as official Government photographer for the United States Census Bureau in Alaska during the gold rush of 1898-1899, as a newspaper photographer in San Francisco in 1906, he photographed the ruins, caused by the earthquake and fire of 1906. From the spring of 1907 he held the photographic concession in Yosemite National Park, where he maintained a studio. In 1912 he began his series of motion pictures of the wild flowers of the Sierras, and soon afterward undertook applications of the time-lapse method, his engineering training of course, being of vast assistance in devising proper equipment. His first motion picture to attract general attention was "A Springtime Miracle," showing the wild flowers of the Yosemite coming magically into blossom. I believe that this was released to the theatres originally by Bray.

His next major effort, after thus accomplishing the compression of time, was to shorten distance. He wished to show the fertilization processes previously visible to the eye only through the microscope. Once more he essayed the task of blending photography and motion, spending two years in incidental experiments at the botanical department of the University of California, where Dr. Harper Goodspeed placed complete facilities at his disposal. Success rewarded his efforts, and he then branched out into film studies of all microscopic life. He it was who made the remarkable life story of the fly for Eastman Teaching Films.

Today, on his letterhead, one reads that Arthur C. Pillsbury, who lectures on "Camera Explorations in Plant and Animal Life" and is president of Pillsbury Pictures, Inc., at Berkeley, California, also produces "Microscopic, X-Ray and Lapse Time Pictures." Louis Pasteur made the same progress from the vegetable into the animal kingdoms, from the studies of the fermentation of beer and wine to those of silkworms, chickens and sheep. Only, Pillsbury preferred to remain most of the time on the vegetable side, even if "Pillsbury's Flowers" occasioned too many puns involving "Pillsbury's Flour," product of the celebrated millers at Minneapolis.

Pillsbury's next greatest technical problem was to find a satisfactory color process. His chief interest always being botany, it was only natural that he should be discontented to render his flowers existent as a monochromatic picture. He had tried most of the time, at that time was obtaining his most satisfactory results with the old Pathé hand-cut stencil. That particular work was done with two machines purchased from the New York office of Pathé, which had imported them from Paris but had no apparent use for them then. A little later I learned that the Technicolor people were assisting Pillsbury in prolonged tests with their cameras at Berkeley; but in 1937, in his book, "Picturing Miracles of Plant and Animal Life," he stated that he had found Eastman Kodachrome the best of all.

Biological Experts

After having had a casual reviewer's experience in seeing early F. Percy Smith and Dr. Comandon experiments in microphotography, he was interested, in the autumn of 1916, to hear of some pioneer work in the same direction, accomplished by an American. It was reported by Carlyle Ellis, from the Triangle Studios in Los Angeles to the publicity department in New York, where I was situated then. Ellis's close friend, Paul Powell, one of the Triangle directors, had just been assigned to produce a story entitled "The Microscope Mystery," and it was for this film, starring Wilfred Lucas and featuring Constance Talmadge, that some extraordinary "microbe actors" were to be employed.

The story for the photoplay was written by William E. Wing, one of the veteran scenarists on the D. W. Griffith "lot," to exploit a contrivance built by Lewis E. Tolhurst, of Los Angeles, a young microscopist. When Tolhurst's device, it was alleged, one could magnify and photograph many minute living specimens not previously susceptible to such handling. Wing was so certain of the great future for the secret machine that he had gone into partnership with Tolhurst's "lens," he was told, it would consist of some sort of thing which had been known to them for a long time in their magazines and newspapers.

In reality, though, young Tolhurst had hit upon something important—a relatively cold light. One of the serious problems in microphotography had always been to illuminate the subject sufficiently to photograph it without at the same time burning it up with the concentrated heat. His apparatus was indeed to have a future usefulness, although not as much in the way of fictional material as Wing had imagined, for Tolhurst proceeded immediately from the scientific to the popular, and became perhaps the most formidable competitor of F. Percy Smith in that line.

If heat of illumination handicapped the biologicals, what must have been the predicament of Wilson A. Bentley, the New Hampshire "snowflake man," who photographed of dew condenstion and frost formations through the microscope? Bray's "Pictographs" used short lengths of film on his studies, produced in Bentley's own doorway at Jericho, Vermont. But then again, the problem of high temperatures troubled the "light people" when using daylight outdoors while the mercury hovered just above zero.

At the Triangle time Tolhurst was about twenty-eight years of age. He had studied law, I understand, and had been admitted to the California bar. What had startled him in this new curious direction had been, it seems, an item he had read somewhere about the optical firm of Bausch & Lomb bringing out a projection microscope. Now, encouraged by the mere fact of the Triangle picture, he put blackstone aside and gave all his spare time to producing a glass microscope for his living meanwhile, by working in a repair shop. About 1924 he won the interest of Sol Lesser, president of Principal Pictures Corporation, who contracted with him for twelve subjects and arranged for their release through Educational under his general title, "Secrets
of Life." I have little doubt that the intent of the showmen who took Tolhurst up was to ride on the popularity of the F. Percy Smith material by imitating its more sensational points. A convenient bit of likely evidence was that Tolhurst's "The Fly" concluded with the star performer on its back balancing a ball on its head. An added interest must have been the fact that one of the most admired items of the old Urban releases produced by Kineto's "educational and scientific staff."

The Bausch & Lomb projection microscope appeared about 1915, and, as that apparently dates Tolhurst, it seems that another, pictures must which started his own career some two years earlier. George E. Stone, of Monterey, was then a student at the University of California, but he already had made up his mind to devote his life to educational cinematography. According to his own story, he began by studying the existing situation and concluding that the dividing line between theatrical needs and those of the school was so sharply drawn that, in order to serve the latter properly, all "box office appeal" must be ignored.

To test the accuracy of this hypothesis, six lantern slides on the subject of sex education. He made the first scenes in 1914, but put them aside while he went on a film-making expedition to Central America. Further interruptions were occasioned by depleted funds and college requirements for a degree, but by the time he was ready to proceed, he was joined by a volunteer assistant, Professor J. A. Long, and together they completed the four-reel subject. It was entitled "How Life Begins." Prints were sold widely to educational and social service institutions, and the Y. M. C. A. adopted it for regular showings in the army camps in both America and France. Its distribution stimulated by the war machine, it went around the world. And about 1920, in peacetime, Mrs. Catherine Carter obtained the copyright for its further circulation.

The praise won by that single production, which was made, largely with make-shift equipment, for an actual cash outlay of only $2,000—not counting personal services and overhead—brought Stone's reputation as well as encouragement. It returned his money investment, and added profits and a certain renown while he went off to war as a member of the Photographic Section of the Signal Corps—witnessing the Battle of the Argonne and participating in the Allied occupation of the Rhine. Returning home, the first years of peace found him producing another four-reeler entitled "The Living World," two single-reelers called respectively, "The Flame of Life" and "Food," and a double, "Malaria and the Mosquito."

The last-named was taken over by the Rockefeller Foundation, the same group which was doing such useful work with the George Skinner production, "Unhooking the Hookworm," but the other subjects were curtailed in their earnings when Stone's distributing agent suspended full operation during a readjustment depression in 1920.

All who film the living mechanisms feel with special force the need of color for adequate representation, and Stone's inquiries as to how he might obtain it, brought him the post of manager of the Western Branch of the Prizma Company. By the Prizma process he produced eleven one-reelers for theatres, the most notable being "A Day With John Burroughs," the story of the Rookwood Pottery entitled "Magic Clay," and "Trout." The Prizma officials, meanwhile, were working intensively to persuade Hollywood producers to use their process, and, as is usual in the introduction of new film methods of that sort, arranged for inclusion of short color sequences in the feature photoplays. For upwards of a year Stone was in the film capital, therefore, supervising the making of such interpolations. But, late in 1923, he returned to his attractive, compact studio that can in a man can serve two masters, he held that school film production must ignore the box office.

"cinema-biology" witnessed the rise of another specialist in the person of Charles F. Herm, of the American Museum of Natural History. Herm, writing at that time in the Bulletin of the Affiliated Committees of Better Films, proclaimed the great need of biological motion pictures. The field was much neglected, he said, and went on to specify the advantages which such reels have over regular animal demonstrations in the classroom. At the start of the second year of his Harley Clarke's S.V.E., January, 1921, Herm appeared in Visual Education as author of an illustrated article headed "Motion Pictures in Teaching Biology," and in the autumn of 1923 his friends and neighbors, who had wondered why he had left the Museum, were invited to his home in the New York suburb Pelham (not far from the Ditmars studio), to see an exhibition of microscopic films which he himself had produced there.

A year later he had closed his Pelham studio and removed with his equipment to Rio Vista, a suburb of Dayton, Florida. He announced that he had organized the Florida Institute for Cinema Biology, had acquired a plot of ground to be used for botanical experiments and "animal husbantry," and would shortly have a marine biological laboratory in addition. The prospectus, incidentally, made a strong bid for cooperation and support of all public-spirited Floridians. In 1930 he was releasing about seventy-five subjects of four hundred to five hundred feet each, but had begun a new concern, still at Daytonia, called Herm's Bio-Cinema Supply Products, Inc. At that time about ten of the films had been "scored" with accompanying lectures.

In 1916 the San Diego Chamber of Commerce was approached by F. R. Edwards with a plan to erect in that neighborhood a studio for the extensive production of scientific films. As an experiment, it was quite successful, but, in fact, the output would consist of pictures of surgical operations and botanical life, but, just in case opportunity for expansion might arise, there would also be historical and geographical subjects for colleges and universities. For so ambitious an undertaking, the asking price of $75,000 was surely not excessive. However, nothing sensational seems to have resulted. In 1920, schoolmen who were watching the swelling visual education movement, had their attention attracted also to the Scien-Cine Film Corporation, situated on Dutch Street in the heart of the city, but, in this case, there was something much more tangible than a plan. It was a three reel subject called "Microscopical View of Blood Circulation."

About 1923 the Rockefeller Institute of Medical Research in New York set up its own laboratory and at the same time its own studio, equipped with apparatus designed for the purposes of this nature. It was designed by Heinz Rosenberger, a specialist in microscopy who then was made director of its operation. He was also given permission to use it, within certain reasonable limitations, for outside work, which he promptly undertook under the name Rolah. Consequently, Rosenberger's expert services and exceptional equipment have been requisitioned frequently by commercial producers needing short lengths of such material. With this apparatus have been produced many important films, including demonstrations of work by Dr. Alexis Carrel with living cells, and of the late Dr. Hideyo Noguchi on Leishmanias and Trypanosomas.

For the present, however, this is going too far into the departments of higher, professional education. It is the author's intent to discuss that phase in a later place, reserving to the present subject of school films those activities which have been mainly for grades below the college level.

**Stirrings Abroad**

Overseas nations had been too hard hit by the War to do much, but circumstances growing out of the World War was somewhat the great immediate progress in visual education. There was plenty of favorable disposition, no doubt, but insufficient funds to provide the proper equipment and to organize necessary audiences. Before the War, the interest of scientists and experiments apparently had been as tentative as they had been in America, using borrowed theatrical films for the greater part, the old Urban catalogue—almost identical with that of George Kleine,
Conservative England probably could not be expected to move on sheer impulse in welcoming a teaching innovation such as this, although one might have hoped for a slight impress caused by Urban's long pounding at the gates. It was at least encouraging, about 1923, when a British Cinema Commission of Inquiry, established by the National Council of Public Morals, appointed an Educational Committee, over which its chairman, Dr. C. W. Kimmins, to the United States to study the phenomenon at its most conspicuous source. Whatever his ultimate report may have been, another committee, that on the Use of the Cinematograph in Education, issued a generally favorable opinion at the Imperial Educational Conference in London in 1924. It was stated on that occasion that a strong prima facie case had been established for the real value of films as supplementary teaching aids, and that their best possibilities that way probably would be in helping to impart nature study, geography, science and intertwined with the development of physical education. The educational authorities were entirely fair and in strict accord with the facts. They were: that production of historical films was still too costly to permit a practicable study of their possibilities; that no satisfactory evidence had yet been offered to prove advantages of the new medium over the old literary controls; that the cinematograph should not be too frequently used to show simple processes which the teacher might demonstrate directly, that the film should be adapted to the curriculum rather than vice versa, and that the educational film proper had yet to be evolved through the collaboration of film technicians and teaching experts. Of the reports of the Cinema Committee of Inquiry, none was more interesting than that which appeared in 1923 as a book entitled The Cinema in Education, under the authorship of Sir James Marchant. This concerned in large part, however, the potential use of the film in the school, class, and described ingenious, revealing experiments in which the teacher was first made acquainted with the picture, then deprived of it and expected to make a creditable showing without it. These experiments and findings stimulated further research, with Dr. Kimmins prominently active. An even happier endorsement of teaching films was made in 1926 at Oxford by the Education Section of the British Association. But a serious setback occurred—seriously mainly because of the publicity it was given—when, also in 1926, the London County Council ruled against school films, explaining that this regrettable conclusion had been reached after studying the report of a recent survey conducted in the New York City schools. It was commonly said of the France of the nineteen twenties that the War had bled her white, but plenty of her famed Gallic resiliency remained. Her film industry once, and not so long before, had dominated the world market. At the same time her savants had speculated with great penetration on the possibilities of the cinematograph in education. I have seen it stated that the first French extra-parliamentary commission assigned to study ways and means of applying such a system (the same function) was set up by the Chamber of Deputies as early as March, 1896. Recollections of both these significant facts remained with the French people, and opportunities to restore the happier situation were recognized. In the summer of 1920 one heard that the French Ministry of Agriculture had plans about to teach farming with films. A bit later one heard of a Paris article of importance entitled "The Educational Film" in School & Life ("Le Cinéma Scholaire" in L'Ecole et la Vie), edited by L. Crebillon; and he wrote therein concerning a library of 600 reels at the Pedagogical Museum, available to schools on a modest rental basis. What were these reels? On geography, mon-sieur, 275; about natural history, 175; appertaining to hygiene, 33; industrial, 41; physics, 12; sports, 21, and—here I knelt my brows in perplexity as I round my list (somewhat gustily, I must confess) until I saw, 267, a "hunt." The French interest, possibly stimulated by English activity across the Channel, was to reach a sensational peak in November, 1927, when it burst into elaborately详情
Teaching Spelling - With Hand-Made Lantern Slides

BY ANN GALE

SPELLING exercises are much easier with hand-made lantern slides. The word may be presented to the whole group at the same moment, and also may be withdrawn and replaced thus insuring equal experience with the word. One successful method is 1) to show the word written or printed or both while the children say the word and then say each letter in the word. 2) The slide is withdrawn while the children say each letter from memory. 3) The slide is replaced while they copy the word. 4) The slide is withdrawn while the children write the word from memory.

The six words presented below are for third grade. They were chosen because they are troublesome words and because it is possible to present them with pictures. With many words pictures are impossible and just the writing or printing is used.

- flowers
- fire
- duck
- desk
- corn
- clock

The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.
The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

UTILIZATION

Curriculum Implications of Motion Pictures—Charles F. Hoban, Jr.—Curriculum Journal, 11:365 Dec., 1940

(See 1)


(See 2)

Classroom Use of Films (Motion Picture Department)—Roy Wenger—The Social Studies, 32:31 Jan., 1941

(See 3)

How Teachers Use Movies—Hardy R. Finch and Eleanor D. Child, High School, Greenwich Conn, Movie Makers, 15:529ff Nov., 1940

Outlines many of the problems of film use in schools, presents ten questions for the evaluation of educational films, and gives six specific suggestions for efficient instruction with films.

ADMINISTRATION

The Cooperative Film Library Movement—H. A. Gray, Erpi Classroom Films—School Management, 10:131 Jan., 1941

(See 4)


(See 5)


(See 6)


(See 7)


A summary of the principles and purposes of visual aids. Bibliography and some sources listed.

EVALUATION


(See 8)


MUSEUMS


(See 9)


The American Museum of Natural History serves as a valuable aid in the teaching of hygiene. However, the instructor and the museum curator realized that visits to the museum were most effective only if they were carefully planned and executed. The article describes in detail how guide-questionnaires help.

EXHIBITS

The Technique of Exhibits—Elizabeth Eiselen, University of Chicago—Journal of Geography, 39:320 Nov., 1940

A much-needed account of important considerations in planning an exhibit, but it a small classroom display or a permanent museum exhibit. Advice is given about the selection of site, the audience, the technique of presenting the content and planning for labels.

SCHOOL MADE VISUAL AIDS

Producing a School Movie—Lesser Bruton Sands, DePauw University, Greencastle, Ind.—School Executive, 60:28 Jan., 1941 (See also "Presenting Fundamentals in Colored Moving Pictures," Education, 61:264-7 Jan., 1941)

(See 10)

Pupil-Made Lantern Slides—Claire Mulville, Greenwich, Conn.—Connecticut Teacher, 7:22 Jan., 1941

(See 11)

Class Makes Movie of "Julius Caesar"—Desse B. Cox, Hot Springs, Jr. High, Ark.—Journal of Arkansas Education, 14:mo. 8:8 Dec., 1940

The project to produce a film of Shakespeare's Julius Caesar was planned and pupil-executed. The filming was done by a student who owned a camera and supplied the film. Future classes in English will use this film as a visual aid in the teaching of drama.


(See 12)

PHOTOPLAY APPRECIATION

"Fantasia" and the Children—May Hill Arbuthnot—Childhood Education, 17:200 Jan., 1941

(See 13)

History in Commercial Motion Pictures—Rosebud Teschner Solis-Cohen—The Social Studies, 32:3; Jan., 1941

(See 14)

"Several Students Had Seen the Picture"—Eleanor W. Mossman, Lane Technical High School, Chicago Schools Journal, 22:56 Nov.-Dec., 1940

(See 15)

PARAGRAPH COMMENTS

1. Curriculum Implications

This year schools are spending over a quarter million dollars on 16mm. films for classroom use and another two and a quarter million dollars for projection equipment. There is great potential value in this expenditure. The schools have been slow in accepting films as educational aids, and even where they are being used they are not always used widely and well. Some Prevailing Errors are:

1) The motion picture is regarded as a supplement instead of as a complement to other educational materials and procedures. Used supplementarily, motion pictures are intended to supply more of the same kind of experience (usually provided through lectures or reading assignments). Used complementarily, they are intended to supply a different kind of experience necessary to complete a whole. The one use is primarily illustrative, the other developmental. The one further illustrates a principle already developed, the other serves as a basis for the development of a principle.

2) Motion pictures are a basis for conceptual development, and not exclusively an interest-getting device. It may lead to new activity or it may clarify and organize experiences.

3) Films should be used in making inferences about a variety of life situations; and not only for what the film itself contains. For example, a film about the circulation of the heart can be used to show exactly the process involved, or it may be used as an illustration of the way in which the bodily organs are interdependent and are affected in their functioning by daily bodily activities, such as exercise. Further study is needed to show other organs of the body that are interdependent.

Curriculum leaders should study the essential nature of motion pictures in the curriculum; and teachers must be taught to discriminate these functions in order that the potential values of the motion picture might be gained.

2. Films in First Grade

Motion pictures were used in the first grade with the result that it was possible...
to introduce social-science experiences that are otherwise postponed until third or fourth grades.

Some of the films used were aimed to give the children an appreciation of the interdependence of people in our complex society, and others showed animal life. Included in the first group was "Cooperative Wool from Fleece to Fabric," which shows wool from shearing to clothing. The children gained an appreciation of the number of people concerned; some knowledge of the map of the United States; and an appreciation of transportation involved. Another film, "Rolling down to Mexico," depicts an automobile trip through Mexico. The children learned something of American engineering, about mountains, and the film stimulated a further interest in Mexico. It was followed by a film, "Native Arts of Old Mexico." In addition to the handicrafts described, the picture helped the children to understand the difference between a culture in which all the processes of production are carried on with simple tools by a few people and the industrialized methods seen in the wool picture. The children became interested in working with clay and gained an appreciation of design. A film on Shelter was a good follow-up because the children had been invited shortly before the showing to see a program given by the third-graders on housing from primitive times to the present.

The pictures were used in various ways, depending upon the teacher's purpose. Discussion was always held either before or after or both.

Here is a description of the use made of the wool picture. The children had read about the story of wool in a picture book, "Pelle's New Suit," by Elsa Beskow. The children talked over the processes a day or two before the film arrived. After the showing, the discussion showed that some of the children had been confused by the complicated machines. It was decided to show the picture again in the afternoon. The children had little difficulty in following the steps and they took in a remarkable amount of detail, but the factory was too complicated. The second showing apparently cleared up many points. The class dictated the story of wool to the teacher. There were about nine scenes in the finished story. The children then cooperated in making an illustrated class book on the story of wool.

Without the film the children might have learned about the steps in preparing wool for fabric but they could never have understood that it was a large industry. They would never have understood how many people are involved, nor how complicated are the machines. The film helped to enrich their experiences, sharpened their observation, stimulated thinking and helped the children to understand the need to reserve judgment.

This is one of the best articles on motion pictures for primary grades to appear in many months.

3 Classroom Use of Films

A critical examination of the content of social studies films as aids to promoting intelligent discussion. The "factual" films in the social studies deliberately avoid the conflicts in the field and give the impression that they are presenting a confirmed truth. Discussion that would bring out points of conflict is difficult to pursue after the showing of such films. If it is follow-up discussion that is desired, we can get it by setting up a conflict in human association in the film so that it demands a solution. The film may hint at acceptable solutions or several solutions, but it must not try to solve the whole thing by picturing an air-tight answer. Set up the problem in the film. Discussion will then follow naturally.

Topics that lend themselves to such treatment in film are suggested. The films distributed by the Human Relations Commission of Michigan are an attempt to present conflicts in human relations. The films made by the Traffic Safety Project at Ohio State University used the technique recommended by the author. Teachers engaged in film making are urged to try presenting problems of their own community through films. Problem films can help to start the democratic processes working in the classroom, in the community forum and in the nation.

4 Cooperative Film Library

A report based on the services of 20 representative film libraries. The agency most closely concerned with film distribution, according to the study, is the teachers' college. The libraries in all cases were organized to meet a definite problem within the state or region. The personnel in these libraries is employed part-time in most cases. Salaries are paid from many sources—N. Y. A., service charges and college funds.

Financing arrangements for these film libraries usually are provided by the enrollment fees of students, about $50.00 per year. Another method is to have each school deposit one or more new films and pay an additional service fee to cover handling.

The author concludes that the film libraries now operating have engaged in careful planning and have ample provision for expansion of services. They are helping to bring educational films to rural and poorly financed communities where such service might otherwise have been impossible.

5 Celluloid Servants

A series of brief statements summarizing a survey on the status and problems of projected visual aids in the secondary schools of Maine. The author concludes that these aids are used as teaching tools, not as ends in themselves; that teachers need help in putting them to effective use. There is a strong likelihood, from the reports, that the use to which the aids are put can be considerably improved.

6 Experiment in Virginia

A group of 30 schools in southwest Virginia is experimenting with instructional sound films. The study at Radford State Teachers College was started under the direction of its president, Dr. D. W. Peters and will continue for two years. All films to be used are Erpi films. Each of the 30 cooperating schools agreed to pay $100 for the purchase of visual aids to help pay for their use. The sixty films thus bought will be cleared through the Teachers College. Films are scheduled 30 weeks in advance. Evaluation sheets are filled out for each film. Teachers are to be trained to operate machines. Miss Ruth Livermon gave a course last summer on the use of these aids at the Teachers College. A list of the film units (two titles in each) is appended.

7 Making Way for Audio-Visual

The purposes and plans of the newly created Division of Audio-Visual Education in the Virginia State Department of Education is already available. During the year information will be collected on the activities within the state and an exchange of ideas will be encouraged. Regional film and transcription libraries will be established in teachers' colleges. Assistance in organizing a program of audio-visual education will be given to teachers and principals.

8 Teaching Conservation

Conservation of the nation's wealth of forests and minerals, wiser use of the soil and water, and protection of wild plants and animal life fall for educational effort of all citizens. The condition of the fertile soil in our land has been greatly threatened through improper farming methods. Four-fifths of the original forests are gone, minerals are being rapidly depleted and many other of the nation's resources are being threatened unless there is a concerted program of conservation.

Motion pictures can help to promote desirable attitudes toward conservation. A few of the films available through government agencies have been reviewed by the author and recommended as unusual and helpful manner. Consult the original article for further details about the ways in which such films as "Trees That Tame the Wind," "Stop Forest Fires," "Re-Creation," "The Tree of Life," "The River," "Rain for the Earth," "Men Against the River," "Seeing Yosemite Park," "Grassland," "The Price of Progress," and "Rain on the Plains" can be adapted to a consideration of problems related to conservation.

9 Visual Aids Handbook

An evaluated list of the films available through the State College. The comments accompanying each reference were collected over a period of time with the aid of the teachers who were using the film library. Evaluations are available as separate sheets or in bound form. Further information, based on additional teacher experience with specific films, will be released from time to time. This type of handbook has great promise as a trail blazer toward a more integrated relationship between film libraries and
the classroom. (William G. Gnadinger replaces Ford Leslery as Head of the Bureau of Visual Teaching.)

10 Enid's Museum

The Enid Senior High School, during the past twelve years, has undertaken the development of a museum, under the supervision of a science teacher. Various clubs in the school have contributed to the museum. The Taxidermy Club, in addition to the birds, mammals and flowers they have collected, made book ends, rugs and other novelties. Bird-banding was carried on in cooperation with the U. S. Biological Survey. Picture aspects of the taxidermic and other magazines have been mounted and filed. Alumni of the school continue to help with the museum's activities.

11 Producing School Movie

A film made by the junior high school in Palo Alto, California was used for public relations to present the activities of that school. There are five important steps in producing a movie: a) securing the proper equipment; b) writing of a good script; c) staging rehearsals and planning the shooting; d) planning and making titles; and e) editing and titling. The 5-reel, color film which resulted has been shown to thousands of persons, at the N.E.A. and the World's Fair in California.

12 Pupil-Made Slides

Pupil-made slides are used in the elementary school from the fifth grade up. Seventh grade children made slides for nature study, of birds, animals, and other subjects. Graphs, cartoons and sketches were put on slides for the safety campaign; experiments with air and water pressure for understanding how a plane flies were shown on slides.

One group of children is preparing a set of slides on the topic, "Our Trip to the Museum."

13 Making Lantern Slides

The popularity of Kodachrome and Dufaycolor has resulted in renewed interest in lantern slides and transparencies, and the rediscovery by thousands of amateurs of a photographic field which was intensely cultivated by their predecessors in days when slides had a very important place in photography. In line with this increasing interest in slides, Camera Craft presents a series of three articles which discuss all phases of slide making.

The first article deals with the sizes and types of slide materials available, and the printing of slides, both by contact and projection. The second installment treats exposure and development of slides, including a variety of formulæ. The final article describes methods of toning slides in various colors, together with the re-touching, binding and finishing of the completed slides.

14 "Fantasia"

An editorial statement about the terrifying aspect of the recent Walt Disney productions. The films are regarded as a hindrance to children's appreciation for the music involved as well as for the great stories from which they have been taken.

"Where, oh where," the author wails, "is the Walt Disney who created Mickey Mouse and the Three Little Pigs who earnestly struggled to ward off the big, bad wolf and win security? And where is the taste and conscience of a fine publishing house that offers Fantasia as a picture book for children?" Teachers and parents will doubtless second the motion.

15 History in the Movies

Notwithstanding the differing philosophies, aims and methods of the industry and of the educator toward history in motion pictures, and in spite of the many handicaps which hinder complete accuracy, pictures dealing with history can be at once entertaining and educationally useful. The services of the regular staff (employed by the industry) might have more effective results were the services of the history specialist employed more frequently and more generally. This point of view is open to question by teachers of history who should be and are concerned with accurate details rather than with glamorizing history. Many of the true facts involved in historical episodes are more thrilling than the false trimmings that are sometimes added because of a mistaken sense of "box office." Why should educators apologize for Hollywood's distortion of historical facts?

16 "They had seen the Picture"

A stimulating article, describing this teacher's experience in developing motion discrimination, which leads her to conclude: "Such experiences make me a firm believer in the discussion method of teaching discrimination in movie-going. At the end of the unit on movies the students should be reading more books and seeing fewer movies. No more worthy goal for photoplay appreciation could be expressed. Interestingly enough, the author was challenged into this study of film discrimination by the dearth of articles on the subject that met her needs, and by the fact that the Dale, Dunn, Ho- ban and Schneider summary had to drag in a unit of work which dealt very indirectly with a film. The unit was based on the book, Arrowsmith. The teacher was quoted as having written, "Several Pupils had seen the motion picture." Hence the title of this article.

BOOK REVIEWS


There are at least two values implicit in the Motion Picture Project's new publication. First it fills a much-needed demand for specific details about the classroom use of films on various educational levels. Secondly, it represents the work of a specially staff in studying, trying out, evaluating and summarizing the use of films in the curriculum. It is to be regretted that the wealth of experiences engaged in by the teachers and the children during the year was limited to so small a bulletin. Doubtless many valuable items of information have had to be omitted for lack of space.

The book begins by providing the setting of the school and its curriculum through excellent photographs. Thus we get to understand the variety of ages, interests, abilities, backgrounds and ideals among students in the 12-year curriculum at Tower Hill. Each of the subsequent chapters is a summary. Chapter III summarizes the techniques and outcomes of films used from Grades I to IV. Chapter IV describes the uses of films in social studies for the fourth grade, and the other grades. An interesting comparison was made between the reactions of the fifth grade group and the eighth graders to the same film. The teachers concluded that fifth-grade children are most attracted to the active part of the film, that they remember what they see, but that they make fewer interpretations. The eighth grade group mentioned fewer specific incidents but they were able to generalize and interpret the film.

The use of films in the science curriculum is described in Chapter V, including the second grade group, the fourth grade and all of the upper grades. Under the heading "Communication and Expression," Chapter VI summarizes the ways in which films were found helpful in teaching propaganda analysis, English, creative expression in art, etc.

The teachers conclude that motion pictures have helped the children to grow in ability to think intelligently. Even the five and six year old children were able to use the information shown in films to make simple generalizations of relationships.

Secondly, the films were seen to promote cooperative action on the part of the group. Group discussion, committee investigations, group dramatizations and art projects were the outgrowth of the common group experience of seeing a film. Illustrations of the many ways in which we live and work cooperatively were provided by several of the films.

Thirdly, the films helped the children to see the relationship of art to other forms of expression; they also helped to sensitize the children to vital social problems of their own country. Films were also found to be effective in promoting wholesome growth in mental and physical health. Lastly, the films afforded an excellent avenue of communication and served as the basis for creative expression.

This volume should be read by every teacher before he or she orders a film, because it suggests a variety of new techniques. It will at least highlight the importance of trying out a variety of ways of using a variety of film subjects. This report is eventually to be supplemented by reports from two other cooperating centers. Chalk up another vital contribution for the Motion Picture Project.
Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

Two Letters

Acting upon the resolution in reference to special postal rates for films passed at last summer's meeting of the Department, the secretary, Ward C. Bowen, sent a copy of that resolution to the Postmaster General with the following letter:

"Hon. Frank C. Walker
The Postmaster General
The United States Post-Office Dept.
Washington, D. C.

"My Dear Mr. Walker:

"Allow me to submit to you at this time a resolution duly passed by vote of the Department of Visual Instruction at the time of its annual meeting at Milwaukee, Wisconsin. This resolution should have been submitted to you at an earlier date. The delay was caused in part by change in the officers of the Department.

"May I call your attention to the fact that the resolution includes two separate requests: first, that instructions might be issued to postmasters to give preferential handling to shipments of educational films in order to avoid delays and disappointments incident to the showing of such films in schools; second, that special rates for parcel post shipments on educational motion pictures be established, thus placing films on the same footing as books, which now enjoy special low rates.

"May I further emphasize the fact that the Department of Visual Instruction in passing this resolution had in mind only films of a strictly educational character. It was not the thought of the members of the Department to make any such request relative to films designed for entertainment only.

"May we respectfully request your careful consideration of this resolution. We shall be grateful for a reply at your convenience; such reply will be forwarded promptly to the Executive Committee of the Department.

Respectfully yours,
Ward C. Bowen
Secretary-Treasurer"

WCB:W
resolution

Here is a copy of the reply from the Third Assistant Postmaster General:

"Mr. Ward C. Bowen,
State Education Department,
Albany, New York

"My dear Sir:

"The Postmaster General has referred to this office for reply your communication of December 6, accompanied with a copy of a resolution adopted at the last annual meeting of your organization held in Milwaukee, Wisconsin.

"We note the resolution requests the Department to give consideration to:

"(1) Issue instructions to postmasters throughout the country to give preferential handling to packages containing educational films when addressed to schools so as to insure their inclusion in the first delivery after receipt in the sending and receiving post offices.

"(2) To establish rates of postage for educational films similar to the reduced rate applying to books.

"We appreciate having the views of your organization and the matter will be given consideration along with the many other suggestions which are being received in the Department.

Very truly yours,
(Signed) Ramsey S. Black,
Third Assistant Postmaster General"

To the Members of the D.V.I.:

When the roster of the Department appeared in last month's Screen, I checked back in previous issues to get comparative statistics on memberships. It is unfortunate, I think, that the practice of printing this roster has not been continuous and I hope that future administrations will make it a Department policy. However, the record yielded the following information:

<table>
<thead>
<tr>
<th>Month</th>
<th>Members</th>
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<tbody>
<tr>
<td>November 1936</td>
<td>317</td>
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<tr>
<td>February 1937</td>
<td>337</td>
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<tr>
<td>September 1937</td>
<td>415</td>
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<tr>
<td>May 1938</td>
<td>422</td>
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<tr>
<td>June 1940</td>
<td>545</td>
</tr>
<tr>
<td>January 1941</td>
<td>551</td>
</tr>
</tbody>
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Because memberships in the Department run from the date of receipt, this means that there are expirations every month in the year with a resultant continuous fluctuation in the total figures. Your secretary has analyzed the "inactive" file and found that there are a large number of cards here of members who belonged for only one year. It is difficult to determine the reasons for this, but partly it has been due to the impermanent lure of a nearby convention or an election of officers. This Department deserves not only the slow but steady growth of the past few years, but a rapidly accelerated growth. We must hold the members we have and constantly seek new members. You can help by (1) promptness in renewing your membership when you receive word of expiration, and (2) reviewing the roster in last month's Screen and sending names to your Secretary of those people you know whose names should have been included in that listing.

Membership will be only one of the many problems to receive the careful consideration of your Executive Committee when it meets at Atlantic City on February 26. It appears that all but three of the fourteen officers and Executive Committee members will be present. At the Business Meeting of the Department on February 24, in addition to progress reports from the Zonal Plan, Yearbook, Field Experiences, and Auditing Committees, there will be opportunity for full discussion of Departmental affairs. I wish all of you could be present.

Sincerely yours,
Paul C. Reed, President

P. S.—You should be thinking of the people you will wish to nominate to serve as president, first vice-president, and second vice-president for next year. In accordance with the provisions of the Constitution, nomination ballots will be sent to you within the next month.
This reply gives no indication that there will be immediate action to bring about the desired special attention to the handling of films by the Post Office Department. If this is still a matter of concern to members of the Department of Visual Instruction, some new and more effective procedure must be evolved to impress the Post Office Department with the importance of the request. Ingenious suggestions are in order and will be welcomed by your Secretary and President.

Notes from the Field

Indiana

The Muncie Audio-Visual Conference held at Burris Laboratory School of Ball State Teachers College. Muncie, Indiana, on Saturday, January 11, 1941. marks a new series of meetings in Indiana. The Muncie Conference was sponsored jointly by Ball State Teachers College, The Muncie Public Schools, and Indiana University Extension Class in Audio-Visual Aids.

Among the speakers were Edgar Dale of Ohio State University; L. C. Larson, W. W. Wright, J. O. Foster, and Karl W. Bookwalter all of Indiana University; and Evelyn Hoke of Ball State Teachers College.

General topics were the “Educational Use of Audio-Visual Aids” and “Organizations and Administration of a School Audio-Visual Service.” Group seminars and discussion panels using classroom teachers and administrators working in various curriculum areas featured the meeting. There were also sections on the Museum Workshop, School-Made Films, and Educational Motion Picture Studies at Indiana University. The last part of the meeting was devoted to the presentation of two documentary films The City and The Children Must Learn.

New England

The joint meeting of the New England section of the Department of Visual Instruction of the N. E. A. and the Connecticut Audio-Visual Education Association was held at the Connecticut State Teachers College in New Britain, December 14, 1940. The meeting, held in the science lecture hall, was opened with a message of welcome by Dr. Welte, President of the Teachers College.

The first speaker on the morning program was Dr. O. E. Underhill of the science department of the Teachers College. Dr. Underhill spoke of one way of meeting visual education needs in the Teachers College through the organization of a visual education service club as an extra-curricular activity. This organization in addition to providing valuable experience to its members in the visual education field, also provided visual education services for the faculty, and engaged in motion picture production and photography.

Mr. Fitzgerald of the Wethersfield High School next gave an illustrated talk on the uses of audio-visual aids in a modern social studies classroom. He started by showing how statistical facts could be easily visualized and readily used in classroom work through an interesting adaptation of a rubber stamp technique. Mr. Fitzgerald stressed the importance of having all kinds of visual materials available in the classroom in such a form that it would be readily accessible to all students. Slides were used to show the various methods of utilizing available room space for bulletin boards, files, cupboards, bookcases, magazine racks, and other devices to bring up-to-date material to the attention of the student.

Professor Abraham Krasker of the Boston University School of Education next spoke on the topic, “Some Uses and Abuses of Visual Education.” In his talk, Professor Krasker pointed out that he was more concerned about the lack of use of available teaching aids than he was about the few instances of abuse in connection with the use of visual aids.

The luncheon and business meeting was held at the conclusion of the discussion. Several meetings of interest to teachers in this region are scheduled for the near future. The New England section of the Department of Visual Instruction of the N.E.A. held another meeting February 1, in Providence, Rhode Island. The Connecticut Audio-Visual Education Association is holding several meetings in various regions of the state during the coming year.

Louisiana

The Audio-Visual Section of the Louisiana Teachers Association met in Monroe the afternoon of November 18th, and on November 19th held a joint meeting with the Louisiana Branch of the Department of Visual Instruction, of which Mr. R. H. Mount is president. This was the first organized meeting of the Branch. Various visual aids were covered on the well-planned program: “Field Trips and School Journeys,” by Bernice O’Neal, Louisiana Polytechnic Institute (Ruston); “The School-Made Moving Picture,” by Ardis Cawthon, Louisiana State Normal College (Natchitoches); “The Use of the Camera and the Development of the 2x2 Colored Slide,” by Anthony Reese, Fortier High School (Monroe); and “Demonstration of a Unit of Study with the Use of Visual Aids,” by Myrtle Rodgers and members of the Faculty of Georgia Tucker Grammar School (Monroe).

The Louisiana Branch issues a monthly Newsletter on Audio-Visual Education to its members. The January bulletin reprints an article by member W. C. McClendon, from School Executive for September, 1940. Title of the article is “Objectives and Techniques for the Use of Films in the Teaching Program.”

Ohio

The Visual Instruction Section of the Ohio Education Association held their conference in connection with the general association meeting on Saturday morning, January 4, in the State Office Building, Columbus. The officers of the Visual Instruction Section are: President, Superintendent A. C. Pence, Cohocton; Vice-President, County Superintendent R. M. Eyrman, Lancaster; Secretary, Superintendent E. E. Higgins, Gallipolis.

The program included the viewing of several motion pictures, Children of Japan, Bulgaria, Planters of Colonial Virginia, Vacation Safety, A Perfect Tribute, and Lincoln in The White House.

An interesting sidelight of the meeting is the fact that a prize of $25 will be given to the member of the
O.E.A. who writes the best comparative essay on the merits of the last two pictures. Essays must not be more than 600 words and must be filed with the program chairman not later than February 1. Judges' decision is final.

In addition to the appointment of committees, the election of officers, and the reports of committees, the meeting also included a demonstration of the Geoscope by M. W. Hunter of Sharon Center, and a report on the Visual Exchange by B. A. Aughinbaugh, Supervisor of Visual Instruction, State Department of Education.

**Note to Members of the D.V.I.**

We should like very much to start a personal section in this column regarding the activities of members of the D.V.I. If you have any information on yourself or anyone else, such as a new job or the carrying out of an experiment, or for that matter the taking of a trip, or an addition to the family, please communicate with us.

As a starter this week we wish to publish the following item:

The writer has it on good authority that Floyde Brooker, who has been Assistant Director of the Motion Picture Project of the American Council on Education since its beginning, has accepted a position with the United States Government in connection with the National Defense Program.—J. D. F.

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**PROGRAM**

**Winter Meeting of the Department of Visual Instruction**

**February 24, 25, 26—Atlantic City—Hotel Traymore**

*(Reprinted from January issue)*

**Monday, February 24**

**First Session 9:30-11:30 a.m.**—Submarine Grill

Greetings from the New Jersey Visual Education—Association—Arthur M. Judd, President, New Brunswick, N. J.

President's Report: *The Challenge of the Unsolved Problems*—Paul C. Reed

Criteria for Selecting Motion Picture Projection Equipment—John A. Maurer, Chairman, Committee on Non-Theatrical Equipment, Society of Motion Picture Engineers

A Critique of Summer Courses in Visual Instruction—Floyde E. Brooker, American Council on Education

Business Meeting

Luncheon—Informal—Form your own party and eat where you wish

**Second Session 2:15-4:30 p.m.**—Submarine Grill

Theme: *Visual Aids in Defense of Democracy*

Address: *Education in Defense of Democracy*—Ralph W. Tyler, University of Chicago

Report: *The Visual Aids We Have*: A Verbal and Visual Review—Sharon M. Reeder, American Council on Education

(There will be a screening of some of the best films related to the theme of the meeting.)

Discussion: What Shall We Do with Materials Available? What Should We Do to Stimulate the Production of Needed Materials? What Precautions, if any, Should Be Taken in the Use of these Materials? Can These Materials Be Used to Coordinate the School and Community Program for American Defense?

**Tuesday, February 25**

**Third Session 9:30-11:30 a.m.**

9:30-10:00—Rose Room—Introducing the Chairmen of the Group Meetings to follow. Each will present briefly the problems and questions to be considered in his meeting.

10:00-11:30—Group Meetings.

Group A—Rose Room—*Can the Schools be Better Served?* A discussion of the problems of visual aids distribution—B. A. Aughinbaugh, Chairman, State Director of Visual Education, Ohio

Group B—Fountain Room Balcony, East—*What Visual Aids are Schools Producing?* Including a discussion of "school-made" motion pictures—William G. Hart, Chairman, Dearborn, Michigan

Group C—Fountain Room Balcony, West—*How Can We Bring About Better Utilization of Visual Materials?* A discussion of pre-service and in-service training—Ford L. Lemler, Chairman, University of Michigan

**Fourth Session—Luncheon Meeting**

—12:15-2:00 p.m.—Submarine Grill

Reports of the Morning Group Meetings by the Chairmen

*The Wartime Use of Motion Pictures in Britain*—Richard Ford, British Library of Information

**Fifth Session 2:15-4:30 p.m.**—Submarine Grill

Theme: *Free Materials: A Blessing or A Blight for Education?*

A Symposium of Ten-Minute Opinions—Edgar Dale, Chairman.

O. H. Coelln, Editor, Business Screen Magazine

John E. Hansen, Chief, Bureau of Visual Aids, University of Wisconsin, representing a state film library point of view

Boyd B. Rakestraw, University of California, representing another film library point of view

Godfrey Elliott, Director, Audio-Visual Aids, Mercer County Schools, Oakvale, West Virginia, representing a point of view of the public schools

Ernest LaFollette, John D. Pierce Junior High School, Grosse Pointe, Michigan, representing the teachers who use free films

William H. Hartley, State Teachers College, Patterson, New Jersey, presenting standards for evaluation

Edgar Dale, presenting a preliminary summary leading to general discussion

General Discussion

**Wednesday, February 26**

**Second Session**

9:30-12:00—Meeting of the Executive Committee

Meeting of the Committee on Field Experiences

Meetings of other Committees as called by Chairman
THE OPAQUE PROJECTOR AS ONE AID IN TEACHING GENERAL SCIENCE

W. H. DURR
George B. Miller Junior High School,
Aberdeen, Washington

The motion picture as a teaching aid in General Science has been successfully used in the Aberdeen schools for a number of years. With the purchase of an opaque projector for the visual education department, it was felt that this new instrument constituted a device, which, if properly used, could contribute much towards the thorough mastery of those concepts encountered in the General Science Course. For this machine made readily available, and at little cost, a wealth of pictorial material which had formerly been neglected.

In an effort to determine some of the values of the opaque projector as a visual-sensory aid, and to work out a technique for its use, one unit of General Science was selected for this experimental work. The study was not intended to in any way minimize the values of the motion picture, the demonstration, experimentation, etc., but to personally evaluate the opaque projec-

Conducted by WILBER EMMERT
State Teachers College, Indiana, Pa.

or as a teaching aid in this area. Briefly stated, the aims were: (1) To experiment with the opaque projector, determine what materials were available, and how these might most effectively be used; (2) To have the pupils work out their own pictorial illustrative material, and analyze the value of this method; (3) To ascertain the value of this technique for developing the scientific method of study. Approximately one and a half times as much time was spent on this unit as is ordinarily devoted to it.

Accordingly, after the showing of one particularly fine film, the class went back and analyzed the picture, scene by scene, to see how the film had brought out different points to be learned from the unit through the use of pictures. For example, potential energy was illustrated through the use of a picture of water back of a dam; sticks of dynamite represented chemical energy; and a picture of a man using a lever illustrated a simple machine.

Following this analysis, the class concluded that many things in their science course could be illustrated with pictures carefully selected, and similar to those used in the film. This resulted in a desire to work out a scenario of their own on some unit of the course. While some pupils were eager to make a motion picture, it was felt that flat pictures which might be used with the opaque projector would serve a similar purpose. After much discussion it was pointed out that while the still pictures could not show motion, motion was not essential to the understanding of much scientific material. Furthermore, motion is a relative concept, and many still pictures are capable of giving the illusion of motion.

As a result of this desire, the class divided into committees to work on the various phases of the unit selected. Each committee selected a chairman to direct the work of the group, and a secretary to record the plans for his committee. Thus definite plans could readily be submitted when the whole class met to coordinate the plans for the final presentation.

Each committee immediately entered upon the study of its section of the unit, and determined the essential points it wished to illustrate. After listing the concepts to be illustrated, it was faced with the problem of deciding how best these ideas might be portrayed.

The science department had been collecting pictures for classroom purposes for several years. However, with the incentive of this project, the class members began bringing in great quantities of illustrative material. Both the science picture files and the new materials being brought in were available to all committees. It was soon evident that a set of standards for the selection of pictures would be needed if the most value was to be obtained from this study.

After considerable study the following standards were accepted as those to be used in this enterprise.
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Color—Natural color, where obtainable, was preferable to black and white prints.

Clarity—The picture must be a good, clear print. Faded or discolored prints were not to be used.

Number—Only one picture was to be used for each idea expressed. This was to avoid needless repetition. However, a series of pictures might be used to develop a concept.

All the material was gone over by the various committees for the purpose of selecting that which best illustrated the various aspects of the scenario. Those pictures which passed the standards set up by the group were mounted on cards for projection. Those items which did not exactly portray the concepts which the committees considered essential to this unit, but which might prove useful in some other phase of classroom work, were filed for future needs. When any committee was unsuccessful in locating pictures which they needed, they prepared drawings of their own to delineate the concept under consideration. The class soon learned that to carry out the type of work it had set for itself, it would be necessary to develop a thorough understanding of the unit. With the discovery of this fact, added interest in the project accrued. A determination to thoroughly master this unit took hold of every member of the class. While class time was devoted to some of the work of selecting and mounting the pictures, most of the work was done outside of class time, in the library, the study period.

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and at home. On numerous occasions, pupils who were working after school closed, had to be sent home.

Finally the pictures were all selected, prepared, mounted, and ready for showing. The class then decided that a commentary should be prepared to accompany the showing of the pictures. The narration was written by a committee selected for that purpose. The whole class entered into the criticism of the draft presented by the committee. After it was finally whipped into shape, a rehearsal was held with special emphasis on: clearness of projection; timing of the narration with the changing of pictures; commentator’s enunciation, voice, and emphasis; and over-all timing of the presentation to fit into a definite period of time.

The final stage of the project was the presentation of the completed unit with the aid of the opaque projector before the other sections of General Science classes in the school. This served as a review for the class, and provided a splendid demonstration lesson to those who were fortunate enough to witness the production. Many who saw it claimed that it was one of the finest visual lessons they had ever seen.

In addition to the three objectives definitely stated above: to find materials available to use with the opaque projector; to have pupils work out their own illustrative material; and to determine the value of this method for developing a scientific method of study —, it was found that the pupils developed tremendous interest in their own creations; test revealed thorough mastery of science concepts; it provided opportunities for self expression; and that study habits acquired carried over into topics studied later in the course.

From the results of this experiment, it was possible to enlist the interests of other teachers in the use of the opaque projector as a valuable teaching aid. While half more time was spent on this unit that is usually devoted to it, the results were most encouraging. The skills and techniques developed during this study will enable the teachers to accomplish as much or more in the same amount of time generally devoted to the study of a unit. The new opaque projector is now in great demand.

**FILMSTRIP DEPICTS PHYSICAL ASPECTS OF VISUAL EDUCATION**

**WILLIAM S. GREEN**

Supervisor of Visual Education

Denver, Colorado, Public Schools

A FILMSTRIP entitled “Some Physical Aspects of Successful Visual Education,” prepared by the writer for teaching purposes in Denver schools, has been shown in various other localities and has evoked marked enthusiasm. The material consists of a strip of twenty-four pictures, with twenty-four explanatory paragraphs in the form of a syllabus to accompany the pictures. The explanatory material was also reproduced on a phonograph to run thirteen minutes synchronously with the pictures. Presented herewith are reproductions of half the pictures on the strip and the entire narrative accompaniment for all the twenty-four pictures.

(1) Much has been written and said about how films and other visual aids should be used from an educational point of view. In many instances the physical problems that arise in securing successful film lessons are regarded as minor details, worth little consideration as compared to educational outcomes.
16 MM Sound
FILMS For HISTORY CLASSES

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Write for complete list of educational films and catalog of entertainment subjects.

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Some of these physical things to do are stressed and mentioned in the lids of projector cases, film catalogues, and film containers, especially information relative to proper threading and operation of the movie machine.

In this film strip story let us consider some of the more important things that will help us profit to the utmost in our investment in projectors, screens, and other visual equipment.

(2) This is East High School as seen from the Sixteenth Avenue approach. It is a large school with a student body of approximately 3000 students, yet the problems involved here and in the smaller school are quite similar. The expense of darkening all of the rooms with opaque shades would have been prohibitive. The problem was solved by using sets of portable shades that may be used in any desired room.

(3) Testing an electric outlet is a simple thing to do with this little neon gadget. If there is a light, one must replace a fuse before current is again restored. At least a "dead" fuse is the commonest cause of trouble.

(4) Here is a close up view of the tester. It is small and may be easily carried in the pocket. A dead electric outlet may delay or deprive the class of a film that was especially important.

(5) These are familiar objects to all of us, yet the lack of any particular item of this kind often spells success or failure of a program. Much valuable time is lost hunting for double sockets, plugs, fuses or other gadgets while the audience waits, often impatiently.

(6) Serviceable extension cords like this one are indispensable. Their sturdy construction makes them much safer and they last longer. They seldom "short out" if they are properly made and are very useful when the electric outlet is some distance from the projector.

(7) This type of cord is less desirable because of its flimsy make up. It is not as safe nor will it last as long.

(8) Here is a projection table in the classroom with the student operator. It is sturdily built, made of angle iron, fitted with strong rubber casters and may be taken to any room in the building. It has a space provided to carry a screen, opaque shades for the room, film cans, extension cord and all other things needed for a film lesson. It is a complete portable unit in itself.

(9) We find rubber casters of this general type indispensable on projection tables. The tables are of such a height that an operator can easily manipulate the machine and at the same time the projected picture is at the correct angle and height for the screen.

(10) Screens of this type may be quickly adjusted to the proper height. It is important to remember that they must be at right angles to the beam of light coming from the projector, otherwise, the picture will be out of focus at one side of the screen or at the top or the bottom, if the projector is too high above the screen or too far below it. Remember, also, to make the projected picture exactly fill the screen. This is controlled by the distance the projector is placed from the screen.

(11) This screen is a home-made affair consisting of a white window curtain in a wooden box to keep it clean and to pro-

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Comments from a Teacher:
"Five series of strip films were shown, using a small Tri-Purpose projector. We all agreed that the projection lantern itself was entirely adequate, and a class room of ordinary size does not have to be entirely darkened while the slides are being shown. The manuscript, which is well adapted for junior and senior high school age, can very easily be followed as the pictures are being shown.*** We all feel that a general use of these films in the science department next year would give results that would mean a forward step in education."

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tect it. It is not as reflective as a beaded screen but is very easy on the eyes.

(12) The screen may be placed on the teacher’s desk as shown here. This puts it at about the proper angle and relationship in the average classroom.

(13) Threading the projector is very important. Improper threading results in film damage which is costly as well as unnecessary. Follow the simple directions given you with your projector and your results will be gratifying as well as satisfactory.

(14) This projector rests upon sponge rubber cushions which help reduce vibration to a minimum. The cushions are made from a kneeing pad. The “blimp” case on this model also helps in making it a silent job for classroom use.

(15) A few simple tools like these come in handy at times. In the strictest sense the oil cans in the upper right are not tools, but lack of oil has been the cause of a great deal of expense and trouble as we all know.

(16) Oh! Oh! Oh! Oh! When using sound films lay your speaker cord in such a manner that it will not take the beating it is getting here. Coil it neatly, see that it is free from kinks and out of the way as much as possible.

(17) Here, a speaker cord is being laid close to the wall where it is least likely to be walked upon. Care should also be exercised to secure satisfactory results by placing the speaker in the proper relation to the screen and the audience.

(18) Darkening a room with a set of portable opaque shades is illustrated here. In this picture a student operator is shown laying an opaque window curtain in the window sill. The tan shades were first raised on all the windows in the room.

(19) The cord on the opaque shade is next placed over a hook in the wood work at the top center of the window. The operator holds the shade with one hand as it unrolls and pulls the cord with the other hand.

(20) When the shade is fully raised the operator ties the cord to a radiator or desk with a knot easily tied or untied.

(21) When the film lesson is over and the shades are taken down one boy rolls up the shade as another slowly releases the cord. Two boys make an effective team in doing these simple but necessary jobs. This liberates the teacher to give her full energy to points of the film lesson. The teacher should, however, know how to operate the projector and all the other necessary details. If she does the student operators can look to her for help if they are stuck and she can control the situation much more intelligently.

(22) A good rewind and splicing outfit are pretty much of a necessity. Films can be built up on to one reel which saves time in class ordinarily spent in threading up the next reel. Breaks in the film or spills that come loose may be quickly repaired with a good splicing outfit. These are points a good operator knows how to do.

(23) A classroom scene at East High school immediately after a film has been shown. When the physical aspects and educational aspects of visual education are in close harmony, and work well together—then and only then will results be as we wish to have them.

(24) This film strip was recorded personally by Mr. R. C. Muhln of the Muhln Sound Systems of Denver, Colorado, on a Presto Recorder. The photographs are the work of Norman Carroll, a student operator of East High school. Your narrator is William S. Green.

Resolutions of Ohio Visual Instruction Section

BE IT RESOLVED THAT:

The Visual Instruction Department of the Ohio Education Association adopt the following platform of principles:

1. The place of visual perception in the learning process is too widely known and too generally accepted to need comment. Such place is of first importance in the learning procedure.

2. We call attention to the phenomenal increase in all types of materials for bringing the world into the classroom and enriching the experiences of the children through visual instruction.

3. We urge that more and more of these materials be made available to all types of schools.

4. We further urge that curriculum construction take into careful consideration making the same an integral part of the courses of study.

5. We suggest to teachers and administrators that there is need for an evaluation of visual instruction materials and procedures. This should provide a plan for preparation, presentation, discussion, and testing.

6. We urge that budgets of Education continue and, when possible, increase the budgets for visual aids.

7. We emphatically urge that all teachers and school patrons petition the legislature to continue support of the present policy for financing visual education materials in the State Department of Education. The present censorship fee should be continued. It is our belief that in the standards set up in the school study of commercial film the motion picture industry is getting value received.

8. Finally, we go on record in commendation and praise of the Visual Instruction Exchange for its excellent service in selection and distribution of films.

W. Dwight Darling
C. M. Layton

Data on Summer Courses Wonted

The Educational Screen is again gathering information on all summer courses in visual instruction, for publication in the April and May issues. Any reader knowing of such courses to be given next summer is earnestly asked to send us names of the institutions—with or without further data, such as: title of course, name of instructor, dates of duration, credits, contents of course.
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This skillfully prepared sound film provides invaluable help in the detailed demonstration of modern shop practice. It is replete with carefully planned, superbly photographed full-screen close-ups which isolate and greatly enlarge the critical action involved in every significant procedure. It not only permits demonstrating to the whole class at once, but enables each student to follow the action, step by step, to even greater advantage than would be possible from a position directly at the side of the instructor. The effectiveness of the film is further heightened by full explanations, in sound, of every step.

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(See September 1940 issue, EDUCATIONAL SCREEN, page 282)

H. Skadsheim, Visual Services
Berrien Springs, Mich.

School Made Motion Pictures

By HARDY R. FINCH

Head of English
High School, Greenwich, Conn.

Member Committee on Standards for Motion Pictures and Newspapers of the National Council of Teachers of English

Seldom do schools make films on topics that are the subjects of controversy in the community. That is why the film, Housing in Flint, reported below should be of unusual interest to school film makers. The problem of housing was being discussed in the city of Flint, Michigan; so the students of the Central High School decided to find out actual conditions for themselves and make a documentary film of their findings.

According to Ruth C. Henry, director of the film, Housing in Flint (450 feet) was produced by the Central High School students. They were studying a unit on Housing at the time that community participation in a United States Housing Administration project was the subject of an impending election.

In the plan of the film, “Flint’s houses were divided, chronologically, into four groups. Good and bad examples from each period, in the proper proportion to their actual numbers, were photographed. The community research and planning bureau gave us the necessary advice. Hence, the film is an accurate sampling of Flint housing. The plan is as follows:

A. Houses before the World War period
   1. Houses that have maintained their value
   2. Houses that have become run-down because of adverse surroundings
   3. Houses that have become veritable slum areas

B. World War
   1. Civic Park—a General Motors project
   2. Private buildings

C. Rapid building of the 1920’s
   1. Expensive homes
   2. Outskirts of the city—no conveniences
   3. Middle range

D. Trends in the 1930’s
   1. Trailer camps
   2. Modern styles

California

Four films (400 feet or less in length) are products of the Long Beach Public Schools. According to N. Evelyn Davis, audio-visual supervisor, they are: Drawing the Human Figure, in which an art class demonstrates its method of drawing; Painting a Mural, a film that shows a high school girl painting a mural, “Little Black Sambo”; Mother Goose, with elementary school children dramatizing Mother Goose rhymes; and Dances from the Nutcracker Suite that pictures high school girls in interpretative dancing groups.
Illinois

Art teachers will be interested in two films developed at the Sullivan School, Chicago. One, Color, an all-color film, starts with the basic principles of the color wheel and leads to correct color combinations. The other, Lettering, shows correct finger and hand manipulation in letter construction. Further information on the films may be secured from Mr. Julius J. Becker of the high school.

Michigan

Art Goes Everywhere is the stimulating title of an 800-foot film produced by students of the Roosevelt School, Wayne University Training School, Detroit. From the pre-school through the sixth grade, the students found art playing a part in all kinds of school activities. Mrs. Mabel Lange Smith, art instructor, was the advisor of the film group.

New Jersey

Miss Martha Noble of the East End School, North Plainfield, describes a public relations film made by her as follows: "A Day in the East End School begins with a picture of the children coming to school in the morning. It shows each grade engaged in some activity—the kindergarten children boarding a boat built of blocks; first grade groups reading, drawing, and playing games; second grade selling seeds in a store which they built; fifth grade dramatizing a Dutch play, painting a Dutch scene and arranging a sand table; fourth grade, library and safety council; fifth grade, hobby club . . . ; sixth grade, school newspaper. The movie closes with the children going home." (400 feet).

New York

A view of what a specialized vocational high school offers the student is presented in a 600-foot orientation film made at the Central Needle Trades High School, New York City.

The Mandl School for Medical Office Assistants, 62 West 45th Street, owns a 400-foot film showing the activities of medical office assistants and the teaching of clinical laboratory techniques. The film shows X-ray techniques, laboratory procedures, medical stenography, and nursing methods. David L. Bennett is principal of the school.

Ohio

One of the questions that school administrators are asked frequently is: "How are your teachers hired?"

This question is answered by a 250-foot film made by Richard W. Horn and O. E. Hill of the Galion Public Schools, Galion. They report: "The film merely presents in situation form how a teacher's services are procured—from the arising of the need to the notification of appointment."
Wisconsin

The following films are reported by H. M. Kuckuk, Rufus King High School, Milwaukee.

*Defenders of Outdoor America* (950 feet), made by the Wilson Junior High School, Appleton, shows boys at work on conservation projects. Another production of this school is *Handlebar Hazards*, a 700-foot bicycle safety film in color. It was produced cooperatively by the police department, the city council, and the board of education—R. L. Swanson, cameraman.

A school publicity film of 200 feet has been completed by the Kosciusko Junior High School, Milwaukee.

*The King's Diary* (1200) of the Rufus King High School, Milwaukee, gives the history of a new school, with the first football game, contest winners, activities of shops and classes.—H. M. Kuckuk, advisor.

A complete presentation of the work of the schools is the subject of *A Preparation for More Complete Living from Nursery School to the Sweet Girl Graduate*, 800 feet of film made by the South Girls Junior Tech, Milwaukee.

Oskosh State Teachers College has made a 250-foot film, *The Activities in the Primary Department of the Rose C. Swart Training School*, Miss Hulda A. Dilling, director of the Kindergarten-Primary Department, was the film sponsor; Phil Lyman, cameraman.

A diary type of film is *The Seniors in Review* (500 feet), a production of the Richland Center High School designed to be shown as a part of a Class Night program.

Every step in puppet making and the use of the finished product may be found in *Puppetry*, (400) a film that has a national circulation. The film was made at the Jefferson School, Wauwatosa.—A. W. Krueger, principal. The activities of students in connection with the study of a unit on Arabia are shown in an 800-foot color release of the same school.

Seven films (approximately 400 feet each) have been completed by Harold R. Stamm of the West Allis High School. Each film documents some activity of Mr. Stamm's classes in physics, biology, or general science. Their titles are: *Telescope Making at the West Allis High School*, *Microscope Projects*, *The Electric Motor*, *Compass, the Signpost of the World*, *Hydrometry, Weights and Measures*, and *The Short-Wave Radio transmitter*.

---

**CHILD HEALTH TRAINING, and CHARACTER BUILDING FILMS**

Silent and Sound 16 or 8 m.m. BEFORE THE BABY COMES BABY'S FIRST YEAR

GROWING UP (Child care and training from one to six)

Useful to adults, young adults, doctors, dentists, nurses, public health workers, high school, normal school and colleges.

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**Booklet on School-Made Films**

*The Motion Picture Goes to School*, a collection of "discussions on paper" on school film production and allied subjects, is available to educators.

The 46-page mimeographed booklet is issued by the Committee on Standards for Motion Pictures and Newspapers of the National Council of Teachers of English. Edited by Hardy R. Finch, head of English of Greenwich (Conn.) High School, it contains the following: "Producing Motion Pictures: A Problem in Communication," Edgar Dale; "The Problems of School Film Production," Lillian McNulty; "Prospectus on Hollywood Via Amateur Film Production," Eleanor D. Child; "The School Documentary Film as an English Activity," Donald Eldridge; "Enriching the Study of Literature by the Making of School Films," Maribel Richardson; "Teaching Library Techniques by Visualized Procedure," Alexander B. Lewis and Lavinia Caprio la Manna; "The Motion Picture or Photoplay Club: Its Function in the Secondary School," Constance McCullough; "Life's Too Short" (a scenario for a safety teaching film), Godfrey M. Elliott; "Bibliography on Movie Making."

The booklet may be obtained from Hardy R. Finch, Greenwich High School, Greenwich, Conn. Requests should be accompanied by twenty cents to cover costs of mailing, etc.

**SEND A REPORT OF YOUR SCHOOL MADE FILMS**

Name of School ..................................................

Address .....................................................

Title and subject of film ..................................

Date Completed .............................................

Length 200, 400, 500 or ...... feet 

Sixteen mm.? .......... Silent? 

Color? .......... Made by 

Brief summary of and unusual facts about the film ... 

Your name ..................................................

Please send your reports to the editor of this department.
4 Ways to Improve

YOUR

Visual Instruction

1. Read this FREE BOOK

*Films on the Faculty* presents valuable, authentic advice about (1) training teachers in effective use of motion pictures (a suggested training program is presented in considerable detail), (2) choosing films and integrating them with the curriculum, (3) developing new areas of instruction for the motion picture, (4) selecting equipment, and (5) administering the visual education program. Whether you’re using or contemplating using motion pictures, you’ll find this book interesting and helpful. It has grown out of the experiences of hundreds of educators. Mark the coupon for your free copy.

2. See this COMPLETE EXHIBIT

At the convention of the American Association of School Administrators in Atlantic City, February 22 to 27, visit the Bell & Howell booth, section L-2. There you’ll see the largest and most complete exhibit of B&H visual education equipment ever presented, and the latest and best educational films in our Filmosound Library. You can examine and compare every Filmo silent and Filmosound Projector, including the powerful Filmorac. And you can see all the accessories that so broaden the scope of school sound film projectors, including microphone, disk recorder and record player, transcription player, phonograph turnable, and others. This instructive exhibit will be attended by specialists who know not only films and equipment but also the answers to your problems of application.

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Only with fine projectors will the full perfection of your visual program be brought to the screen. So use Bell & Howell Projectors. They are precision-built by the makers, for 34 years, of Hollywood’s preferred professional equipment. In thousands of schools they have proved their ability to deliver “demonstration results” through years of rigorous service. Pictured is Filmosound “Academy,” popular school model for both sound and silent 16 mm. film.

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1847 Larchmont Ave., Chicago, III.
(1) Send free book, Films on the Faculty.
(2) Send literature on projectors for ( ) sound film, ( ) silent film, ( ) silent film.
(3) Send catalog of educational films.
(4) Send catalog of recreational films.
(5) Send catalog of religious films.
We now own ( ) ( ) projectors of

... make.

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Name: ____________________________________________

School: ____________________________ City: ______________________

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February, 1941  Page 81
FACT or FICTION!

Whether you seek EDUCATION or ENTERTAINMENT you will find that the VISUAL way is the BEST way!

INCREASE your knowledge of world affairs and home affairs; enjoy the thrills of your favorite sport in season and out of season; "See America" and travel to the four corners of the world; ... or see Hollywood's greatest stars in their greatest pictures, just as they are shown on the screens of America's theatres!

Here are some of the outstanding dramatic, musical, and comedy successes of the year, pronounced by the leading motion picture critics as

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"When the Dallons Rode" A rip-roaring picture of America's most sensational bandit family, starring Kay Francis and Randolph Scott.

"A Little Bit of Heaven" Gloria Jean sings her way through a glorious human story of "Just folks."

"The Boys from Syracuse" A Broadway hit that sold out at $5.50 a seat, now faster and funnier with Allan Jones, Martha Raye and Joe Penner.

"Sandy Is a Lady" The most publicized lady of the screen, "Baby" Sandy, in an hilarious comedy.

"If I Had My Way" Bing Crosby joins voices with Gloria Jean in the year's most tuneful picture.

Desanna Durbin First Lady of the Screen, in her three latest and greatest pictures, "First Love," "It's a Date" and the magnificent "Spring Parade."

Write Immediately to

Universal's Non-Theatrical Department for full information about these full length feature attractions as well as the complete catalog of short-subject comedies, musicals, travelogues and animated cartoons ever assembled!

WRITE FOR FREE CATALOGUE No. 17

UNIVERSAL PICTURES COMPANY, INC.
Rockefeller Center New York, N. Y.
CIRCLE 7-7100

News and

Southern California Spring Conference

Present and future trends in the field of visual-audio education will be realistically demonstrated at the coming Southern California Spring Conference of the Visual-Audio Section of the C. T. A. to be held in San Diego, April 4-6. City and county departments will act as co-hosts with headquarters in the Hall of Education, ideally located in the heart of the city's cultural and recreational center in beautiful Balboa Park.

Enjoyable social and recreational special events are being arranged in connection with the program. Among special attractions is a guided tour, Sunday, to the Observatory on Palomar Mountain, where the world's largest telescope is housed. Another planned trip will be a personally conducted Harbor Excursion, which will afford an opportunity to see anchored in port the latest type navy ships. Visitors will be given an opportunity to witness actual training of students in such types of work as sheet metal, motor assembling, boat building, and reconstruction for mine sweepers, tool making, parachute manufacture, etc. This school was recently launched under the San Diego City Schools National Defense Training program to meet the urgent demand of local aviation plants for more trained men. Regular class work of the Vocational High School, including both trade and business courses will be open to the visitors attending the conference. Observation of these vocational schools will be planned so as to show methods and materials now available to visualize such instructional areas.

Exhibits will include a photographic salon featuring the work of teacher and pupil photo-activity groups, displays of student's work illustrating local curriculum centers of interest and areas of study, and commercial equipment exhibits.

Attuned to the spirit of the times, the theme of the illustrated forums and panels scheduled for the conference will be, "Visualizing Today's Defense of Life's Real Values."

(MARIAN EVANS)

Visual Education in Tennessee

The "Audio-Visual News," published by the University of Tennessee Division of University Extension, reports that January 1, 1941, marked the first birthday of the new educational motion picture film service inaugurated last year by the University. But despite its short life, the library now boasts the acquisition of nearly three hundred and fifty film subjects, and is filling a real need in Tennessee. Already almost a hundred and fifty accounts are listed in the books of the Division.

Among the new films offered is a one reel sound subject produced by the University, entitled The University of Tennessee at Work, which presents the activities, work, and scope of the institution. It is available free to film users in the state.

Another item of interest reported by the bulletin is that for the first time in the history of the Tennessee
Notes

Education Association, its program will include a sectional meeting on Audio-Visual Education, April 11. Mr. W. Gayle Starlins, University of Kentucky Extension Division, will be guest speaker.

Preliminary plans are being made to introduce a Visual Aids Caravan in the state after school starts in the fall. The Caravan will be a traveling conference, holding meetings at seven centers for the discussion and demonstration of visual aids.

Visual Aids in Mathematics Demonstrated

The Visual Instruction Section of the New York Society for the Experimental Study of Education devoted the evening of January 10 to a discussion and demonstration of "Visual Aids in Mathematics." Considerable interest was shown in the series of 16mm silent films for teaching mathematics, produced by Dominick Montelbano, teacher in Junior High School 109, Brooklyn. Mr. Montelbano also outlined the experimental evaluation which is now being conducted to determine the effectiveness of these films in the teaching of 7A Mathematics when compared with the traditional method that uses the textbook as a basis. The series of 17 films were made to accompany specifically the course of study in the New York City junior high schools. The project is divided into four units: Home Unit, Savings Banks, Geometry, and Travel Units.

Pupil-made lantern slides correlating with the 7A Course of Study in Mathematics were also demonstrated, by Thelma Jackson, teacher in Junior High School 113, Bronx. Mrs. Esther L. Berg acted as chairman of the meeting.

Museum Free Film Programs

The Art Appreciation Film Program for 1940-41 at the Philadelphia Museum of Art has been prepared on an impressive scale by the Division of Education. Beginning November 16th, this series of free motion pictures is given weekly on Saturday and Sunday afternoons, concluding May 25. The seventy-nine films booked for the season cover such subjects as Architecture, Sculpture, Painting, Pottery, Weaving, Arts and Crafts, Puppetry, The Graphic Arts, Abstractions, and the Animated Cartoon.

Visual Aids in the CCC

Howard W. Oxley, Director of CCC Camp Education, recently reported that 1,100 of the 14,897 CCC camps have motion picture projectors, 1,108 filmstrip projectors, and 282 are supplied with opaque projectors. A few have lantern-slide equipment. In one typical school month 7,402 educational films were shown, with a total attendance of 575,028 for the month. Maps, charts, diagrams and models are also used for exhibit purposes in many camps.

In each corps area, films and filmstrips are distributed

(Concluded on page 87)
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

The Snapping Turtle (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's guide to be furnished.

Unusual photography reveals the life-story of an interesting reptile, seen in its natural habitat. As the film begins, it is springtime; some of the inhabitants of a pond and its shore are pictured. Then, in detailed closeups, the snapping turtle is seen swimming, going to the surface for air, and catching food. Mother snapping turtle crawls out of the pond; locating a suitable spot, she begins laying her eggs. This process is shown in some detail. Afterwards, she starts back to the pond. A skunk discovers the nest and begins to eat an egg, but a dog frightens him away. After three months, one of the eggs is seen hatching. Others follow. Several of the tiny turtles, yolk sacs still attached, start out to find the pond. In the water, one catches and eats a dragonfly nymph. The mother passes close by her young, and we hear that she has no further interest in them except as possible appetizers. A crayfish escapes her by losing a claw. As winter comes, the turtles dig a burrow at the bottom of the pond and hibernate through the months when ice covers the surface; but with the coming of spring again, they awaken to begin another year of life.

COMMITTEE OPINION—An excellent film for a wide range of applications; should be especially valuable in biology, zoology, and nature study classes, at all grade levels. The film is well organized; photography and sound are good.

A New World Through Chemistry (DuPont) 2 reels, 16mm Cinecolor sound, "Free."

This color film tells of the activities of the du Pont Company in bringing to our everyday life new and useful products made possible through chemical research. The film opens with views of laboratory apparatus as the narrator states that the chemical laboratory is in the vanguard of modern progress. First, a realization of chemists' dreams is shown in Neoprene, a synthetic rubber now in commercial manufacture. The qualities which make it superior to rubber for certain uses are shown in tests. A housewife demonstrates several kitchen conveniences manufactured from Neoprene. Next, liquid-repellent fabrics are demonstrated in a dramatized skit. Fire-retarding agents, useful for women's dresses, are shown. To make rayon, cellulose sheets are shredded, liquefied and forced through spinnerets, wound on spools, dyed, and woven. A West Virginia plant which makes Nylon is next shown, with a brief explanation of raw materials and some of the methods. In a hosiery mill, the Nylon thread is knitted into women's stockings. Other uses of this product are shown in the making of brushes and fishing line. The Lucite plastic, valuable especially because it will transmit light over any desired course without lateral leakage, is demonstrated. We also see furniture and other household articles made of this and other plastics.

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments of both are cordially invited.

Producers wishing to have their new films reviewed on this page should write Mr. Don White at 223 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, and basis of availability of the films. They will be informed of the first open screening date when the Teacher-Committee can view the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, which must be borne by the producers.

The film ends with scenes of girl models in their synthetic dress and using synthetic furniture, as the commentator emphasizes the value of chemistry to our life. Produced by Scientific Films, Inc. Distributed also by Siegel's Motion Picture Bureau, 347 Madison Avenue, New York City.

COMMITTEE OPINION—An excellent film for use in chemistry and physics classes; should have some value for social science classes, and should be very effective in general showings, at the junior high level and above. Of limited value also in elementary grades. The film makes effective use of color; photography and sound are good, although color rendition is not completely up to standard. A good variety of materials and uses are shown. The one weak point noticed is the fact that in a few scenes models appear clothed in undergarments and bathing suits; some schools may consider these scenes unsuitable for their showings. For that reason, it is recommended that the film be screened by faculty members before being exhibited to students.

Argentina (Erpi) 11 minutes, 16mm sound, sale price $50.00.

Teacher's guide to be furnished.

Represents life in Argentina by showing the daily lives of people in Buenos Aires and by explaining the city's dependence upon the Pampas for export products. The film opens in Buenos Aires as Roberto Campas, an employee in a meat packing plant, goes to work by subway. A wealthy broker, Senor Rodriguez, goes to his office by automobile. In the packing plant, some of the processes in preparing Argentine beef for market are shown. Senor Campas returns home for lunch. In his office, Senor Rodriguez dictates an order for a new automobile. At the docks, ships are being loaded and unloaded with the exports and imports vital to the city's life.

But making both possible, there is behind the cities another Argentina—the land of the vast Pampas, used chiefly for agriculture and grazing. Typical agricultural activities on the Pampas are shown. Great herds of cattle, with their gauchos, form a picturesque scene, as do the sheep which roam the plains. Back in the city, Roberto Campas and his family are seen visiting the zoo, and the film closes with views of their home life in the evening.

COMMITTEE OPINION—An excellent film for classes in the social studies, particularly geography, from the junior high through adult levels; should have considerable value also in elementary grades. The film is well organized and includes a variety of material. It should contribute especially to a realization of kinship with the people of Argentina. Photography and sound are good.

Throwing on the Wheel (Minnesota) 1 reel, 16mm silent, sale price $28, rental $1.25.

Epic Hellman, graduate of the University of Copenhagen, demonstrates the techniques of forming a vase on the potter's wheel. First, a lump of clay is placed on the wheel. In detail, but without explanatory titles, the process of centering, shaping the bottom, lifting the sides, final shaping and finishing the vase are shown. With extreme care the vase is lifted from the wheel, air-dried, fired, dipped in glazing slip, and fired again. In conclusion the completed vase is shown.

COMMITTEE OPINION—A fair film for use in teaching the techniques of pottery making, and for art appreciation. Some committee members criticized the film's entire omission of explanatory subtitles on grounds of lack of clarity and completeness. Others thought this a good feature because, among other things, it makes possible use of the film at any grade level, and because they felt no explanatory titles were needed. Photography is good throughout.

(Concluded on page 86)
DEMOCRACY UNDER FIRE!

- Here is living history... the story of British Democracy under fire told through the twenty-five most significant films to come from the present world crisis.

- Pictured in these films is every phase of England's effort: the impact of total war on British industry, on civilian life, on its military services and on its government.

- Pictured in them too, is England's answer: how it has set about the task of preserving its constitutional form of government as well as itself; and successfully turned democracy into a weapon efficient enough to withstand the challenge of totalitarianism.

- But perhaps most important of all—quite apart from their authentic importance and meaning to us as the world's only other great democracy—these films have a very real and timely educational value. The detailed visualizations of the vocational training, industrial and social techniques the British are evolving provide answers to many of the problems which our present defense program is raising.

- Be first in your community to show these films by acting now.

16mm sound prints sell for $15.00 per reel; rent for $1.50 per reel. 35mm sound prints rent for $2.50 per reel.

Write today to your dealer or to

COLLEGE FILM CENTER
59 E. Van Buren Street  Chicago, Ill.

These 25 films provide the first authentic moving picture record of how British Democracy is meeting the challenge of total war.

BRITAIN AT WAR

1. Britain on Guard (1 reel; 7 mins.) A democratic people mobilized against invasion. Commentary by J. M. Keynes. G. P. O. Prod.

2. Channel Incident (1 reel; 8 mins.) A typical small craft in Dunkirk evacuation.

3. Coastal Defense (1 reel; 11 mins.) Preparations against attack. Attacks at sea.

4. Into the Blue (1 reel; 11 mins.) Training pilots, gunners and observers for R.A.F.

5. Raising Sailors (1 reel; 11 mins.) Training the Royal Navy. Pathe Prod.

6. Raising Soldiers (1 reel; 10 mins.) Training the Army. Majeur Press.

7. Sea Fort (1 reel; 7 mins.) A floating sea fort off Britain's coast.

8. War and Order (1 reel; 10 mins.) Wartime duties and training of the Police Force and Home Guard. G. P. O. Prod.

PRODUCTION FOR DEFENSE

9. Job to Be Done (1 reel; 10 mins.) Use of civilian man-power in wartime.

10. Aircrew (2 reels; 22 mins.) Manufacture of all-metal airplane propellers; "variable pitch" explained.


12. Yesterday's Over Your Shoulder (1 reel; 8 mins.) How man without experience is trained to be an engineer. Valuable for Vocational Guidance.

INTERNATIONAL RELATIONS

13. Atlantic (3 reels; 27 mins.) An all-diagram film for teaching purposes, giving an overview of the Western World to 1940.

14. Men of Africa (2 reels; 19 mins.) British colonial administration in East Africa with particular reference to medical services, education and native responsibilities.

LIFE OF THE PEOPLE

15. The Big City of London (1 reel) The best short film to date on London. Should be in the permanent collection of every school.

16. Village School (1 reel; 10 mins.) How children, including 30 evacuees, are educated in wartime. A good example of method. Should be shown in every teacher's college.

17. Sailors Without Uniform (1 reel) Fishing for food and sweetening for milks.

18. Spring Offensive (2 reels; 20 mins.) Rosedale rubbish disposal. How farmers carry out a campaign to cultivate more land. A London boy evacuated to the country is shown doing his part.

19. Britain's Youth (1 reel; 11 mins.) British zoos: importance of physical fitness.

20. Religion and the People (2 reels; 15 mins.) Protestant, Catholic and Jewish welfare work.

21. S. O. S. (1 reel; 12 mins.) The story of a lifeboat crew in Cornwall.

SOCIAL WELFARE

22. Mother and Child (1 reel; 11 mins.) Maternity and child welfare—services in Britain.

23. The New Britain (1 reel; 12 mins.) Some achievements of British democracy 1918—1939—health, education and housing.

24. Welfare of the Workers (1 reel) Ensuring high standards in working conditions.

25. White Battle Front (1 reel; 10 mins.) Medical services for fighters and civilians.

MAIL THIS COUPON

College Film Center, 59 East Van Buren, Chicago, Ill.

Gentlemen: Without obligation please send me further information about the Films on Democracy. I am especially interested in the following numbers:

Name

Address

City
News and Notes
(Concluded from page 83)

to camps by the corps area film center or through district film centers, on a definite booking schedule. Through the service of corps area film libraries it has been possible to correlate groups of films and film strips with specific classes and activities, and to prepare study guides for the use of instructors. A survey conducted by the United States Office of Education indicated that 199 films had been used effectively in 31 different subject-matter fields.

Two publications will be available soon from the CCC, namely “Catalog of 16mm Educational Films Used Successfully in CCC Camp Courses,” and “Use of Films, Film Strips and Slides.”

New Film Courses

Two new courses in Audio-Visual Education, sponsored by the Bronx Boro Wide Association of Teachers, New York, are given this semester by Joseph V. Sullivan, Chairman of the Classroom Films Committee, Department of Secondary Education of the N.E.A. “Types of the Photoplay—The Documentary Film” is aimed to enlighten teachers about the potent power and curriculum implications of this medium of instruction. Films based on a definite topic are shown at each session to form the basis of the lecture and discussion. The other course, “Motion Pictures in the Industrial Arts,” is designed for teachers in that field, to acquaint them with suitable films and proper teaching techniques for using such films in the classroom.

“Ten Best” 1940 Theatrical Films

The “Ten Best” films released in 1940 have been selected by 546 American critics and reviewers from a list of 440 eligible features compiled by The Film Daily, which conducts this poll annually. Rebecca, a Selznick production distributed by United Artists, was first with 391 votes. Others were respectively: The Grapes of Wrath (Twentieth Century-Fox); Ninotchka (Metro-Goldwyn-Mayer); Foreign Correspondent (United Artists); All This, and Heaven Too (Warner Bros.); Abe Lincoln in Illinois (RKO Radio); Boom Town (MGM); Northwest Passage (MGM); Our Town (United Artists); The Mortal Storm (MGM).
**Current Film News**

- **Non-Theatrical Pictures Corp.,** 165 West 46th Street, New York City, have acquired a series of short British documentary films on England, for sale in 16mm sound.

- **College Film Center, 59 E. Van Buren Street, Chicago,** offers these same subjects for both sale and rental. They can also be rented from many film libraries throughout the country.

- **Britain at War,** the title of one group into which the films are classified, includes 9 subjects: Britain on Guard—sections of the population mobilized for defense; Channel Incident—dramatic re-enactment of the Dunkirk evacuation; Coastal Defense—preparing against invasion; Food Convoy—protection of Britain's overseas food supply; Into the Blue—training of men in the R.A.F.; Raising Sailors—gun drill, signalling, recreation in the Royal Navy; Raising Soldiers—army training and equipment; Sea Fort—inside views of a floating sea fort off the coast of Britain; War and Order—police duties under normal and emergency conditions.

- **Men and Armaments** has 4 subjects: A Job to be Done—organization of civilians in war time; Air Screw—detailed technique of propeller construction; Behind the Guns—industrial processes in Britain's armament factories; Yesterday's Over Your Shoulder—technical training of civilians portrayed in dramatic sketch.

- **World Factors**—3 films: Atlantic—animated film explaining history of western world, racial problems, colonial and imperial expansion in relation to countries bordering Atlantic Ocean; Fighters of the Veldt—revue of South African army, navy and air force; Men of Africa—British colonial administration in East Africa.

- **Social Services**—5 films: The New Britain—achievements in social welfare during the last two decades; The Big City—transportation in London in relation to work and recreation; Mother and Child—child welfare services adapted to war time needs; Welfare of Workers—working standards maintained under war conditions; White Battle Front—medical services available for fighting forces and civilians.

- **Life of the People**—7 films: Britain's Youth—importance of maintaining physical fitness in war time; Religion and the People—contribution of Protestant, Catholic and Jewish population to social and democratic life; S.O.S.—details of life boat crew rescue work in typical coastal village; Sailors without Uniforms—hazardous work of Britain's fishermen in war time; Spring Offensive—organization of campaign to increase food resources; The Answer—civilians population rise to meet menace of invasion; Village School—education in war time, care of evacuees from metropolitan centers.

- **Castle Films, Inc.,** 30 Rockefeller Plaza, New York City, have completed a new motion picture on African jungle life, under the title:

**Native Africa**—16mm and 8mm, sound and silent—an intimate filming of tribal customs and primitive existence in the kraals, and an unstaged picturization of wild life in its natural habitat.

- **Rounding the Cape of Good Hope,** a brief visit is made in the great modern city of Capetown, from which quick transition is made to the rolling plains of the interior, and finally the jungle itself. Here the continual danger in which natives live is reflected by the thornbush walls around every village as protection against night prowling killers. The African elephant is shown in its natural settings, and then trained to do the hard work of the jungle. Baby lion cubs guard the den in the absence of their parents. They are herded with goats and other denizens of the jungle. A fine close-up study shows a magnificent specimen of lion at the water-hole.

- **On the Road to Acapulco**—2 reels—color film that portrays the famed beauty of Old Mexico with a background of appropriate Mexican music.

- **Films Incorporated,** 330 West 42nd Street, New York City, makes the following announcement:

**Conquest of the Air,** the documentary film, which was produced last year by RKO-Pathe-Films Incorporated, is now available to Cooperative School Film Libraries and University Extension Libraries on a lease basis. It is forty-five minutes in length and is 16mm sound. The film traces the history of aviation, telling in pictures, animated diagrams and clarifying dialogue how man flies and how he learns to fly. This history is brought right up to date with scenes of the latest type aircraft and an explanation of the United States Army air training program.

- **Garrison Films, Inc.,** 1600 Broadway, New York City, have added four more one-reel films to their series of Handicraft Teaching Films, rounding out the ten subjects originally scheduled. The first seven have been announced previously in this department. Titles of the three new films are:

**Casting with Rubber Molds; Simple Block Printing; Clay Pottery.** The films were directed by Arthur Brownin, and produced by Garrison in cooperation with the Universal School of Handicrafts.

- **Garrison Films, Inc.,** also announces that the entire series, now available in silent form only, will be ready with sound commentary March 10th.

(Concluded on page 90)
RCA Motion Picture Sound Equipment is the Choice of over 6000 Theatres

Give Your Pictures the "BIG TIME" Projection They Deserve with RCA 16 mm. SOUND FILM PROJECTOR

Finer, clearer sound... More even light distribution on screen... Greater operating simplicity. It's years ahead... 16 superior features... yet is priced with the lowest!

Give your pictures new sparkle... your sound new life— with the sensational RCA 16 mm. Sound Film Projector.

The finer performance and greater operating simplicity of this instrument are the result of RCA engineering. Designed by the men who build RCA equipment used in Hollywood studios and in thousands of theatres, this projector has oversize reflector, condenser and objective lens which provide more even distribution of light on the screen.

Sound is full, clear and more brilliant—at either high or low volume— because of film take-up equalizer and superb electrodynamic speaker.

To greatly simplify threading, this projector has threading line cast on projection block. All size reels may be quickly rewound by motor.

Low in cost, easy to carry, this equipment is just what you've been looking for to make every lesson live!


You are cordially invited to visit the RCA Victor booths G-22, 24, 26, at the NEA Convention in Atlantic City.
The Educational Screen

General Science and Health—9 subjects on achievements in medical science, including the work of Pasteur, Dr. Carver, Dr. Jenner, Dr. Semmelweiss, Alfred Nobel, and others.

The Bureau has also acquired many films from Erpi Classroom Films, and Vocational Guidance Films, Inc., making up a series of 15 reels on "Vocational Guidance."

The Manske Library, 1521 Dunn Avenue, Cincinnati, Ohio, has just added to its rental library, the feature release of Commonwealth Pictures Corporation: Call of the Wild, 7 reels, 16mm sound, an adventure story set in the isolated Northwest, with a fine, intelligent dog as its star. The distributors recommend it as a family film, one of wide appeal to nature lovers.

FILM REVIEW

The Last Stronghold—4 reels, 16mm sound, (Films, Incorporated).

A documentary film presenting, in closely packed continuity, every salient factor and event in Europe's hectic career from the first World War to the present—a composite made from R K O-Pathé newsreels of the time.

Opening with fast, dazzling montage, we glimpse Federal Buildings in Washington, violent bits of the former war, President Wilson speaking, the Armistice. The Versailles Treaty is shown as starting Germany working for revenge, and Italy, Russia, Japan likewise. Economic crash of Germany, the Benes-Ley-Smoot bill, helped by Hull treaties, "Mein Kampf," Hitler as chancellor, Hindenburg dies, Hitler supreme in 1933, and total effort toward war begins, with surrender of household metals and training of children. Review of invasions—Japn in Manchuria, Italy in Ethiopia, Hitler into Rhineland, Spanish Civil War, Czechoslovakia in '37, Munich in '38, Dantzig and Poland in '39. Roosevelt's neutrality proclamation, Russia and Finland, Graf Spee, Denmark and Norway, Churchill's great pronunciamento. Dunkirk, France falls, and Italy and Japan join Axis. Striking scenes of bombed London and Coventry, U. S. Defense Committee, inadequate equipment, sabotage, "fifty destroyers and new bases." Picture plea for defense of all Americas, subservive Bund activities, need for train- ing youth, unison pledge to flag, Hull in South America, Western Hemisphere-al- liance, Havana agreements, Pan Ameri- can Union, FDR's urgent rush in building and training projects, and Roosevelt's unity speech closes film.

Maps and animation are used effectively throughout the four reels. In such a mass of material, the individual sequences are exceedingly short and follow each other in bewildering similarity. The educational effect is overwhelming unless the spectator is well acquainted with the facts in advance. The Last Stronghold is a swift and striking review of a period packed with deeply significant action and event. It recalls, vivifies, and emphasizes a multitude of steps and causes that have led the world to its present tragic state.
It was not until the invention of the sound motion picture that Equal Educational Opportunities could be provided in such a dynamic manner throughout the schools of America. Every school, regardless of size, location, limitation of physical environment or finances, may now provide equal learning opportuni
ties with the aid of Amprosound 16 mm. motion pic
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Among the Producers

Pictures That Reconstruct the Past

Four years ago Raymond Fideler decided that something should be done about reconstructing the past... pictures visualizing the significant aspects of life in colonial days, pioneer days, and in mediaeval and ancient times should be made available to all teachers and students. These pictures should record the past as vividly as modern life is being mirrored by the fine photographs in our journals of today. Unfortunately, the camera is a very modern invention. For visualizing man's progress up until barely ninety years ago, we must depend upon the genius of the artist.

After discussing the idea with hundreds of teachers, supervisors, and superintendents, Mr. Fideler decided to organize the publishing company now known as Informative Classroom Picture Publishers, with offices at Grand Rapids, Michigan. Educators served as curriculum correlation advisors, and an editorial plan was formulated on the basis of ten areas of human experience. These areas included: Pioneer Days, Life in Colonial America, Indian Life, Knighthood—Life in Mediaeval Times, Early Civilization, Transportation, The Story of Textiles, Community Life, and The Farm. Artists were engaged to visualize the information called for in the various courses of study.

The accompanying picture of a fortified village in Kentucky is typical of these drawings that have been produced, and illustrates two important functions of every picture in this series. It provides the best possible substitute for the complete experience of an actual visit by reconstructing a village typical of hundreds that were built in Kentucky by the early settlers. This is the first purpose of each picture—to visualize some important life problem for which adequate photographs do not exist. The second criteria was that each picture must contain "action."

A page of "functional text," supplying pertinent reference material and written on the child's own level, accompanies each picture. As teachers quickly found that it was often advisable to use parts of several units rather than to use one unit in its entirety, an alphabetical and analytical index was prepared.

Five new units will be available in the early part of 1941: Life in Ancient Greece, Life in Ancient Rome, Americans All, The Age of Victoria and Discovery and How Man Has Put Himself on Record. Plans at present call for the publication of a new set of pictures each ninety days.

Tell the Informative Classroom Picture Publishers of the area of living that you would like to see them visualize. Your suggestions will receive the attention of their curriculum correlation advisors and it is very possible that they can be included in future editorial plans.

Audio-Visual Teaching Aids Shown in New Book

A complete audio-visual service for schools, including electronic devices of every type applicable to classroom use, is contained in a colorful new booklet being announced by Ellsworth G. Dent, RCA Victor Educational Director. Master control sound systems, recording apparatus, RCA Victrola radio-phonographs, public address systems, records, 16mm. sound motion picture projectors, and laboratory apparatus for teaching science, radio and electrical engineering are among the numerous important educational aids described and pictured.

"The tremendous advances in electronic engineering from the RCA Victor Laboratories, have placed at the disposal of the schools a vast number of new teaching aids in the 30 years since the RCA Victor Educational Department was established to make more general the benefits of recorded aids to teaching," Mr. Dent said. "In the new booklet we have made every effort to show not only the new types and models of equipment, but also the applications of those instruments to making the efforts of the teacher more productive and more enjoyable."

The booklet is available on request from the Educational Department, RCA Manufacturing Company, Inc., Camden, New Jersey.

Illustrated Reference Material for Classrooms

Mr. Henry Skadsheim of Visual Services, Berrien Springs, Michigan, has developed a unique method of making available for convenient classroom use the wealth of valuable illustrated material contained in the pages of the National Geographic since 1917. The magazines are broken down into a thousand articles and classified into fifty subject headings, following the Dewey Decimal library system. Nine volumes cover Natural Science, seven cover Travel, three the Social Sciences, and thirty-one the world in Geography.

To provide a permanent, handy method of preserving these articles, they are bound in sturdy illustrated booklets. Each series of booklets is kept in a cloth bound box, made in book style, to be kept on the library shelves for handy reference. They can be used for classroom project work or projected on the screen in the opaque projector.

A Topical Index correlates the contents of the Geographic in topical arrangement, listing the articles chronologically. Another section of the index lists the Natural Science material alphabetically, and an Analytical Section gives a two-way charting of references on each country.

A further outgrowth of this plan is to make materials for binding these pamphlets available to sponsors of Binding and Library Projects. For those wishing missing issues of the Geographic, the Service can supply them. Write to Mr. Skadsheim for complete information.

(Concluded on page 94)
A Visual Aid That Aids in Teaching

An Interesting Visual Technique Successfully Used —

In Teaching Reading.
In Teaching Spelling.
In Teaching the Reading of Music.
In Teaching Foreign Languages.

Experiments in Remedial Teaching of Spelling Have Produced Remarkable Results.

Further Information or a Special Demonstration Given on Request

Keystone View Company
MEADVILLE, PENNA.
**New 35mm Kodak Ektra**

Heralded as “the world’s most distinguished camera,” a de luxe 35mm. miniature camera, the Kodak Ektra, is announced by the Eastman Kodak Company, Rochester, who claim the new camera to be without parallel. Designed for the serious worker who prizes quality and precision in photographic equipment, the Ektra includes certain new features never before available in any 35mm. miniature camera in this or any other country. Its design, based on extensive research, aims at the maximum of operating convenience, and unequalled versatility in either amateur or professional use. Six interchangeable lenses are offered incorporating new optical techniques which insure a high quality of performance. Focal lengths range from 35mm. to 153mm., with other lenses to come.

A distinct departure in miniature cameras, the Kodak Ektra is the first to provide both interchangeable lenses and interchangeable Magazine Backs for 35mm. film. These backs enable the Ektra owner to switch from one type of film to another in the middle of a roll, without loss of a single frame. Other outstanding features of the new Ektra include: precise range finder coupling automatically with all focal lengths of Ektra lenses; focal plane shutter of unique precision and stability of performance, with speeds from 1 second to 1/1000; a variable-power view finder which sets by a simple dial for lenses of focal lengths from 50 to 254mm., corrects automatically for parallax; full visibility of all scales and dials from the top of the camera: all operating controls at the finger tips of one hand: rapid film advance and rewind, with a visible indicator actuated by the film itself—providing a sure and accurate check on film movement. Advancing the film simultaneously resets the shutter for another exposure.

These features are in addition to such technical refinements as an automatic exposure counter on the Ektra body and a manual-set exposure indicator on each Magazine Back; a visual signal which shows after each exposure until the film is advanced; positive prevention of accidental double exposures; a velvet-smooth shutter release plunger — absolutely eliminating release shock—with a quick-set lock to prevent accidental release: a delayed-action mechanism for self-portraits and similar work.

Finish of the Kodak Ektra is in thorough accord with the precision of its construction. Metal parts are neatly and compactly designed, and either brush-finished or highly polished. The covering is fine black-morocco leather.

**Color Film Slides on Art**

A 24-page catalogue on “Masters in Art” has just been issued by Art Education, Inc., 35 West 34th Street, New York City, listing approximately 2000 subjects available from them in color film slides. These 2x2 inch slides mark an epochal development in accurately reproducing paintings, color drawings, watercolors, sculpture and architecture. The collection offers the wealth of the world’s famous galleries and private collections, in inexpensive and durable form.

The catalogue lists the slides on “Art Masterpieces of the World” alphabetically by artists. Since many of the subjects have a definite place in Literature, History, Geography, Religion, Folk Lore and other academic studies, symbols designating certain fields are placed after the title. Other slides are classified into Paintings for Juveniles, Architecture, Historic Design, and Miscellaneous.

**Poetry Records**

The Harvard Film Service announces the publication of the first of a series of recordings of American poets reading their own poems. This series has been prepared under the supervision of Professor F. C. Packard, Jr. of the Department of English. Each record is 12”, double-faced, and sells for $2.00, plus postage.

In addition to the recordings made by John Holmes, David McCord, and Robert Fitzgerald, several by Robert P. Trumblay, Theodore Spencer, John Gould Fletcher, and others, to complete the series, are in preparation. A series of records for the teaching of Appreciation of English Literature will be published in the spring by Harvard Film Service, Harvard University, Cambridge, Mass.

Also reported from Harvard Film Service is the addition of 112 reels of Erpi films and 33 Castle films to their film library this month. These subjects will be available at standard rental rates for single bookings, as well as on a membership plan and in subject matter libraries.

**Two B&H Magazine Cameras Now Have 5 Speeds**

Taking another step ahead, Bell & Howell, 1801 Larchmont Avenue, Chicago, announce the addition of a fifth speed to the Filmo Auto Master (Turret Head), and the Auto Load Speedster, B&H 16mm. magazine loading cameras. This new speed is 24 frames per second or “sound” speed. Films taken thus may have a sound track “dubbed” in later.

The new speed gives these B&H cameras a speed range of from 16 to 64 frames per second—the normal 16-speed, for general use; 24-speed, for sound to be added later; 32-speed, for shooting from moving vehicles and for fast action shots; 48-speed, for semi-slow motion; and 64-speed, for beautiful, analytical slow motion study. The addition of this important intermediate speed makes for greater flexibility for these popular magazine loaders. There has been no increase in the price of either camera.

**A Bit of DeVry History**

_Time Marches On!_ From the archives comes this picture taken back in 1918 when the first DeVry sales conference and get-together was held. Today, over 188 DeVry representatives (Audio-Visual Specialists) in all parts of the country are at the service of schools, churches, civic organizations, industry, etc., ready and qualified to extend assistance on any visual education problem. Mr. H. A. DeVry, president of the DeVry Corporation, is third from the left in the back row.
### Also for the Visual Field

**"1000 AND ONE" FILM DIRECTORY**

"1000 and One" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including a large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

132 pp. Paper. Price 75c. (25¢ to E. S. subscribers)

**THE FILM EVALUATION SUPPLEMENTS TO "1000 and ONE"**

A new, unique, outstanding service to the teaching field—annual film evaluations in card-index format.

The first Supplement is ready—presenting, on 50 standard-size library cards, evaluations totaled from multiple judgments of the 50 films modified to date—and scored after actual use by the Judging Committee of 500 Teachers under the National Film Evaluation Project. Each succeeding Supplement will carry the next 50 films to attain their quota of Score Films from the Committee.

Price 25c per Supplement, with full explanations accompanying, 50 cents (postpaid if cash with order.) (Sold only to owners or purchasers of "1000 and One Films," 16th edition).

**VISUALIZING THE CURRICULUM**

By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Throughout the text the theory of visual aids is applied to textbook illustration. "Visualizing the Curriculum," itself a splendidly "visualized text," provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a foundation in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

**THE AUDIO-VISUAL HANDBOOK. (3rd Edition)**

By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."


**PICTURE VALUES IN EDUCATION**

By Joseph J. Weber, Ph. D.

An important contribution to the literature of the visual field. Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph.

156 pp. Cloth. Illus. Price $1.00

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**Full Proceedings of the Midwestern Forum on Visual Aids (Held in Chicago, May 1939)**

The most complete record ever printed and on one of the liveliest visual meetings ever held. Numerous addresses by leading figures in the visual field, a notable Directors' Round Table and three complete recordings of classes taught by sound films are among the rich contents of the 86-page booklet.

80 pages, Paper. Price 50¢. (25¢ to subscribers of Educational Screen)

**HOW TO MAKE HAND-MADE LANTERN SLIDES.**

By G. E. Hamilton.


**EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE.**

By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full data on evaluation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.


**THE EDUCATIONAL TALKING PICTURE**

By Frederick L. Devereux.

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of the education. The first six chapters deal with the development of fundamental bases of production, with the experimentation which has been conducted, and with suggested problems for future research. The remaining chapters discuss the effective use of the sound film in teaching.

220 pp. Cloth. Illus. Price $2.00. (20% discount to schools)

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By M. R. Brunstetter, Ph. D.

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers' use of sound films and in helping to organize programs of audio-visual instruction in school systems. Two valuable Appendices and a full Index.

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**MOTION PICTURES IN EDUCATION IN THE UNITED STATES.**

By Cline M. Koon.

A report of the instructional use and indirect educational influence of motion pictures in this country, divided into nine units. Treats the motion picture (1) as an educational influence; (2) in service of health and social hygiene; (3) in governmental service and citizenship; (4) in vocational guidance; (5) in international understanding; (6) Motion picture legislation; (7) technique of production and distribution; (8) systematic introduction of films in teaching; (9) general educational problems of films in teaching.

106 pp. Paper. Price $1.00 (20% discount to schools)

**THE STEREOGRAPH and LANTERN SLIDE IN EDUCATION.**

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Educating for Patriotism

The school-journey used under exceptional conditions and producing exceptionally interesting results.

MURIEL POST
Girard College, Philadelphia

When all have disembarked, one of the high spots of the trip has been reached. The boys enter through the Walnut Street door, and carefully touch the crack in the bell beloved by all Americans, then on to the Declaration Chamber. The whole group once inside, the guard is called in. He verifies for the boys the points of interest they have already noted for themselves. New information is obtained when he tells of many of the uses to which this famous room has been put in more recent years.

In the picture gallery to be found in the old banquet halls on the second floor there are two main attractions—one the painting by Benjamin West of Penn’s Peace Treaty with the Indians, the other that of George Washington on his horse. Both had been discussed before taking this trip, and are now studied eagerly.

Every building in the Independence Hall group has its own interest, and half a school day is none too long a time to accomplish all these boys have set out to do. Without delay, therefore, they visit the museums in the two wings of the main building, then move on to Congress Hall. Here, on the first floor, they enter the room where the lower house used to meet, and even walk across the very floor boards where Washington himself was wont to step. The curios on the second floor fascinate the children far more than does the Senate Chamber, where Washington was inaugurated for his second term.

Back in the bus, we proceed down Chestnut and up Fifth. “Do you see the red brick wall?” The question is on every tongue. “There it is!” And sure enough, the bus slows down. Around the corner, and through an opening in the wall, the boys see the graves of Benjamin Franklin and his wife. Traffic is heavy, so we pause for only a moment before continuing along Arch Street to Second. Another high spot! For here we are at the legendary birthplace of the flag. Again all leave the bus, and are shown through the Betsy Ross House by the very capable guide who is stationed there.

A short walk around the corner brings us to Christ Church. Voices are hushed. Quiet children walk down the aisles, and reverently stop, perhaps where Washington sat, or Benjamin Franklin, or at the tiny pew where Betsy Ross was accustomed to worship. Another thrill for the boys, as they realize the historic ground they are treading!

A longer ride takes us to the oldest Church in this part of the world—Gloria Dei, or Old Swedes’. Here the genial rector greets us, and as eager boys are seated at the front of the Church, he tells them...
March, 1941

stories of the early people who planned and built the edifice. This is our last stop. A half hour’s drive brings us back again to our own welcoming gates. As the boys go back to their dormitories, a word of thanks is whispered to Stephen Girard, the kindly benefactor who made possible this red letter day.

But what significance has the afternoon’s excursion? Is it just a break in the ordinary routine life? Or has it some deeper meaning? Is it an end in itself? Or can it claim, rather to be a means to a great many ends? Let us examine it and see.

For three weeks the 4B boys had been studying local history. Classroom, reference library, art department and shop had been scenes of intensive activity. Near the end of October an article had appeared in a local newspaper. This mentioned the celebration at New Castle in honor of William Penn’s arrival. That William Penn had stopped elsewhere before arriving in Philadelphia, was news to the 4B boys. Research therefore began in earnest. This brought out the wealth of historic interest our city has for every American. “I wish we could go to see the Liberty Bell.” That and other similar wishes seemed to be the general desire.

Possibilities and plans were discussed, a request was written and sent to the office for approval. When this was accomplished, definite plans were formulated. The date was selected, and the itinerary decided. Since it would be impossible in the three hours allowed for such an excursion to visit every place which had been discussed, a map of the city was secured, and plans narrowed down to include only certain buildings within a convenient radius. The places already mentioned were the ones selected.

Meanwhile, class work continued with a will. The head of the art department was called in to give an illustrated talk on Ferris pictures, which show scenes from the early history of Philadelphia. One group of boys made a bead belt, copied from Penn’s famous one of wampum. Another group hunted up some pictures of the Welcome—Penn’s ship—and with the help of the manual arts department, made a fine model of it. Still another group found pictures of early cabins, and—again helped in the shops—put up a model of such a settler’s home.

Maps were made, both of “Penn’s green country town” and of his city as it stands today. Pictures forming a frieze depicting scenes from early Philadelphia, were drawn and colored for the classroom. Stories of famous Philadelphia were written and told in class. Careful study was made of contemporary costume, and large models were developed and painted, showing the fancy dress of both men and women, as well as the Quaker garb. Small wonder that interest in the proposed trip ran high!

So far the part of the teacher had been that of adviser. She had encouraged the interest aroused, and had assisted with the research work in the classroom, as the librarian was assisting in the reference library. She also worked with the various groups in planning and carrying out their activities. In planning for the excursion, however, the teacher had a very definite part. If such a trip is to run smoothly, a preliminary visit is an absolute necessity. If the greatest value is to be realized, too much should not be attempted at one time. The wise teacher, therefore, will check this carefully, and will aid the children in making a selection from the wealth of material at their disposal.

Frequently, when public buildings are visited, it is possible to secure the services of a guide. Often, however, it is far better for the teacher herself to act in this capacity. Very often the information given by these public guides is too mature for elementary school children. All this can be ascertained on the preliminary visit. Means and routes of transportation should be inspected, and checked at all points to insure the safety of the pupils.

A preview of the trip, given after such preparation, and followed by class discussion, showed the need for establishing certain standards of conduct, as well as for safety. Thus it was that we found an orderly group of young gentlemen embarking on the bus, and visiting the several buildings. Equipped with standards of conduct of their own making, and armed with intelligent questions, it was not strange that all along the route people should say to those in charge, “What a fine group of boys! Girard College should be proud of them.”
Girard is proud of her boys, and the boys are proud of the College which is to them both home and school. Proud, too, they are of their fine city, and its wealth of historic background, and glad that they are Americans.

In order that the trip might be of the greatest possible benefit to all, opportunity was given to share any information obtained. Certain immediate outcomes of such an excursion may be listed as follows: (1) Reports (Oral or written) (Discussion). (2) Dramatization. (3) Art work. (4) Note books. (5) Exhibition. (6) Assembly program (This may include all above). (7) Letter writing (Note of thanks, etc.).

Jack Finds A Way

"Jack Finds a Way" is the title of a motion picture which was made by the Dover, Ohio, High School. Significantly, not only Jack but the Dover High School, too, did quite a bit of way-finding into the production of films since this was our first school-produced motion picture.

The project was part of an experiment by the Bureau of Educational Research at Ohio State University and the Highway Education Board of Washington, D.C., to determine whether schools can produce educational films of good quality. The incentive for this project can be traced back a few years when a group of Ohio State University students in a Visual Education class reviewed all of the commercial safety productions which were available. It was their judgment that very few of the films had much value in terms of bringing about safe conduct and that schools themselves should be able to treat the topic more successfully by dealing with specific local needs.

The problem faced in the project was obviously not one of merely encouraging the production of more school-made films. Surveys show that several hundred such movies have already been made. It is evident, from a viewing of the schools' product, however, that very few such films are either carefully planned or well photographed. This situation is not difficult to understand. It is quite apparent that the average teacher-photographer has little knowledge of film production techniques nor has he any easily available means of improving his photographic skill. Conferences, summer classes, and magazine articles have undoubtedly done their share to improve the school-made film. In this project, however, not only was literature made available and discussion of filming problems made possible, but clinics were held where the participating group of teachers met with experts, discussed their filming problems as they arose, and actually took part in film production. In addition, the staff of the Bureau of Educational Research was made available for consultation on individual problems.

In addition to these outcomes, there are certain ultimate ends which may be attained. These are to be seen in the attitudes fostered and the social habits whose development is aided. (1) Following directions. (2) Consideration of others. (3) Observation of interesting details. (4) Appreciation of the worth while in History, Art, Tradition. (5) Ability to work together. (6) Desire to share information. (7) Realization of the need for certain desirable standards of conduct in a well organized community.

In accomplishing these ends, such an excursion is indeed, not just an end in itself, but a means to a great many ends.

A fully detailed account of one school's venture into film-production that should encourage others to go and do likewise.

CLYDE K. MILLER
Director of Visual Education
Public Schools, Dover, Ohio

Dover High School was one of ten schools, eight in Ohio and two in West Virginia which undertook with the help of the Bureau to produce a motion picture in the field of traffic safety. On account of the widespread interest which developed immediately throughout the Dover High School it was decided to make the film an entire school project, everyone who desired to assist. Three school groups which were particularly interested in the project began work immediately. The Visual Aids Operators Club, the school group responsible for handling upkeep and operation of all of the school's visual education equipment; the Photography Club, responsible for the school's unusual dark room setup embracing all students in the school interested in photography; the safety patrol, an AAA-sponsored group of students who were responsible for patrolling the streets near the school; all cooperated in the production of the picture.

The first step was the choice of the area in which the film was to be made. A survey was made of school and city officials, teachers, students, and parents to determine the particular safety subject which was of most vital interest to Dover High School. As the result the topic of bicycle riding could (1) bring about an awareness on the part of pupils of deficiencies in their safety behavior, and (2) provide practice in techniques for eliminating these errors.

Another survey revealed that 90 per cent of the school's bicycle riders were in the seventh, eighth, ninth, and tenth grades. Students in these grades were asked to list the mistakes made by bicycle riders. Errors in riding bicycles listed most frequently by students were:

1. Riding two or more on a bicycle.
2. Riding in center of street.
March, 1941

3. Racing on busy street.
4. Not stopping for street light or stop sign.
5. Riding two or more abreast.
6. Hanging on a truck or car.
7. Not paying attention to riding.
8. Zig zaging.
9. Daring the motorist by acting smart.
10. Cutting out in front of traffic.

A literature class worked the list into a rough draft of a scenario which a committee of faculty members polished into a final shooting script, broken down into scenes and shots with detailed descriptions of each portion of the action. After the script had been completed, a copy was sent to the Bureau of Educational Research at Ohio State University for their suggestions and approval before "shooting" began.

But before "shooting" could begin, arrangements for work at various locations had to be made. In order to avoid any possible future misunderstanding, the "stars" and "extras" alike were asked to sign a card giving the school permission to use them in the film and to use the resulting pictures freely and without restriction. Two student property men arranged for all small properties as well as large ones, such as trucks, ambulances, and even a large city fire engine. They also made arrangements for the special scenes to be shot at the City Hospital and in the mayor's office.

Scenes were not shot in sequence but in the order most convenient. We tried, whenever possible, to finish up at one time all action taking place at one location. This could not always be done, however. In addition, there was the problem of retakes. Both retakes and continued filming at a particular location required that all properties and costumes be duplicated exactly in subsequent shots.

The making of a large number of documentary still pictures helped to assure this accuracy. When retakes are necessary, the photographs would be consulted to reconstruct the scene exactly as it had been before. And although in amateur work the "rushes" of a day's shooting could not be made, the still pictures could be processed in the evening and be ready the next morning to give an idea of the action in the previous day's shooting. In addition to the documentary pictures of a scene, a careful day-to-day record was kept of costumes. In one case where it was necessary to use a bandage to indicate an accident, the bandage had to be checked each time for location and appearance. A broken right arm suddenly shifting to the left side would have been embarrassing, indeed!

Filming was done during school hours, making it necessary for special arrangements with the Attendance Office to excuse all students needed. An attendance boy kept a record of the "actors" needed and saw to it that the necessary persons were on hand for each scene. He was an important part of the production crew, working as a go-between for the faculty directors and Attendance Record Office. Actual camera work was done by a student crew. The writer, who is the director of the school's visual education department, was produc-

(Continued on page 130)
The Sound Film: A Challenge to Language Teachers

J. R. Palomo
Department of Romance Languages
Ohio State University, Columbus

For more than a decade now our students have been hearing radio broadcasts in foreign languages. Faster and cheaper transportation facilities have made it possible for more people to visit foreign countries. Students are demanding to be taught to speak the foreign tongue, or at least to understand it when they hear it. Especially is this true of Spanish. The present unrest in the Old World has turned, and the Good Neighbor policy of our Federal Government has focused the attention of our people upon Latin America.

The teaching of foreign languages cannot be justified solely on the grounds that such effort furnishes mental discipline and, incidentally, an appreciation of foreign cultures. Until now this effort has been based almost entirely upon the mastery of the printed word. It is time that we language teachers re-examine our methods and our objectives, or rather the objectives of our students. The exigencies of our times point to this necessity. We as teachers must try to meet the new demands upon our profession if we wish to keep in step with the times.

The tool which bears the greatest potentialities for teaching foreign languages is the sound film. Its possibilities in our field have not been explored to any great degree, although the sound film intended as an aid in foreign language instruction is here with us. The degree of its usefulness in our work will depend upon its suitability to our needs. It is for us teachers, who know the nature of these needs, to get together and determine what type and manner of films may be best suited for our purpose. It hardly needs be said that the educational film companies will be glad to hear what we have to say and, convinced of a market, they will be quick to supply it.

There are various types of language films now available. The film intended solely for entertainment does not altogether suit our purpose, primarily because its language is not geared to teaching needs. The travelog is not much better even though sometimes there is an attempt to control vocabulary. Moreover, travelogs aim to give, in a single reel, a wide variety of impressions of the foreign country, which necessitates the use of a broad vocabulary by the commentator and this very fact handicaps them as a medium for teaching language. Then, too, this accompanying monolog is often delivered too fast for the comprehension of beginning students.

Many travelogs are largely scenics, intended to satisfy the general public’s curiosity regarding foreign lands, and they try to give so wide a sampling of a country’s attractions that they lack cohesion and therefore are certain to prove boring to students who would have to experience several projections in order to benefit by the repetitions of the language sounds. Narration, especially when people are shown in the picture, is unnatural and lacks the dramatic quality of normal conversation. Also, since the language the student hears does not emanate naturally from what he sees in the film, there is not evoked in his mind the unified impression of scene and sound, and his mental effort is divided between the picture and the words of the invisible speaker. This division of his attention also tends to lessen his interest. Again, the projection time of most entertainment films averages eighty minutes, travelogs about twenty-five minutes. This is too long to permit of repetition within the usual class period.

The above evaluation suggests that, from the linguistic standpoint, the travelog and entertainment films have many inadequacies. This is not a denial of their value as purveyors of cultural information which is quite adequately absorbed by the student through his visual faculties. It is apparent, then, that much remains to be done to develop sound films which will meet the needs of the students of foreign languages. This is a challenge to us who teach languages to participate in the development of what can be made a powerful and useful tool for our profession.

It seems to me that in order to have the right kind of language films we must first prepare a series of lessons dealing with the everyday aspects of life in the foreign country. The first few lessons should employ conversation chiefly. Description should be added gradually and should be of such nature that it can be introduced with great naturalness by the interlocutors. It is essential that the vocabulary of these lessons should be controlled in both range and density. The contents of these lessons are then to be filmed, and the textbook and film together will form the basis of classroom work.

Having prepared the lessons to meet classroom requirements we must now consider the filming of the content. As has been stated above we must first have conversation instead of narration. This means that our language films must present people in meaningful situations against a native cultural.

A terse discussion of the kind of sound films needed for achieving best results in the teaching of foreign languages.

(Continued on page 126)
MOTION PICTURES—NOT FOR THEATRES

By ARTHUR EDWIN KROWS

A COMMITTEE appointed in 1925 by the Swiss Student Federation at Basel, to study the future of school films and to find expedient ways of realizing it, was also to lead to the League of Nations. So was the Belgian group, Les Amis du Cinéma Éducatif et Instructif, formed late in 1926 at Brussels.

It should be clear, of course, that there is no attempt in these pages to present the European non-theatrical story. It is hoped that these foreign references will accomplish is to orient the various leading national developments, and to refute chauvinistic notions that non-theatrical films are an exclusively American property. Many lesser evidences of progress overseas, such as the school experiments in Sweden and the adoption of films in the schools of Hungary, have not been touched upon at all, and, when the larger history is told upwards of a century hence, it may be that those will appear as more significant than anything accomplished educationally in the United States.

The Educators Have Ideas

It was very evident, in the early nineteen-twenties, that nobody knew much about visual education. But it was also evident, even in the absence of reliable tests, that that large part of it which embraced motion pictures was worthy of development. The film producer, confident in his mechanical mastery of his machine, and possessing effective experience with theatrical audiences, thought that he knew also what the pupils ought to have, but he himself had to learn that school spectators do not view the screen with the same mental attitude which characterizes those on amusement bent. And the teachers, while aware that these two audiences were different, could not yet tell precisely why, and had the further disadvantage of not knowing how to handle film.

Those educators, who ranked as recent pioneers in the visual education movement, were at pains to be articulate about the problem. They studied immediate symptoms and delivered shrewd hypotheses to their teaching colleagues by means of addresses at educational conventions and articles in professional magazines. In many instances the chief concern was to ticket the symptoms with names. This was natural enough, and was to be expected in any new development, but it was dangerous, too, for, while it is right and necessary to apply and define terms, terms imply pigeonholes, and pigeonholes exclude dialectic thinking and that delusion which mistakes an acquaintance with names for actual knowledge.

Frank N. Freeman, A. G. Balcom, F. Dean McChusky, Ernest L. Crandall and Joseph J. Weber were among the educators who rendered practical and thoughtful service here with miscellaneous writings in which theories were well mixed with facts. One of their major points, which was not heeded by producers at large but which should have commanded their sharp attention, was that presentation is not identical with learning. The simple fact of placing a mass of information on the screen before a class, does not by any means make certain that the pupils will therefore absorb it. A receptive attitude must be built up previously in the learner, and the information must be so presented that it is correspondingly understandable.

Here are unmistakable clues to the respective functions of teacher and producer, and, indeed, to a full working philosophy on the entire subject. Speaking of which recalls the important articles by George S. Painter, professor of philosophy at the New York State College for Teachers, starting in American Education for December, 1925, entitled "The Psychological Background of Visual Instruction." In that place was enunciated, clearly and distinctly, the caution that mere perception is not learning, either.

"Knowledge does not pass ready-made into the mind," said Professor Painter there. "To observe is not merely to have sensations and feelings; it is also to put things together and to interpret them, and appreciate to some extent what the sensations mean. Simply to stare at things does not give us knowledge of them; unless the mind reacts, judges, thinks, we are no whit wiser for our starring." Which should have been sufficient answer to the objection of many teachers that motion pictures could only induce laziness in pupils by making it easier to absorb information, and therefore could be of small value in stimulating thought, forming sound habits and eliciting to useful action, which, I understand, are among the main purposes of education.

It should be remarked in passing that others had thought along the same line as Painter. None had put it clearer or more pungently than Matilda Castro in Educational Screen, in the spring of 1922, when she observed that, "Pictures are focal points in the psychological approach, but are not substitutes for explanation or the imagination."

These facts were only those which applied with equal force to the school textbook, and, by the same token, they had been amply tested and fully accepted. What had to be worked out pedagogically about films was, first, what the medium of the screen could do better than any previously utilized teaching instrument, and next, how specific pictures might be made to serve efficiently within those limits—in short, to explore their advantages and to establish their control. But the ensuing tests were not all made in realization of this. Many of the little people, who approached the matter on their own small initiatives, did so to show how smart they were by "proving" that textbooks were obsolete. Others would screen any ordinary picture which came to hand, in a classroom, without preparation, as they might give a presentation to a monkey, to see what happened and with no precise expectation of what the result might be.

How simple such alleged "tests" might be is well illustrated by the much-publicized "experiment" conducted in March 1922, by the Chicago Board of Education to determine what sorts of picture should supplant the lurid movies commonly held to be juvenile favorites. A free program of supposedly educational standard was screened for four audiences of about 4,500 children each, the expectation being that such could be learned by measuring their applause. A geographic lesson on Egypt fared poorly, and so did scenes of a royal wedding, but a slapstick comedy reel, and a shot of a turtle withdrawing its head were uproariously received, and the whole conclusion seems to have been merely that it was all "confusing."

What were referred to as school theatrical films in these and other papers, were generally mere screenings of odd theatrical subjects where motion pictures had not been used before. They were expected to provide only an "enrichment" of the educational yield, and the circum-

The 25th installment recalls the pioneer work of fifteen or more years ago to explore advantages and set up a practical control of motion pictures in the school.
stances were not “controlled” in any sense which would have been acceptable after the start of the visual education movement. This, of course, was only because educators at large were not previously familiar with even the machinery of exhibition. As scientific procedures specialists in the field” Desideri de Saint to have those were days when the film was loved for its silence; all he had done in that instance was to succumb briefly to the human belief in things-as-they-are.

It will be recalled, of course, that the show of the visual education movement stirred many persons in charge of motion picture activities in schools, or otherwise vitally interested, to observe critically the reactions of classroom audiences. And, to preserve their findings, there were articles published in newspapers and magazines on successful uses of the cinematograph in teaching English to foreigners in Washington; on the film teaching of geography, as the admirable one written by Edith P. Parker for Visual Education, and on motion pictures in physics classes. A thoughtful comment prepared for the same magazine by Harvey B. Lemon.

David Gibbs, superintendent of schools at Meriden, Conn., reported “An Experiment as to Economy of Time in Instruction through the Use of Motion Pictures” in the pages of the Educational Screen; in the New York Times were described the reactions of school children when they saw themselves on the screen engaged in various projects. "Pathé News" cooperated with educators in tests for fourteen weeks at Junior High School No. 64, Manhattan, to see how films might be used in teaching current events, a study to be followed later by similar tests in the public schools of Newark and Boston. All of these are random illustrations of the period during this period to reduce a powerful new educational force to law and order.

To conduct tests on a satisfactory basis required more time and effort than the usual schoolman himself could afford to give. To obtain the requisite funds for finding such unpromisingly hard work was not easy. However, realizing that one could not ordinarily reach an objective without taking certain preliminary steps, Frank N. Freeman, of the University of Chicago, concentrated temporarily on those steps; and, in the spring of 1922, it was announced that the Commonwealth Fund of New York, an endowment established to assist research work in various lines, had granted him $10,000 for a twelve-month effort to determine the value of motion pictures in child education.

Frank N. Freeman was born in 1880, early removed to the United States, and rose rapidly in his chosen field of psychology. His first services in this department of knowledge were at Yale, where he had received his Ph. D. in 1908, but in 1916 he became an instructor at the University of Chicago, gaining the professorship of educational psychology there in 1920. Many side endeavors, represented in committee memberships and editorial connections, added to the ready proofs that he was an excellent person to conduct this important survey. He was sharply alert to the existing facts of the
visual movement, and had an intimate acquaintance with the current work of Harley Clarke's Society for Visual Education, carried on, as most of it was, by his students at the University of Chicago.

His clear idea of the needs was expressed in a formal statement which accompanied the announcement of the grant. He aimed, he said, to solve two main problems: first, what might be taught best by motion pictures, and, second, to find ways of improving the pictures themselves. "In the opinion," he declared, "that the film is not so far superior to other methods as to be substituted in a wholesale way, but that it has its definite field and is excellently adapted to certain things such as the presentation of natural objects, such as biological and nature study subjects, might be set apart, as "strictly educational," from those having entertainment values and therefore being in the nature of literature. Recognizing useful results to be obtained by presenting pictures of objects which the child had not previously seen, the giving of "vicarious experience" thereby, he showed at the same time a commendable caution, and was rather sure that motion pictures ultimately would not spread over the entire curriculum. And he saw needs to discover, in his survey, how much a child of given age and development could absorb from a film, how long a school film should be, how much should be explained by the picture captions and how much by the teacher. The conclusions reached by Professor Freeman, generally confirming his original hypotheses, were presented in 1924 in his book Visual Education, published by University of Chicago Press.

Newspapers were eager to anticipate Freeman's broad opinion, and, in February, 1924, just after he had edited his report on tests with school films in and around Chicago, they seized upon a garbled account of his speech at the latest N.E.A. Convention and made it appear that he had condemned educational pictures. He was quick to correct the story, proving readily enough that he actually had heartily approved school films, and had condemned only the exaggerated claims made on their behalf. Assisting Freeman in his Commonwealth survey, and collaborating on his report, were: F. D. and H. Y. McClusky, H. W. James, E. H. Reeder, A. P. Hollis, Caroline Hoefker, Edna Keith, E. C. Rolfe, Lena A. Shaw, D. E. Walker, Nina J. Beglinger and Jean A. Thomas.

New Resources

When Dr. Freeman spoke of improving the pictures themselves as a coordinated aim, he was also giving due consciousness to the fact that no tests could be final while the mechanical possibilities were still being developed. It was true that the move of the materials for school films had long existed, but many important advantages were out of reach of educators for divers practical reasons. Besides that, there might come a day when the films would acquire also speech and a third dimension. Anything needful might happen. Already the wizards of the lens were taking photographs in darkness. And there was Dr. William Draper Harkins, professor of physical chemistry at the University of Chicago, who, in July, 1924, thrilled his colleagues by showing them films of atomic collisions.

In truth, the magic of the film was being discovered almost daily through the forces of industrial competition and the discovery of new uses, such as the start of their employment by engineers for simultaneous meter readings. A more extended new application was in the motion and time studies which had grown out of the pioneer experiments of Frederick W. Taylor. For years Taylor, known as "the father of efficiency systems in America," had been using the still camera to study manual operations in factories, and it was only a step further to apply motion pictures to the same end. Frank B. Gilbreth did it first in 1912. John Patterson employed Jam Handy to make some for him in the N.C.R. plant at Dayton about 1919. Others carried on the work of Taylor, especially Lillian Moller Gilbreth and her husband, consulting engineers in scientific management. For these needs C. P. Watson's Novagrap was usually and perhaps always a satisfactory answer, but really high speed cameras held interest in other scientific laboratories where the "eight-times-faster-than-normal" was insufficient. Clever mechanisms were being devised in those places to take up and in these pictures to slow projection and study. The subjects were movements of air waves, bullet trajectories, speed of chemical reactions, and so forth. The names of Dr. Richet and J. W. Legg, the latter of the Westminster Company, were outstanding among those of such inventors.

The underworld of the ocean, so dramatically opened to popular view by the Williansons, attracted others, and one heard of films photographed with the Sisson deep sea diving machine, and of a new submarine camera developed by Dr. Paul Bartsch and Andrew Cramer, respectively curator of mollusks and instrument maker at the National Museum. New pioneers in aviation photography arose, none more remarkable than Lieutenant Frank W. Goddard, a flyer in the Army Air Service, and Edwin S. M. Bunke, and expert photographer who assisted him in devising means to take pictures of large areas secretly at night, through fog and from an altitude of more than 5,000 feet. The U. S. Navy, using airplanes in the summer of 1925, mapped almost 40,000 square miles of Alaska, where sitting photographers, working for the U. S. and Illinois Geological Surveys, completed an aerial picture of the City of Chicago on a scale of two and one-quarter inches to the mile. Although these were still photographs, the laying out many precedents for the improvement of cinematography on high.

Motion pictures in the air and generally in the field, where "traveling" or "follow" shots were especially necessary, were greatly improved by Carl Akeley's invention of a device for photographing wild animals. The well known sculptor and taxidermist here provided a camera recalling Etienne Marey's "photographic gun" of 1882, which was designed to register birds in flight and could literally be aimed at them and moved steadily in line with their progress. The Akeley camera remains today unexcelled for newsreel shots of athletic events.

About 1925 the public relations department of the New York Edison Company became interested in making an industrial film of New York City, relying largely of shots from the air, and engaged to produce it Hamilton Maxwell, an English aviator who had made some exceptionally beautiful still photographs of clouds. Maxwell supervised the work, much of which was done by A. B. Wetzel, a flying cameraman who was then well on his way to the reputation he has enjoyed since, of being an outstanding specialist in the line. The collection of views made on that occasion was excellent for the time and exceptionally complete as a presentation of Manhattan from the air.

Through the early twenties even the ordinary camera became conspicuous for its ability to do tricks. It was the result of a foreign influence. The technicians of Germany, in particular, were just beginning to discover the facility of the taking device, and they were covering deficiencies of story, acting and studio equipment with photographic stunts. Barren the notable work of such directors as F. W. Murnau and Ernst Lubitsch, many of the German films were mechanical exercises which the American film studios had toyed with, too, in earlier years, and put aside in the certainty that they distracted the spectators from the story. As soon as the audience begins thinking of the camera, the experienced makers producers know, the breaking of the emotional spell of the play. With that decision made, they worked to make the camera inconspicuous. But now, with all the superficial appearance of important novelty—of "breaking the shackles of art"—here were the Germans (and presently the Russians), with freak angles, "rooms," "follow shots," distorting leues, "montages."

(To be continued)
The Challenge of the Unsolved Problems

A REPORT

PAUL C. REED. President
Department of Visual Instruction

The title selected for this report implies an attitude of mind—an attitude which I believe is absolutely essential to successful promotion of the improvement of classroom instruction through the use of visual aids. To cause such improvement is a stated objective of the Department of Visual Instruction, and if we are to realize the satisfactions that come from successful achievement, we must cultivate essential attitudes. We need the attitude of healthy dissatisfaction with the present status of our progress; we should attempt to isolate and analyze the problems that are obstacles to more rapid progress; and we should be eager and ready to dig in and work energetically to find the solutions for the problems that confront us. These are the attitudes that must be ours—individually and collectively—if we are to demonstrate the sincerity of our interests in the promotion of improved instruction through the use of visual aids.

If one reviews the progress that has been made in the use of visual materials in classroom instruction in the past five, ten, twenty, or thirty years there can be no question but that progress has been made. A greater variety of visual aids are being used than at any previous time. Schools are better equipped; there are more full time workers in the visual field; there are more visual courses offered to teachers; there are more film libraries; circulation curves are pointing upward; membership in this Department is increasing; there is more advertising of visual materials and equipment in educational journals; more articles about visual materials are being written. Advances have been made, but have they been made rapidly enough? Has the progress been commensurate with the values we know are inherent in the intelligent use of visual materials for instruction? My answer is “no” and I hope yours is too. There may be some reasons for being satisfied, but there are more reasons for being dissatisfied. There are problems to be solved, and for the most part, they are the same kind of problems that have been troubling for years.

A few months ago there was reprinted in the Educational Screen a cartoon that had first been published in 1926. It was a cartoon analysis of the problems in the field of visual instruction. Depicted was a vicious circle with a school board member pointing an accusing finger at the school superintendent, and a teacher pointing to the board member, and so on, around the circle. The teacher, a salesman, the producer, and finally the visual expert. Each had an alibi for lack of progress.

A basic unsolved problem in 1926 and the basic unsolved problem today is the lack of adequate financial support for a sound program of visual instruction in all our schools. By adequate I mean a program that provides up-to-date equipment with which to use the visual materials that are available—projectors for lantern slides and film strip, projectors for motion pictures, cameras, and space for the filing and classification of flat pictures and three-dimensional materials. By adequate I mean a program that provides facilities for the use of visual materials—classrooms equipped with electric outlets, projection screens, and dark shades, and class schedules and school rules that permit field trips and excursions. I mean a program that provides for the regular borrowing, renting, and acquisition of visual aids—without complete reliance upon materials that are free. And such a program demands competent supervision and direction. These should be the minimum standards insisted upon by all those who are in charge of educational units whether they be individual schools, a city or county school system, or a statewide system of schools. There are few instances in our total educational structure where such adequate financial support is being given. In too many schools and school systems no attention at all is given to the systematic use of visual materials. In many others, what attention is given is the result of the enthusiasm of individuals who are working against almost overwhelming odds of unconcern, smugness, and traditional instructional patterns. While at least one city recognizes sufficient values from visual instruction to appropriate an annual budget for new materials and equipment of one dollar per pupil, there are other cities boasting loudly about their excellent schools, paying lip service to never methods, and appropriating as little as two cents per pupil per year.

Lack of adequate financial support is, I believe, visual instruction’s number one unsolved problem and it is a problem about which something must be done. There are facts enough to prove the values. More studies have been made than have been used. There are enough practical working situations to show what can be done when visual materials are used purposefully and intelligently. There are more good visual materials available than are being used. Technical advance has been tremendous and good equipment is available. The facts for visual instruction are available. The specific challenge is to get those facts across to education’s oficialdom that controls the budgets and directs the policies. That challenge can be answered by cooperative action.

Unsolved problem number two is the lack of understanding and skill of teachers in the most effective use of available visual materials. Any one who doubts that this is a problem is invited to visit a cross-section of teachers even in school systems that have highest reputations for their well organized visual programs. He will find all kinds of use made of excellent materials—form the use that is care-fully timed, well planned, skillfully presented, and meaningfully related to other learning activities, to the use that is nothing more than gross misuse where they have a movie show. Misuse does not occur only with the more expensive visual materials. I have been in classrooms where the least expensive materials—flat pictures cut from used magazines—have accumulated at random in a desk drawer or are pinned up helter-skelter about the classroom. Teachers need fundamental understanding of the necessity for visual experience in the learning process and they need to acquire skill in the use of the materials available to them so that instruction will be more meaningful.

Most of us recognize this problem and are attempting to do something about it. I think, however, that much of our effort has been expended in trying to deal with this problem too directly. We have tried to reach classroom teachers individually and for the most part we have relied too much upon the course in visual education. Other approaches are indicated, it seems to me, for the simple reason that there are so many teachers and so few of us. The specific challenge here is the need for enlisting our educational co-workers—these others who are also responsible for the improvement of instruction—the principals, supervisors, instructional directors, superintendents, and teachers college teachers. They must
believe as we do in the place and value of visual experience in learning and when they do our force will be increased a hundred-fold. We must recognize too that all teacher growth does not take place in formal courses. Teachers can and do learn in a great variety of ways from the daily contacts of their work—from magazine articles, helpful words from principals and supervisors, from the practices of their fellow teachers, and from conferences and meetings. A shifting emphasis should mark our approach to the problems of teacher training.

I would identify as our unsolved problem number three our failure in setting up administrative systems that will get visual materials to the hands of ultimate consumers efficiently and effectively. If visual materials are to serve their basic function in the learning process, they must be in the classroom ready for use when they are needed and they must remain until the day they served their purpose. Some schools are served in this way—those schools fortunate enough to have a staff member who will work tirelessly on the problem, and those schools in city systems with well organized visual services. I have said "work tirelessly" because the distributional system that has grown up is not a simple one, and the school must seek materials from a dozen different agencies if it is to have a well-rounded visual program. Speaking of the film library services alone there is little evidence of cooperative planning to serve best instructional interests. Service areas are not well defined; territories are overlapping; service rates and procedures are not uniform; and few have assumed any responsibility in guiding teachers in the most effective use of the visual materials they distribute. I recognize that plausible explanations can be given for the conditions that exist. But the distribution system is the key to the whole problem. It has been a real and important one to every sincere worker in the visual field until all schools have abundant and various materials available readily when they need them. The specific challenge here is to provide better visual service for more schools. We must improve our administrative and distributional machinery and focus upon the ultimate consumer. We must demonstrate through our practice that agencies set up to service the schools really are "service" agencies. Their success should be measured only in terms of how well they serve the educational needs of boys and girls.

As one attempts to identify these problems related to visual instruction, he is forcibly impressed with their interrelation. Adequate financial support may be a base problem, but its solution is somewhat dependent upon intelligent teacher use of materials provided. Teacher use is dependent upon availability of materials. Interrelated with all of these problems is the variety and kind of visual materials that are being produced. This suggests the fourth major unsolved problem of the visual field. There has not yet been brought about a continuous flow of the most needed, high quality visual materials from the producers. It is believed educators are far more responsible for this being a problem than are the producers. Adequate markets have not been provided even for the superior visual materials of unquestioned educational merit. We cannot blame the producers when we will not accept and use their best products in sufficient quantity to make their production economically practical. That is our problem to solve, not the producer's. In addition to the actual purchase and use of available materials perhaps the greatest service that we could render the producers would be for us to find some area of agreement about the materials we want and let them know what the demands are. There is a specific challenge, and satisfactory response to it would, I believe, do more than anything else to guarantee a continuous flow of the most educationally valuable materials. Can we determine our wants and make them known?

Education has an organization which could and should direct its energies vigorously toward the solution of these unsolved problems in the field of visual instruction. According to the constitution of the Department of Visual Instruction of the National Education Association "The object of this Department shall be to promote the improvement of classroom instruction through the effective use of visual and other sensory aids; to serve as a clearing house of information regarding the sources, values, and guiding principles in the use of visual materials, as determined by research; and to cooperate with other domestic and foreign agencies with similar interest and purposes." If the Department of Visual Instruction is to serve the purposes for which it was organized and now exists, it cannot ignore these fundamental unsolved problems in the field of visual instruction. If the Department is to provide the leadership and energy required to solve these problems, its members must at the same time also give some attention to unsolved problems of its own organization.

For nearly twenty years the Department of Visual Instruction has been the one continuing organization serving as a rallying point for all who were interested in the use of visual aids. The growth in membership, the specific accomplishments, and the record of achievement of this organization have not been phenomenal, but it is an organization that has survived the ordeals of infancy and adolescence. Now as it approaches maturity, if it can make the adjustments demanded by its adult status, it can make genuine contributions to the educational world.

The Department needs most of all a planned program of action. It needs to recognize the problems impeding progress in the visual field and to devise a realistic and definite program for their solution that can call all of its members into cooperative action.

The Department needs more members. Examination of the membership list discloses that many well known visual leaders are not members. The Department needs them. It needs more members because the kind of program that needs to be planned will demand participation by larger numbers. The Department needs the greater financial stability that will result from increased membership. A particularly significant development in relation to potential future membership and the stability of the Department is the proposed Zonal Plan which calls for regional organizations within the Department. Such a plan offers the opportunity for developing a program more closely related to the interests of its members and for bringing members more actively into the affairs of the Department. It holds out the promise of greater membership and raises new organizational and leadership problems. The amendments providing for the zonal plan were introduced at the regular meeting last July and will be voted upon finally at the meeting in Boston next July.

The Department needs the stability that can be given to it by an executive secretary, employed at least part time by the Department, and a permanent national office. An executive secretary would carry on the routine business affairs of the Department and eliminate the inefficiencies resulting from a complete shift in administration each year. The zonal plan will make this need greater and may make its fulfillment possible.

Finally, the Department deserves greater respectability among national educational organizations. It deserves this because of the fundamental values of visual materials in the learning process. It deserves this because of the great potential contributions of visual materials to the improvement of classroom instruction. It deserves greater respectability because of the cause it seeks to promote. The Department can gain greater respectability in terms of the kind of program of action it develops and its degree of success in carrying it through. It can achieve its rightful place among educational organizations if it can strengthen its structure from within. It can make lasting contributions to American education through accepting the challenge of the unsolved problems and by actually bringing about a higher level of instructional achievement through the use of visual aids.
Education in Defense of Democracy

RALPH W. TYLER

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THE PRESENT emergency has glaringly revealed apparent national weaknesses. The devotion of many other people to the ideals and forms of democracy is frequently questioned. Our physical stamina and productive capacity seem much lower than we had believed. The courage and tranquillity which spring from confidence in our national accomplishments seem strangely lacking.

The revelation of such apparent weaknesses leads to several typical reactions. An increasing pressure is likely to be placed upon the schools to set aside a special time for teaching patriotism or to compel loyalty oaths from teachers and students. A growing demand may be made for a return to the fundamentals of education which are commonly interpreted as the "Three R's," rigid discipline, and difficult tasks for school children. A great upsurge in emphasis on vocational and physical education may be observed and finally many groups will plead for a reduction in expenditures in education on the ground that defense requires first claim on our resources. In this situation we must not forget that such weaknesses in our national life can be remedied only through educational processes.

Loyalty to democracy is not acquired through compulsory loyalty oaths or through special periods set aside for teaching the Constitution. Loyalty develops through an increasing clarification and experiencing of democratic values which must permeate the school within and without the classroom. The improvement of the physical stamina and the productive capacity of the people require a program of health and physical education which is an integral part of a comprehensive program of general education. Confidence in the achievements of democracy grow from a broader and deeper understanding of our national development and our national accomplishment. That is to say, the elimination of these weaknesses places a greater responsibility upon American education than we have commonly recognized in the past. The effective fulfillment of this responsibility requires the devotion of more resources and efforts to education and the building of a better comprehensive program rather than the addition of certain few phases to the work of the schools. Continuing the type of educational job which has been done in the past twenty years will not make the contribution to our country which the schools are capable of making. The school is now accepting a responsibility for a wider range of educational objectives. The development of the good citizens involves not only the acquisition of information and of skills but also the ability to understand significant features of our complex life and the ability to think clearly through the many problems which continually confront us.

The school is forced to accept increasing responsibility for such objectives as the development of democratic social attitudes, of fundamental work habits, of wide and mature interests, of clear and deeply cherished values. Unless attention is given to all of these aspects of effective citizenship, the educational program is not likely to be well rounded and effective.

Furthermore, the acceptance of such a wide range of educational responsibilities demands educational learning materials in order to attain these objectives adequately. It seems to me, therefore, that we face two major tasks—one to clarify our purposes in a broad and comprehensive fashion and in the light of our increasing concern for democracy and two, to develop more varied curriculum materials appropriate for each of these educational purposes.

In the clarification of our educational purposes, we probably need to recognize the various aspects of development which we hope will result from our educational efforts. We shall need to recognize that young people are developing sets of values and that our responsibility is to help them in clarifying their values, in making them increasingly socially rather than selfish, and learning to cherish them more deeply because they apprehend their significance. We shall recognize also the significance of helping young people to identify and to analyze important personal and social problems which prevent the fruition of these democratic values in their own lives and in our social system. We shall also want to help them acquire certain important facts, concepts, and generalizations which enable them to understand the nature of these problems and possible methods of solution. We shall try to help them develop various sorts of skills needed in effective thought and action, skills both intellectual and manual. We shall want to help them develop more effective adjustment to themselves and to others so that they may think and act with serenity and confidence and not be hampered by fear and conflict. These are illustrations of the kind of formulation which any school faculty needs to make in indicating more clearly just what it is trying to do in educating in defense of democracy.

Furthermore, this clarification of our educational purposes should make us increasingly conscious of the relation of these various phases of development.

Values are related to interests, to attitudes, to information, and to ways of thinking. In similar fashion, other aspects are interrelated. If we attempt to develop each of these things in isolation, we do not achieve an effective citizen. For example, if attitudes are developed in a vacuum without reference to pertinent facts, and to careful and critical thinking, students will at the mercy of the next propagandist who plays upon their emotions for his own purposes. Furthermore, thinking cannot be effectively carried on without understanding all those facts and ideas which form the counters of their thinking. Otherwise, a paucity of formal logic alone students believe that they are thinking through a problem when they are merely manipulating words, the meaning of which and the truth of which they do not know. These two illustrations may be sufficient to indicate the importance of stating clearly the various objectives which we must attain in developing a good citizen and also the importance of the relation of these objectives one to another.

The second problem, that of enlarging our repertoire of learning experiences in order to accomplish this wider range of educational objectives is closely related to the first. To obtain materials that may contribute to these various objectives demands the utilization of many types of learning media. We will need to use not only reading materials and firsthand experiences but also auditory and visual materials. Furthermore, the range of objectives will demand visual materials of many different sorts. Materials helpful in apprehending important facts will probably differ in their nature from those which help to identify problems which should be of concern to students. Materials useful in seeing what values are at stake in various types of human association will differ from those which are useful in clarifying scientific principles. Materials which help to analyze the essential features of a problem will differ from those which help to arouse wider and more worthwhile interests. Hence, visual materials must be selected from the point of view of the several purposes upon which the curriculum is focused.

Furthermore, the particular contributions of visual instruction in connection with these various objectives need to be identified and their educationalized upon. The chief defects of verbal instruction are those common in all forms of symbolism. Students may use words without having had those concrete experiences which help to give words meaning. They may think that they understand ideas because they have heard the words. The expression of a verbal reaction may take the place of direct and helpful action. In overcoming these defects of verbal instruction, visual materials may have their greatest value. Visual materials may help students to see problems of which they
were not previously aware. Visual materials may help to give a concreteness to situations and certain meanings to facts which would otherwise escape them. Visual materials may provide a detailed analysis of a complex process difficult to apprehend verbally. Visual materials can combine in one short time or space sequence things which are separated widely in time and space and may thus promote an apprehension of relations otherwise difficult to grasp. It is in these respects particularly that the curriculum director looks to the field of visual instruction for assistance.

From the nature of the present emphasis upon education and national defense, it seems likely that the present crisis will stimulate the development and use of visual materials in five major areas:

1. Those useful in occupational orientation and vocational education.
2. Those which provide facts about the defense program and other activities of the country in attempting to meet the national crisis.
3. Those which help to clarify the fundamental values cherished in a democratic society such as the respect for individuals as persons regardless of their nationality, race, religion, or economic status; encouragement of variability among persons; the settlement of issues through free discussion and group decision; the encouragement of wider social participation on the part of every individual; faith in intelligence as a means of solving problems.
4. Those which help to build confidence in the effectiveness of a democratic form of government through a better understanding of the achievement of democracies.
5. Those which help to build understanding of Latin America.

The present crisis provides an ideal opportunity to show the educational effectiveness of visual materials when properly combined with other helpful types of learning experiences.

The Wartime Use of Motion Pictures in Britain

RICHARD R. FORD
British Library of Information

First, I propose to survey what has actually happened in the British motion picture business since war began with emphasis on the production and exhibition of short documentary-type films. Afterwards, I shall offer some comments on the purpose of the wartime short films and the trend of policy affecting their subject matter, length and distribution.

As you know, peacetime documentary film production in Britain maintained a level of quality that was recognized the world over. These prewar films were mainly sponsored by commercial and industrial interests, local Governments and State Departments. Many of them are well known to you—North Sea, The Londoners, Five Faces of Malaya, or Housing Problems, for instance. When war was declared in September, 1939, nearly all these sponsors and benefactors drew in their horns, and the various short film production units were faced with the prospect of extinction. But, before long, a light dawned in the shape of the Films Division of the Ministry of Information—a brand new Government Department. It was many months, however, before that light burnt with a steady flame. But, after a good deal of trial and error, the Division has emerged with flying colors and an unparalleled amount of production to its credit.

One of Britain's short film units—the G.P.O., or General Post Office—had long been established under a government Department. This unit, which grew out of John Grierson’s Empire Marketing Scheme over ten years ago, has fully maintained its very high standards. It was responsible, in the early months of the war for The First Days, Squadron 902, which deals with balloon barrage, and Spring Offensive, which explained the State aided scheme for increasing land under cultivation. Recently, you may have seen London Can Take It, and Christmas Under Fire, with those sincere commentaries by Quentin Reynolds—both made by the G.P.O. Unit. The early months also saw The Lion Has Wings, feature film made by Korda, assisted by documentary producers, Some of the short films produced at that time now seem curiously dated—films made with English and French commentaries, three-minute films warning the public against gossiping, and a film showing London children evacuated to a seaside resort that is now in the front firing line. As with other aspects of the war effort, it was not until after Dunkirk that the true role of films in wartime became apparent. Since that time, production of shorts sponsored by the Government has been phenomenal, work being assigned to half a dozen units as well as the G.P.O., as well as the commercial film studios and newsreels; and it is worth mentioning that whereas in the early months much of the work went to the studios, the tendency lately has been to give more and more to the documentary units.

First, let us take the short films made for showing in the movie theatres. This is the so-called five-minute film scheme, under which the Ministry of Information has been issuing a single reel free to every theatre, at the rate of one per week, ever since June, 1940. ... no small achievement. It is difficult to generalize about their subjects, as they cover almost the whole field of war effort. Most are intended to convey specific advice, presented in an entertaining way. The subjects include saving instead of spending, wartime diet, salvaging aluminum utensils, dealing with parachute troops, gossip, Home Guard activities, and a warning against staring up at aerial dogfights. London Can Take It was also one of the series; so was Mr. J. B. Priestley's exhortation, Britain on Guard. War and Order, showed the wartime duties of the police.

The non-theatrical story is more remarkable. In the summer of 1940 the Government made available a small sum (Courtesy English Speaking Union, Chicago) British youngsters being evacuated from cities.
of money to finance a scheme for showing 16mm films in places where they could reach a public beyond the public movie theatres. The scheme provides about 50 mobile projectors serving mainly rural areas, and loan of a further 100 projectors to public libraries and similar meeting places, and the creation of a Central Film Library to supply prints free of cost. The films for this scheme come from three sources—industrial, such as the Gas Industry's films on wartime cooking; the Government's five minute film scheme that I have just described and finally, films specially made for non-theatrical showing. Twenty-one new films were commissioned, of which sev-

eventeen were placed with documentary units and four with the four newscast companies. These films for 16mm exhibition provide, in the main, information about what is going on—to use a broad phrase. Britain in wartime suffers from certain obvious disabilities: travel is discouraged, letters delayed, and parts of the country are isolated for military or other reasons. These non-theatrical films, with their brief descriptions of coastal defense, factory life, the meaning of Reserved Occupations, State maternity services, schools in wartime, industrial health, army medical services and so on, help to bridge the gaps of loneliness when families are divided.

children evacuated, brothers on Service, sisters in distant factories, and the old people just carrying on. The service comprised 30 traveling units reaching 135,000 weekly in factories and public libraries. By mid-winter, these 16mm shows reached a total of 700 per week, with an average audience of 150 for each.

So much, in brief, for the two main groups of short films sponsored through the Ministry of Information. Examples of both groups are now available in this country. They were not made, as you know, to influence opinion here: but we brought over to show to those who are interested in the public psychology of a country at war, how one phase of Government publicity is being conducted.

Long before the Ministry of Information was contemplated there existed to improve and maintain cultural relations between Britain and other countries, the British Council, whose film department has recently made 32 wartime short films for overseas distribution. The character of such films is of course entirely different from those sponsored by the Ministry of Information for home consumption. Their purpose is to present a picture of Britain preserving and maintaining its cultural standards in wartime—films, for instance, about Oxford today, about the Green Belt around London, about craftsmanship in pottery, about the resourceful inventors of Scotland, about fisheries and about Britain's reply to the cultural challenge of Germany. The British Council has also produced an all diagram film showing the history of the countries bordering the Atlantic Ocean, to be followed by similar films about the Pacific and Indian Oceans.

At the risk of mentioning too many titles, I must add a word for those who appreciate "documentary technique"—for want of a better phrase. In both Spring Offensive, and Men of Africa—the latter is the first film to examine the problems of colonial administration in Africa—you will find examples equal to the best. And keep an eye open for Men of the Lightship which reconstitutes the attack of a German bomber on an undefended lightship, and the fate of the crew. It will be released soon, I expect. These are not the only examples. The documentary training of the British short film makers is evident again and again, even in the most hurried jobs. You will perceive, when you see these films, an attitude towards the subject, an appreciation of the other man's point of view and an expression of belief in democratic ideals. For over ten years these film makers have worked in a tradition recognizing that the film, by giving the dramatic significance of everyday life and work, could become a great instrument of democratic education. Thanks to their outstanding skill, the documentary has had an influence out of all proportion to its cost of production.

In these days the documentary producers have new difficulties—complica-
tions of transport, the difficulty of finding hotel space in overcrowded towns in safe areas, the delays of air raids in London. Here are a few sentences in a recent letter from one of them—

"The documentary movement in England is dealing with a greater amount of work than at any time since it came into existence in 1929. The Films Division has become progressively more enlightened. It is pretty certain that they will commission a large number of short films this year—about 100, perhaps. Their length will range between the 5-minute films, which is well liked by the public and the fairly expensive prestige three-reeler. In addition to the films ordered by the Ministry, documentary units are also engaged on films for the British Council and the War Office, while the oil industry's non-theatrical schemes continue, and the gas industry may re-enter the field this year. The War Office has recently set up its own film unit. Generally speaking, I think there is a tendency for our current and forthcoming productions to have not merely more enlightened subject matter, but more enlightened treatment of the subjects. Our general impression is that movie theatres are doing better than they were a couple of months ago. The London ones close at 7 in the evening. The Chaplin film is an enormous success and is still running at three of the largest theatres in London and also in many big provincial cities."

Less than 10% of Britain's cinemas are closed, and except in the West End of London, they are not doing badly. Nor does bombing seriously interfere. A cinema in the suburbs is smashed one night, but this does not prevent the next door theatre being full the next night. The morning after the worst raid on Manchester, which caused extensive damage, my mother and father—both over 60—were waiting in the line to see The Great Dictator, which they thoroughly enjoyed, being quite undismayed by an alert during the performance. You may have heard the story of the two London boys, who were evacuated to a rural school. Becoming somewhat difficult to manage the headmaster permitted them to go by bus to the nearest town to see the movies. Soon after they went, the town had a daylight raid, and the headmaster feared the worst, especially when there was no sign of them for supper. He was about to go and make enquiries when they turned up, looking well and very hungry. When asked what had happened, the elder said, "Oh, Sir, we were bombed out of the Rialto so we went to Plaza."

I believe, as I have said, that the part of Britain's home information service dealing with movies is doing a remarkable piece of work. The results in terms of films made and distributed are impressive to say the least, and, in fact, unique in motion picture history. The reasons are several and I would like to suggest one or two that may interest those who are concerned directly or indirectly with Government film work here. First, smooth, intelligent, fairly free and flexible relations between Government Servants in charge of administration and the short film producers, by which the Ministry exercises control over subject and theme but delegates the creative treatment to creative people. Secondly, an absence of conflict about costing and profits, with an understanding that every film will achieve all it can within its budget. (Budgets for British shorts are surprisingly small.) Thirdly, the public is the judge: it likes Ministry films when they are good, and raises Cain when they are poor. Incidentally, there is evidence that the public likes Government films about ordinary people and dislikes films about socialites playing their part between cocktails.

The Latest Survey of College and High School Motion Picture Equipment

NATHAN D. GOLDEN
Chief, Motion Picture Division, Bureau of Foreign and Domestic Commerce

IN MAY, 1940, at the request of interested manufacturers of motion picture equipment, distributors and producers of industrial and educational motion pictures, and at their expense, the Motion Picture Division of the Bureau of Foreign and Domestic Commerce undertook a survey that would indicate the schools in the United States which have motion-picture facilities, and those which do not but which might be interested in acquiring such equipment. Because of the magnitude of the undertaking, the survey was broken down into two parts, Part I to cover high schools and colleges in the United States, and Part II to cover elementary schools. (Only Part I is discussed here.)

On May 15, 1940, there were mailed to 28,277 public, private and parochial high schools and colleges in the United States and its Territorial Possessions, a simple postcard questionnaire. By July 30, 1940, only 9,855 replies had been received. Feeling that the mailing was made at a time when schools were finishing their year, and that a number of replies were overlooked in the rush of graduation and vacation periods, the Division prepared a second mailing to those schools that had failed to report. This second mailing was released on September 20, 1940, and resulted in the receipt of 7,609 additional replies, making a grand total of 17,500 replies from a mailing of 28,277 questionnaire cards. Of this mailing it was found that 283 cards were returned representing elementary grade schools and 161 cards were returned with post-office notifications indicating that the schools were either closed or consolidated with other schools. Eliminating these 444 cards gives us a net of 27,833 questionnaire cards to consider in this survey. With 17,500 replies received, this represents a 62.79 percent return of the net questionnaire cards being considered.

It is interesting to note that of the 1,725 colleges contacted, 1,424 or over 82.6 percent made reply. Of the 2,935 questionnaire cards mailed to private and parochial high schools, 2,341 made replies, or a 79.8 return. The return from 14,725 public high schools shows
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62.3 percent replies out of the total of 28,617.

Present and Prospective Usefulness of Data

Compilation of returns commenced in October 1946. Because of the short time which elapsed in making this survey available to interested groups, it is felt that the data are timely and should be useful both to distributors of educational films and to equipment manufacturers who are seeking outlets for their products.

Since the inception of this survey, the Government had entered upon its Defense Program on a large scale. This survey therefore should be helpful to Defense officials interested in the utilization of the motion picture as an instrument of education for specialized groups and workers. Through the information presented it is possible to ascertain immediately which high schools and colleges are equipped to show motion pictures in the furtherance of such Defense educational programs as may develop.

Cultural and Utilitarian Functions of Films

Many important industrial organizations have sponsored educational films and furnished free distribution of prints to schools. Some of these companies have had a sufficiently broad vision to eliminate direct advertising and selling elements from their films. In such cases their efforts to reach the educational field have been notably successful. Others have included a burdensome amount of advertising or blatant sales "plugs," and have found that, to them, most educational channels of distribution have been closed.

Industry, in part, has realized the value of the film in creating good will that finds expression in the years to come. They are willing to invest in futures, and so they use the classroom, not to tell of the superiorities of a particular product, but to give a broad view of a process or an industry and to instill in the audience an appreciation of the part played by an industry in the march of American progress. Their contribution is a patriotic one, and they deserve the wide acceptance which has been accorded their films.

Any keen observer of the current scene perceives at once the state of flux, the clashes, the swift changes and readjustments in political and social ideas in many regions of the world. On one point our own country stands absolutely firm and undeviating—that point being its devotion to the principles and methods of democracy. But we all realize that if democracy is to be enabled to stand its ground during the coming years, and to develop its inherent strength and magnificence of purpose, it must be based on an adequately informed public opinion. It must rest solidly on knowledge—the possession of all the essential facts about modern life. The citizens of a democratic republic must know, and be able to appraise, all the things that influence his daily round of life—all the things that contribute to his convenience, security, power, and ease of movement—all the things that help to shape the vigorous social currents that swirl around his head.

This means that he must know the industries of his native land. And such knowledge can be imparted most profitably and advantageously in his youthful, formative years, when he is in the classroom, intent on education. A new, dynamic, modern realistic spirit is making itself increasingly felt in American education. We long ago came to understand that education was not merely a matter of ancient history, lyric or epic poetry, conjugations or foreign verbs, and abstruse philosophic concepts. And today we know that education should not (on the other hand) be a matter of exclusive concentration on some narrow practical specialty, professional or technological. True education today must embrace a broad, clear comprehension of all the major factors that go to make up modern life.

Outstanding among those factors is American industry, in all its aspects. If the young American of today is to play a proper part in the teeming, splendid life of our Nation, he must know about machinery, factories, manufacturing processes, business management, consumer requirements, inventive ingenuity, maintenance of quality, stylization of merchandise and many phases of mass production and of individual craftsmanship. Only by familiarizing himself with such vital elements in the everyday working of our national economy can he render himself competent to confront, and pass upon, the major problems of the present day and of the years to come. Thus, without the slightest doubt, a knowledge of American industry should play a highly important role in the schooling of our youth. It must form a part of any rational training for good citizenship.

The use of motion pictures in education has developed during the past four years into a potent instrumentality for a great number of progressive educators in the American school system. Observations made in various centers throughout the country have proved conclusively that, where motion pictures have been used in the presentation of educational material, a greater knowledge of the subject has been gained by students and the vital factor of retention has been heightened and strengthened.

It is generally acknowledged that the motion picture is unmatched in its portrayal of scientific experiments, biological and botanical processes, in graphic, detailed and illuminating manner. In subjects such as geography, it conveys actual reality with incomparable exactness. Re-creations of history and exemplifications of civic themes by means of motion-picture films arouse and maintain the student's interest in these vital subjects. In still other fields of study, the great usefulness of the motion picture has also been amply demonstrated.

The inherent appeal of the medium—arising from youth's instinctive love of pictures and the reaction normally associated with entertainment films—serves almost invariably to intensify and " vivify" the reception of knowledge through the motion picture, rendering the knowledge thus imparted an integral, dynamic part of the student's mental and emotional make-up. Consequently, it seems highly essential that dependable facts should be made public showing the extent to which motion-picture equipment is available in American educational institutions at the present time.

Comparison with Previous Survey

Four years ago a study was made by
the American Council on Education and the U. S. Office of Education, resulting in the publication of a National Visual Education Directory which covered 9,000 school systems in urban areas in the United States. It was found in 1936 that 6,074 16-mm, silent motion-picture projectors and 458 16-mm. sound projectors were available, while only 3,290 35-mm. silent motion-picture projectors and 335 sound projectors were in use. Also, 2,733 film-strip projectors were available.

Since this survey was based upon the number of school systems rather than upon the individual schools, it is difficult to make comparison with the present study. The above figures are cited merely for the purpose of any comparison that the reader may desire to formulate with respect to the progress and use of motion pictures in American school systems.

Salient and Significant Facts Here Developed

The present survey covers 12,443 16-mm. motion-picture projectors and 2,447 35-mm. motion-picture projectors which were reported as owned by colleges and high schools in the United States and its possessions. Of the 12,443 16-mm. projectors, 6,059 are silent and 6,384 are equipped for sound. Of the 2,447 35-mm. projectors, 1,624 are silent and 823 are sound. Of the total number of projectors in the United States and its possessions reported in the replies to our questionnaire, 12,411 16-mm. projectors and 2,426 35-mm. projectors are in colleges and high schools located in Continental United States. Of the 12,411 16-mm. projectors, 6,037 are silent and 6,374 sound. The 2,426 35-mm. projectors consist of 1,612 silent and 814 sound machines.

The present survey shows that 4,182 silent 35-mm. film-strip projectors and 143 35-mm. sound film-strip projectors are in use in the colleges and high schools of Continental United States and 22 silent and 6 sound projectors in its Territories and possessions.

According to the data presented, 9,690 high schools and colleges failed to reply to the questionnaire. It is reasonable to assume that many of these have motion-picture projectors. It may be reasonable to estimate that from 15 to 20 percent of these failing to reply have at least one 16-mm. projector.

Of interest also is the fact that 7,526 schools state they have no permanent motion-picture equipment of any type. Certain of these, however, indicate that they "can borrow" or "rent" as many as 5,578 16-mm motion picture projectors and 1,070 35-mm. projectors either from other schools or from commercial distributors of such equipment. This group presents a potential market for those engaged in the distribution of educational films and equipment.

Criteria for Selecting Motion Picture Projection Equipment

JOHN A. MAURER
Chairman, Committee on Non-Theatrical Equipment
Society of Motion Picture Engineers

This is a preliminary report on what is now the principal activity of the Non-Theatrical Equipment Committee of the Society of Motion Picture Engineers. This committee is made up of sixteen members, all with extensive professional experience in 16mm. motion picture and sound reproducing equipment. Since the early part of last year, at the request of the Committee on Scientific Aids to Learning, of the National Research Council, our Committee has devoted most of its time to the working out of a set of performance specifications, or criteria, intended to serve as a guide in the selection of 16mm. projection equipment for use in schools.

Early in the course of this work the Committee decided that its report ought to consist of two parts, first, a set of definite technical specifications, which, by their very nature, can only be made use of by a fully equipped testing laboratory, and, second, an interpretation of these specifications in less technical language, suitable for those who will be called upon to make decisions on the basis of the reports of a testing laboratory, or, perhaps, only on the basis of such observations as can be made without accurate testing facilities. The Committee's main project will require several more months to complete it. The main principles on which the report is to be based, however, have furnished an outline for the present paper. While this paper thus embodies much of the Committee's work, it has unfortunately not been possible to submit this paper for approval by the Committee and therefore the writer should be held solely accountable for any errors it may contain.

It is important to establish our basic approach to the problem at the outset. The title of this paper is not "Criteria for Selecting Motion Picture Projectors". It is "Criteria for Selecting Motion Picture Projection Equipment." What is needed is proper coordination of projector, screen, and sound equipment with the size, shape, seating arrangement, and acoustics of the room. In a completely scientific and logical selection of equipment, the projector itself is the last item to be chosen.

Our first, and fundamental, criterion for projection can best be stated in terms of the audience. Especially in a schoolroom, every spectator is entitled to a good view of the picture. This means that he must be able to view it from a suitable distance, neither too near nor too far. It also means that if it is necessary for him to view the picture at an angle, this angle must not be so great as to produce objectionable distortion. Furthermore, it means that the picture must be bright enough, but not too bright, and that there must not be any condition that produces eye strain, such as glare from a noticeable "hot spot" on the screen.

For 16mm. projection, the distance from the screen to the farthest row of seats should not be more than six times the width of the screen, but at the same time the distance from the screen to the nearest seats should not be less than twice the width of the screen. In order to satisfy both these conditions at the same time, the screen must usually be placed on the front wall of a classroom.

If the projector is equipped with the usual inch projection lens, it will fill the screen when its focal length is one-third the screen width. Therefore the stand for the projector should usually be placed about five-sixths as far from the screen as the farthest row of seats. It is better to place it even with the farthest row of seats provided the nearest row of seats is not too close for the size of the resulting picture.

No one in the audience should be required to view the picture from an angle of more than thirty degrees. Stated differently, this means that no row of seats should be longer than its distance from the screen. In order to satisfy this condition in schoolrooms that are square rather than oblong, the pupils who normally occupy the front corners of the seating space should be moved closer to the center line of the room when pictures are to be projected.

Screens are of several types. Some have smooth matte white surfaces, and reflect the light almost equally in all directions. Such a screen provides as bright a picture for those at the sides of the room as for the center. A second type is the glass bead screen, which is directional in its reflection. It provides a brighter picture than the first type within a viewing angle of about twenty degrees, but at an angle of thirty degrees the picture is not as bright as it is with the matte surfaced screen. Still other types have metal coated surfaces. They are still more directional than beaded screens.

In any room that is square or nearly square, only the uniformly reflecting, or matte surface type of screen should be used. When the room is oblong enough that most of the rows of seats are not longer than two-thirds of their distance from the screen (corresponding to a maximum viewing angle of twenty degrees), the beaded type of screen should be chosen. Matte coated screens should not be used at all for classroom or auditorium projection of motion pictures.

From the considerations that have been given it is a simple matter to determine the proper size and type of screen for a given room. If, then, we know what
screen brightness is necessary for good seeing, we are in a position to calculate how much light the projector must deliver to the screen. The recommendation that has been adopted by the Non-Theatrical Committee is that in 16mm. projection the screen brightness, as measured with the projector running but without film, should not be less than five foot-lamberts, and not more than twenty foot-lamberts.

It should be noted that these values are stated in terms of the foot-lambert, a brightness unit. The foot-candle, which has often been used in this connection, is a unit of illumination. It measures the light falling on the screen, but tells us nothing about the brightness of the picture unless we know the reflecting properties of the screen.

The following table has been calculated on the basis of the known reflection factors of typical screens, and shows the brightness, in foot-lambert, that is required from the projector. It will be noted that two columns of values, corresponding to optimum and minimum conditions are given for the uniformly reflecting type of screen. Because of the directional nature of the reflection from a beaded screen, the amounts of light specified for this type will give a brightness of fifteen foot-lamberts as seen from the center line of the room, and only five foot-lamberts at a viewing angle of twenty degrees. Therefore, there is little leeway within the recommended limits, and it is for this reason that only one column of figures is given for the beaded type of screen.

This table will become really useful only when definite information is provided as to the light output of the projectors on the market. It is expected that this information will be made available by the projector manufacturers in the not very distant future. In the meantime it can only be stated, in a very general sort of way, that projectors using 500 watt lamps are likely to be suitable for screen widths up to four or five feet; that pictures six to seven feet wide will require 750 watt lamps, and pictures eight to nine feet wide will require the comparatively new 1000 watt short-life (10 hour) lamp. Pictures ten feet wide or more will require arc lamp projectors.

A good arc lamp projector delivers about 900 lumens if equipped with a two inch projection lens of the largest aperture. Therefore for ten to twelve foot picture widths the screen should be of the uniformly reflecting or matte type. On a beaded screen 900 lumens will give excessive screen brightness for those sitting along the center line of the auditorium. The matte or center portion of screen surface is likely to be required in any case by the shape of the auditorium. From this the conclusion may be drawn that screen widths of fourteen to sixteen feet are rarely justified in 16mm. projection.

All of the above figures and estimates on the subject of screen illumination expressively assume that the room in which the picture is being shown is well darkened. This means, darkened to such a degree that it is practically impossible to read ordinary book type anywhere in the room. It is believed that in the past not enough attention has been paid to this basic element of good school projection. It should be pointed out that it is not practical to compensate for the presence of stray light by increasing the light from the projector, even where a screen with an adequate brightness already exists. Adding more light does not restore the tonal balance of a picture if the blacks are being degraded by excessive stray light in the room.

With reference to sound reproducing amplifiers a similar table of minimum power output requirements might be drawn up, corresponding to rooms of various sizes and with different degrees of acoustical treatment. In this respect, however, the variation from room to room is so great, and the acoustical quantities involved are so difficult to measure, that at the present time it does not seem worth while to attempt to present a general statement. It may be said that a power output of from five to ten watts will be sufficient for almost any classroom. For auditoriums at least fifteen watts should be available, and preferably more. It does no harm to operate an amplifier below its capacity, but when it is necessary to operate it at its limit in order to obtain a sufficient volume of sound, the distortion is sure to be extremely bad.

**TABLE**

<table>
<thead>
<tr>
<th>Viewing Distance</th>
<th>Screen Size</th>
<th>Number Lumens Required For Uniformly Reflecting Screen</th>
<th>Number Lumens Required For Beaded Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>20' 6'8&quot;</td>
<td>30'x40'</td>
<td>128.0</td>
<td>42.0</td>
</tr>
<tr>
<td>24' 8&quot;</td>
<td>3'x4'</td>
<td>172.0</td>
<td>60.0</td>
</tr>
<tr>
<td>30' 10&quot;</td>
<td>3'9&quot;x 5&quot;</td>
<td>268.0</td>
<td>94.0</td>
</tr>
<tr>
<td>36' 12&quot;</td>
<td>4'6&quot;x 6&quot;</td>
<td>386.0</td>
<td>135.0</td>
</tr>
<tr>
<td>42' 14&quot;</td>
<td>5'3&quot;x 7&quot;</td>
<td>526.0</td>
<td>184.0</td>
</tr>
<tr>
<td>48' 16&quot;</td>
<td>6'x 8&quot;</td>
<td>686.0</td>
<td>240.0</td>
</tr>
<tr>
<td>54' 18&quot;</td>
<td>6'9&quot;x 9&quot;</td>
<td>868.0</td>
<td>304.0</td>
</tr>
<tr>
<td>60' 20&quot;</td>
<td>7'6&quot;x10&quot;</td>
<td>1072.0</td>
<td>375.0</td>
</tr>
<tr>
<td>72' 24&quot;</td>
<td>9'x12&quot;</td>
<td>1540*</td>
<td>540.0</td>
</tr>
<tr>
<td>84' 28&quot;</td>
<td>10'6&quot;x14&quot;</td>
<td>2100*</td>
<td>735.0</td>
</tr>
<tr>
<td>96' 32&quot;</td>
<td>12'x15&quot;</td>
<td>2740*</td>
<td>960.0</td>
</tr>
</tbody>
</table>

*These values seem to be in excess of what is now obtainable, even with an arc lamp projector.

**It should be borne in mind that the beaded screen is recommended only when practically all the seats give viewing angles less than 20 degrees.**

We have now, theoretically at least, arrived at a point in our discussion where we are ready to consider the matter of size, shape, and type of screen. From this, in turn, we know how many lumens the projector must deliver. We also know from which position output of the greatest sound amplifier should be selected. Several machines are offered, each of which appears to satisfy these basic requirements. Which of them shall we select?

A choice between competing projectors should be made on the basis of fundamental performance, and not on the basis of any special "features", unless it is clearly apparent that these features are making a definite contribution to the excellence of the fundamental performance.

The main emphasis should be placed on sharpness and steadiness of picture, intelligibility and naturalness of speech reproduction, naturalness and steadiness of pitch in music reproduction, and smooth, quiet operation. Excellence in these respects necessarily implies general good workmanship and quality of construction.

Much is frequently made of the question of film damage. The writer believes that no projector of reputable make will damage film if it is kept in proper operating condition and if the film is threaded correctly. On this condition alone, any projector can and will damage film if it is threaded incorrectly, or if the mechanism is not kept clean. In no case of which the writer is aware is the threading a matter of special difficulty. Nevertheless, the only way to avoid film damage is to make some reliable person definitely responsible for the care, cleaning, and lubrication of each projector, and see to it that all persons allowed to operate it are properly instructed in the threading and control of the machine.

In the absence of a technical testing laboratory equipped in the proper way to decide whether or not one of two competing projectors is superior to the other is to test them together in the same room, on the same screen, and with the same film. The film is the most important item. It is necessary to see that it has both sharp picture and good sound quality, or else two separate films should be selected for these qualities.

The two projectors should be connected to the same power line, so that they will receive the same voltage, but they should not be operated at the same time unless it has been ascertained that the line is capable of carrying a load of twenty-five amperes without damage. If this precaution is neglected, fuses will probably blow.

First examine both projectors to see that their condensing and projection lenses are clean and that the lamps are new and of proper voltage rating. Then turn on each machine without film, and center the clear field of light on the screen. The field should appear evenly illuminated and free from striations or patches of color. If there is any marked difference of light efficiency between the
producers it will reveal itself at this point, but unless this difference is great enough to be noticed, the sound will be all the same, and when one machine is turned off and the other turned on, it is of no practical importance. Different lamps, even from the same lot, may differ enough in light output to produce a noticeable difference in this test. For this reason, if it appears that one projector delivers more light than the other, the lamps should be interchanged, if they are of the same type, and the test repeated. If there is a rheostat on either machine for controlling the lamp current, make sure that it is adjusted for the correct value. A difference between the two projectors should not be made on the basis of a slight difference of light output unless other factors are substantially equal. In some projectors other desirable design or performance features have been legitimately gaited at the expense of a slight loss of optical efficiency.

Next, thread the film selected for the picture test, first on one machine and then on the other, and project it, adjusting the focus as critically as possible and noting any differences in sharpness between the center and sides of the screen. At the same time compare the steadiness of picture on the two machines. If it is necessary to be very critical to detect a difference in steadiness, set the framing device so that the frame line is visible on the screen. Walk directly up to the screen, and hold a ruler against it. In this way the amount of frame line jump can be measured with considerable accuracy. It should not be more than one-half of one per cent of the width of the picture. Make this test in the same part of the film for both machines.

Next, if the projectors are sound machines, thread the sound test film and run it first on one machine and then on the other. Try the effect of the tone controls, and then attempt to decide what adjustments give the most satisfactory effect for speech and for music under the room conditions existing. It is important that this test be conducted under the actual conditions in which the machine will actually be used. For example, do not draw a final conclusion from a test in an empty classroom or auditorium, but arrange to have an audience of normal size present and in their seats. On account of the variable element introduced by the tone controls, it may be necessary to run the sound test film several times, first on one projector and then on the other, in order to decide whether or not there is a clear superiority of one over the other.

The 16mm sound and picture test reel of the Society of Motion Picture Engineers are still the best films available for the critical comparison of projectors. They are several years old, and are unquestionably capable of improvement, but nothing else of equal or greater merit has appeared to take their place. The sound reel is particularly valuable because it contains excellent records of both speech and music of types particularly suited for revealing imperfections in projector performance.

In the absence of these special test films, the demonstration reels used by projector salesmen can usually be assumed to be of good quality. The important point is to run the same films on all machines being tested, at the same time and under the same conditions. Demonstrations at different times or in different places and with different films are not conclusive.

During the sound tests it should be ascertained how far the volume of music may be increased on each machine before noticeable distortion sets in. It is usual, but not necessarily, true, that the amplifier that permits the higher volume without distortion will give cleaner reproduction at normal volume. This point can be checked by attentive listening.

The projector that seems to be the most satisfactory up to this point should be subjected to the further test of projecting two 1600 foot reels of film, one immediately after the other. During this period of about one and one half hours continuous operation, there should be no noticeable change in the quality of performance, and no part of the machine should become hot enough to burn the hands of the operator.

In the course of these tests the person conducting them will certainly have formed a general idea of how the machines compare in value, as evidenced by good appearance, good workmanship, convenience, and the like. He will naturally decide on the basis of these factors as well as on the result of the more fundamental tests. But if he has followed this simple testing routine faithfully, he can be satisfied that he has really made his choice on the basis of value and suitability for the task intended, and if, after all, a certain element of personal taste has entered into the matter, no one should complain. We are still a long way from being able to specify a "best" design of projector, even for a very definite purpose.

To the Members of the D. V. I.:

Most of the prepared words that were spoken and read at the Winter Meeting of the Department are printed in this issue of Educational Screen or will appear in the next. We hope that these reports and addresses will to some extent bring the values of the meeting to those of you who could not attend. But the unprepared words—those that were interjected spontaneously into the discussions and conversations—were not recorded and therefore cannot be included as a part of our proceedings. Perhaps they were just as important.

Although I may be too optimistic and too biased because of my interest in the Department to judge objectively, I sensed new enthusiasms, an increasing willingness to face our problems squarely, and a determination to move forward actively in the visual field. Many expressed the thought that we seemed ready now to move toward real accomplishment.

At the Executive Committee meeting, which was attended by eleven of the fourteen officers and members of the Committee, considerable attention was given to the problems of membership, the proposed zonal plan, the coming Summer Meeting at Boston, and the need for a permanent office and secretary. It was our privilege to have Mr. H. A. Allen, Business Manager of the N. E. A., with us for a part of our meeting. As a result of this Committee meeting, I can assure you that every person present is going to work thoughtfully and constructively during the next few months in an effort to find the ways and means to bring about greater stability in the Department so that the whole visual instruction field may be strengthened.

We are hopeful that we may soon be able to submit for your consideration a definite and forward looking program.

Yours sincerely,
PAUL C. REED, President
The Literature in Visual Instruction

A Monthly Digest

HISTORY AND PRINCIPLES


Audio-Visual Aids: Relation to the Learning Process—Harry Ha-worth, Pasadena, Cal.—Sierra Educational News, Jan., 1941

ADMINISTRATION


Ventura County's Program of Visual Education—Persis Hamilton—Cal. Journal, 16:33 Jan. 1941

The experiences of one school system in organizing and administering a practical program of visual aids with the help of competent workers in a WPA project. Especially helpful should be the ways in which the group used inexpensive materials to make available aids that were otherwise inaccessible.

UTILIZATION

Use of Motion Pictures as a Curriculum Aid—Lillian A. Lamoreaux, Santa Barbara—Cal. Journal of Secondary Education, 16:30 Jan. 1941


PERIODICALS


Visual Aids Digest—New Jersey Visual Education Association, 1940.

PARAGRAPH COMMENTS

1 Role of Visual Materials

Following are some beliefs or propositions which the author believes are important in considering as the basis for using visual materials:

1. The term 'visual education' or 'visual aids' if interpreted literally is a misnomer. We learn from many senses at all times, and not from one sense alone. The total nervous system responds to any given field of experience and the meaning of the object (or situation) is perceived in the light of the total situation.

2. A much larger proportion of school experiences than we may be willing to admit is barren, sterile and verbalistic. Verbalistic student recitations and explanations are used by a large proportion of teachers as the method of instruction. This results in barren, mechanistic and sterile treatment of factual information and a large amount of forgetting.

3. Teachers of the past were skilled in handling words. Teachers of the future must be skilled in handling experiences. Teachers now have more confidence in their ability to check on factual material obtained from reading and reciting than from their ability to evaluate other, more vital kinds of experiences.

4. Experiences are found at varying levels of generality and abstraction. The teacher must help children to have experiences in concrete forms in order that thinking and the use of language (both symbolic) may be meaningful.

5. Just as it is possible to move too quickly to generalization and abstraction, so too it is possible to stay too long at concrete levels. There is danger of living increasingly on a vicarious level, hearing radio speakers interpret situations, or seeing events through the eyes of the newsreel camera man. There is a satisfaction from first-hand experience beyond those achieved by vicarious ones. Illustrative of this are the comments made by children who have seen films. They make note of the aids that will arouse curiosity, raise questions and stimulate discussion; those that will give help in setting the problem clearly before the pupil; those that will serve as a source of information; those that will serve as a review. Those teachers no longer think of the quantity of material they are to use, but rather of the quality of use to be made of each bit of material selected.

2 Visual Aids and Learning

A large part of our task as teachers (in the present crisis) is to give meanings to the symbols used in our "democratic frame of reference." It is imperative that full use be made of those audio-visual aids which may assist in bringing to the students the illusion of active participation. The scale of learning-experiences ranging from the most concrete to the most abstract (mathematical concepts) is then given, as described by I. Keith Tyler in a recent address.

3 Program for California

The results of a survey made in 1938 show that teachers in large city districts most often have access to an abundance of visual materials and that those in small districts are unable in themselves to provide the chief essentials of such a program. There are three recommendations: (1) that a state director of visual instruction be created; (2) that county or regional libraries be set up for smaller school districts; (3) that more courses be available in more California colleges where teachers can be helped to improve their methods of use.

In an editorial note the author reports progress in each of these areas. One unfortunate event, however, appears to be the adverse ruling of the Los Angeles County district attorney in which the L. A. County Visual Library, the oldest and largest county department in California, was closed.

4 Films as Curriculum Aid

The part that a supervisor (director of curriculum and instruction or visual education director) can play in helping teachers to improve their use of motion pictures. A conference with each teacher helps to clarify the purposes to be served by films and some of the experiences that must follow them. The procedure would then be somewhat as follows:

First Miss Y and Miss Z analyze their classes; then they plan their area of instruction; they set up their objectives and think through the larger problems which are found in that area, also considering the major activities which would help solve or give improved insight into the problems. Next they think about the teaching tools available. They think of the various uses to which these tools could be put and the relative value of each in a given situation. The teachers make a trip to the Visual Education Department and look at prints, dioramas, exhibits, preview films, slides, and still films. They make note of those aids that will arouse curiosity, raise questions and stimulate discussion; those that will give help in setting the problem clearly before the pupil; those that will serve as a source of information; those that will serve as a review. Those teachers no longer think of the quantity of material they are to use, but rather of the quality of use to be made of each bit of material selected.
5 Visual Aids in Social Science

Suggested materials available for teaching a unit such as "The Development of Transportation and Communication in the U. S.," include maps, lantern slides, still films; and other materials. If the materials suggested are properly used, the teachers will find a greatly stimulated interest in further work on the part of the student.

6 Pictures in Social Studies

Pictorial material that has particular value for social studies teaching includes cartoons, pictures of historic characters and events, social customs during different periods of history and contemporary life. Cartoons and pictures are available at low cost; photographs may be taken by the teacher or by students; filmstrips and simple activities shown in motion pictures may similarly be made by the teacher.

Pictures, to be effective, must be presented at the right time. The same picture will often cause different classes to react in diverse ways. The length of time required to show pictures and the interest span of the group also differs. A simple procedure for showing pictures is to pass them around. If the teacher knows each picture thoroughly he can point out important aspects of the picture and direct discussion.

One way to present pictures is for the students to jot down the salient points. Or the teacher may put a few "springboard" questions on the board and let the class find the answer. If pictures have nothing worth recording or remembering they have no value. For further study, the pictures or cartoons might be placed on bulletin boards.

A slide library may be organized in every school with the help of the camera club. Natural color may be photographed on 2x2 slides. Directions are given for equipment and techniques used in making copies of pictures or cartoons in color.

7 Technique of Field Trip

The extent of the educational returns resulting from a field trip will depend upon four principal things: (1) the preliminary arrangements; (2) the care taken in the teacher-pupil planning; (3) the procedure during its progress; and (4) the activities which follow. The article should be read in full for some helpful suggestions.

8 Visual Aids Digest

In this latest bulletin from the active organization of New Jersey teachers, a genuine effort has been made to collect the real experiences and judgments of teachers, supervisors and administrators regarding audio-visual aids in safety, for deaf children, in mathematics, English, consumer education, vocational education, social science and the like.

SOURCES OF MATERIALS


Lists sources of charts, exhibits, maps, films, pictures, slides, and publications which should contribute greatly to courses in geography and civilization of our Latin American neighbors. The purpose of the compilation is to implement such teaching. An Appendix gives some helpful hints on projects which may be carried out dealing with cookery, correspondence, field trips, and costume dolls.


In the introductory statement to the list of films related to the teaching of mathematics, the author urges that teachers make known their needs to producers and to the Committee on Visual Aids of the National Council of Teachers of Mathematics if a large number of films is ever to be made available.

Detailed information is given for films in geometry, advanced mathematics, industrial mathematics, mathematics in nature, weights and measures, money, cooperatives, physics, engineering and the like. This list will meet a welcome response from mathematics teachers and directors of visual education everywhere.

Living Films: A Catalog of Documentary Films and Their Makers—Association of Documentary Film Producers, Inc., 56 West 45th Street, New York City, 1940, 57 pp. mimeo. 50 cents.

An interesting Who's Who of documentary films in America, recording the biographies and achievements of ninety-nine members of the Association, well-known names in fact films. 150 films are listed, alphabetically by title, with brief descriptions of contents, production credits, and complete information regarding distribution arrangements. A glance through the film titles reveals a wide range of subject matter, from observations of the first acts of an infant to studies in mural painting and instruction in aviation.

Current Releases of Non-Theatrical Films published monthly by the Motion Picture Division of the Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, is now issued as Part 8—Motion Pictures and Equipment—of the new "Industrial Reference Service."

It continues to report on educational film developments abroad, and to list new non-theatrical films in this country as they are released, with brief data on each. Part 8 can be obtained separately for $1.00 a year, or 10 cents a copy.
SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH

Head of the English Department
Greenwich High School, Greenwich, Conn.

Member of the Committee on Standards for Motion Pictures of the National Council of Teachers of English

EVER SINCE the article on the Purdue University engineering films appeared in EDUCATIONAL SCREEN, a great deal of interest has been shown by educators in these unusual 16 mm. film productions. To show the range of these films in engineering it seems advisable to give further details in this department. The pictures are of three types: (1) silent pictures with titles; (2) sound pictures with sound track on film; and (3) silent pictures with a timed commentary to be read by the teacher at specified points during the showing. (All of the films are available for rental. Inquiries regarding this should be sent to Professor Justus Rising at Lafayette, Indiana.) Length in feet is given after each title. Notable features of many of the subjects are (1) work sheets whereon students work pertinent problems at designated intervals in the picture, and (2) accompanying lantern slides for discussion and for showing correct solution projected on screen or blackboard.

Freehand Drafting (431) (Silent) Shows sketching as antecedent of drawing. Demonstrates sharpening of pencil, proper strokes for various lines; short and long horizontal, vertical and inclined; large and small circles and ellipses.

Ink Work and Tracing (436) (Silent) Demonstrates preparation of tracing cloth, filling and handling pen, drawing straight and curved lines and circles. Explains order of inking, lettering, erasing, and cleaning.

Orthographic Projection (663) (Silent) Demonstrates with models how to represent an object by three orthogonal views. Use of scale, T-square and triangle for constructing the views, transferring a measurement from one view to another, or constructing the third view by projecting from the other two.

Shop Work (621) (Silent) Explains the function and operation of lathe, milling machine, drilling machine, shaper and planer, and arbor press. It demonstrates turning, facing, boring, drilling, reaming, chamfering, thread cutting, gauging, chucking, knurling, centering, necking, tapping, countersinking, counterboring, spot facing, surface milling, etc.

Structural Drawing (537) (Silent) Shows the preparation and use of the chisel pointed pencil for making pencil drawings on tracing paper for Blueprinting. The various steps of making a structural drawing are completed in order so that an efficient performance results. Reel 1—Layout of Roof Truss; Reel 2—Detailing a Gusset Plate.

Testing T-square and Triangles (303) (Silent) Shows how to check smoothness and straightness of T-square Blade and T-square Head, of edge of drawing board, of edges of triangles and angles of triangles—accurately without the use of auxiliary apparatus.

Use of T-square and Triangles (274) (Silent) Shows placing of drawing on drawing board, drawing horizontal, vertical and inclined lines with T-square and triangles. Explains drawing of perpendicular and parallel lines, and construction of angles by use of triangles.

Capital Letters (822) (Sound) Describes and demonstrates one at a time, the construction on ruled grids of single stroke inclined commercial gothic capital letters, ampersand and numerals.

Lower Case Letters (582) (Sound) Explains and demonstrates the construction of each of the 26 lower case letters.

Use of T-square and Triangles (304) (Sound) Sharpening of pencil and use of T-square and triangles, with a step-by-step explanation to show proper technique for drawing horizontal, vertical and inclined lines, both solid and dotted.

Auxiliary Views (449) (Silent with Commentary) Shows method for constructing auxiliary views for straight line and curved line figures by means of models.

Pictorial Drawing (450) (Silent with Commentary) Isometric and oblique drawing by means of mod-
For the Health Teaching Program

Five authentic child health, training and character building films, prepared in cooperation with, and endorsed by leading health authorities, BEFORE BABY COMES: BABY'S FIRST YEAR: GROWING UP; LIFE OF A HEALTHY CHILD: ROAD TO HEALTH AND HAPPINESS. 1 reel each, 16mm silent or sound, 8 mm silent.

HEALTH FILM SERVICE - First Nat'l Bank Bldg. SALEM, OREGON

16mm silent Religious Films for rent

"Jesus of Nazareth" 7 single reels
"Palestine," and New Testaments
5 reels
"City of David"
Send for free list

LEWIS FILM SERVICE - 216 East 1st St. Wichita, Kansas

els and construction of objects with isometric and non-isometric lines and circles. Gives similar demonstration for oblique drawing.

Sectional Views (373) (Silent with Commentary) Illustrates principles of Sectioning by means of models and celluloid cutting planes. Full section, half section, and offset sections are shown.

Development of Surfaces (545) (Silent with Commentary) Explains the construction of the patterns of surfaces by means of models and drawings. Describes the methods for right prism and oblique prism, for right cylinders, for right pyramids, for right cone and oblique cone.

Intersection of Surfaces (255) (Silent with Commentary) This film explains by means of models and drawings the principles for finding the lines of intersection between intersecting surfaces. It discusses the problem of finding the intersection of two prisms, of two cylinders, of cylinder and cone.

Massachusetts

A film (400) dealing with the development of a unit of work in elementary school arithmetic at the Butler School, Belmont, has been made by Chester A. Robinson, visual education chairman. The film was used as part of a demonstration at the Boston University Conference on Elementary Education and was used later at meetings in Baltimore, Maryland.

Ohio

A 16mm silent motion picture is being produced by the Metallurgy Department of Ohio State University in cooperation with the Department of Photography and the Bureau of Educational Research. The film, which is being financed by the American Society for Metals, will be directed toward metallurgical students and similar groups. Animation and photography will be used to show changes which occur in metals under various conditions. The film will be completed in June.

All departments of the Celina High School are represented in a public relations film sponsored by D. W. Davis.

Wisconsin

A detailed account of the six-man football game compared with the eleven-man game, is presented in Six Man Football, a 400-foot film owned by Williams Bay High School. Charles A. Jahr was the cameraman, and Robert T. Cook the director of the film.
The Educational Screen

NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

Food the Modern Way (ASFL) 11 minutes, 16mm sound, sale price $30.00; apply to distributor for rental sources and prices.

Produced by the Denver Public Schools under the sponsorship of the Motion Picture Project of the American Council on Education, this film presents information on the application of technology to the production and distribution of food. In the first sequence, the application of science and technology to agriculture is shown. The use of modern methods such as farm machinery, hothouses, and scientific animal and fowl breeding is explained. A sequence on factory processes is introduced by a title stating that laboratory testing and factory processes develop new products and new combinations of familiar products. Milk, coffee and wheat are shown being tested and sampled. In a large bakery, the steps from flour to bread are briefly traced. Then milk is followed through a dairy plant. An ice-cream pie is decorated by hand, and a machine cuts butter into cubes.

The next sequence depicts modern methods of preservation and packaging. Foods preserved through quick-freezing, drying, and canning are shown. Foods are displayed in cartons, paper, cellophane bags, and cans. Meat is preserved through smoking, and by being kept at low temperatures. The next sequence deals with transportation and refrigeration. The final sequence deals with wholesale warehouses and modern super markets. The functions of the warehouses are explained, and the film closes with several views of tempting dishes as the commentator states that men and machines work together to bring us food the modern way.

COMMITTEE OPINION—A fair film for classes in economics, social science, home economics, and related fields, at the junior and senior high levels. The film is simple in style, and it is accurate as to details. Deficiencies noted were chiefly technical; the film was photographed and recorded on 16mm film, and photography is not up to standard. Editing and recording could be improved.

How Our Health Is Protected (ASFL) 25 minutes, 16mm sound, sale price $60.00; apply to distributor for rental sources and prices.

Produced by the Denver Public Schools under the sponsorship of the Motion Picture Project of the American Council on Education, this film describes some of the ways in which health is protected in a city. It begins with shots of public health workers in various activities as the commentator states that the film is dedicated to health workers. The first sequence deals with water supply. Mountain water sources, purification plants, testing for purity, and important uses of water in the city are shown. The process of sewage disposal are explained briefly. The next sequence is introduced by a title, “Pure Foods.” Protection of the milk supply is explained in detail. Production of bread, meat, and vegetables is next shown. The regulations which must be met by public eating places are described. In the next sequence generalized health activities are shown: street cleaners, garbage collectors, children’s day nurseries, Public Health Nurses. School health officials are shown at work. In the city’s bureau of vital statistics, a clerk looks up a birth certificate. An ambulance rushes a girl to the hospital. A girls’ physical education class takes corrective exercises and plays games. The transformation of unsightly sections of a city into well-kept modern communities, through the cooperation of city and federal governments, is explained.

The commentator states that Denver’s dry sunny climate has made it attractive to many people who are benefited by such conditions. The final sequence deals with the future of public health work. The research laboratory is shown as a fundamental activity. The importance of healthful living is emphasized, and the film closes with views of students studying together as the commentator summarizes the information gained by students in their study of the protection of health.

COMMITTEE OPINION—A fair film for classes at the junior high, senior high and college levels in health and hygiene, Civics and government, social science and related studies. The film is well organized, but it was suggested that it might have been improved by editing with a view to reducing its length. Since this film is most valuable to children in the City of Denver, those who show it in other localities may find it advantageous to make note of this in an announcement prior to showing. The film was photographed and recorded on 16mm width stock; photography and recordings are fair.

It’s Fun to Play (ASFL) 20 minutes, 16mm sound, sale price $60.00; apply to distributor for rental sources and prices.

Produced by the Denver Public Schools under the sponsorship of the American Council on Education, this film shows many different forms of recreation for school boys and girls, and suggests the value of healthful play for normal living. Mountain climbing, playing in the snow, parlor games, badminton, hobbies, swimming, recreational reading, dancing, visiting a museum, attending a football game, tobogganing, and skiing are shown. High-school boys and girls are seen in these activities throughout the film. There is a musical background with occasional comment by a narrator.

COMMITTEE OPINION—A fair film for classes at the junior and senior high levels in physical education, recreation, and allied studies. Also appropriate for P.T.A. groups and other general showings. Deficiencies noted are, in the main, technical ones; the photography (made on 16mm original) is below standard, and the organization of the film could be improved. Sound is fair.

Singing Wheels (AMA) 23 minutes, 16mm sound, “free.” Apply to distributor for names of distributing libraries which circulate prints.

In this film, unusual photography and editing combine with dramatic narration to emphasize the role of motor trucks in our civilization. As the film opens, a great city is seen at sunrise. America is still asleep. But throughout the nation, the singing wheels of the transport trucks are turning to bring to the city materials to fill its infinitely varied needs.

In a series of brief closeups, truckmen speak their “language.” A driver, then a group, sing a rolling song as many scenes of trucks at work follow in rapid succession on the screen. The vital part played by trucks in serving 48,000 towns and villages is emphasized in a dramatized sequence which demonstrates the chaos which might result if all the trucks suddenly disappeared. Next, the economic contributions of the trucking

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments of both are cordially invited.

Producers wishing to have their new films reviewed on this page should write Mr. Don White at 223 Walton Street, N.W., Atlanta, Georgia, giving details as to length, content, and basis of availability of the films. They will be informed of the first open screening date when the Teacher-Committee can view the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, which must be borne by the producers.
industry: four million employees, one out of every eleven of the nation's pay checks, and use of raw materials and supplies from every state. Uses of trucks other than for transport are briefly mentioned.

The contributions of the trucking industry to our highway system are shown in the following sequence. Drawings compare the average amounts of yearly taxes paid by various classes of motor vehicles, ranging from private automobiles at $25 to trailer trucks at $832. It is stated that trucks pay 27% of all motor vehicle taxes, or enough to pay all highway maintenance costs plus one-fifth of all new highway construction. Next a typical truck driver is introduced; he answers an examiner's questions concerning various phases of his job and equipment. The importance of the trucking industry in national defense is explained as scenes of Army motorized units in action are shown.

Committee Opinion—A good film for classes in transportation and social science. Excellent cinematic techniques are used, and good information is presented; however, it was felt that the propaganda in the film is somewhat over-emphasized. The film is technically excellent in every way.

Fun in Food (Contemporary) 1 reel, 16mm Kodachrome sound. Distributed exclusively by Films, Incorporated, 330 West 42nd Street, New York City. Apply for rental rates.

This color film uses titles, photography, and narration to explain food constituents and their work in the human body. At the beginning, an expert on foods and diet, Frances Stern, is introduced. She talks about foods and food selection. A table setting is shown; then growing vegetables, as the narrator explains that proteins are needed for growth and repair in the body. Foods valuable as protein sources are shown. Then it is explained that carbohydrates and fats furnish the body's fuel; their sources are shown. Next calcium, builder of the body's foundations, with its sources, and food iron, for red blood. Here a chart indicates the circulatory system, drawing an analogy to irrigation systems used in agriculture. Finally, the vitamins and some of their sources are enumerated. Frances Stern concludes the film with brief summarizing remarks.

Sailplane (J. W. Love) 11 minutes, 16mm Kodachrome sound.

Apply to producer for sources of prints, both rental and sale.

An unusually beautiful and well-made color film on the sport of gliding. The film opens with views of gulls in flight as the narrator tells of man's age-old dreams of birdlike flight and of the early gliders which led to the development of motorized airplanes. Then the development of motorized aircraft is pictured in a rapid succession of scenes.

But some men still dreamed of flying like the birds, without noisy and dirty motors. The realization of their dreams is to be found in the modern sailplanes. In a home workshop, some of the steps in the construction of a sailplane are shown. Then the narrator explains how sailplanes can fly without motor power. We see a sailplane being towed into the air by an automobile, and then the use of thermal and contour currents in keeping aloft is explained.

A sailplane is assembled preparatory to flight. After checking the controls and explaining their functions, the pilot gets in and is towed into the air by automobile. The camera flies...
The School's Role in NATIONAL DEFENSE

is to impart to the student a knowledge of our country — and the American Way of Life. Following are but a few of the many fine 16mm sound films we offer for this purpose:

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America's First Frontier
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We, The People
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The Golden Gate International Exposition

HIGHWAYS AND BYWAYS OF THE U. S.

Old New Orleans
Washington
Yosemite
Coney Island
Manhattan Waterfront
Mount Vernon
San Francisco
Real Americans
Colonial Williamsburg

City of Proud Memories
Up and Down in New York
Land of the Navajos
Trail of the Lonesome Pine
The Golden Gate City
Singing Waters
Heart of the Sierras

INDUSTRIES OF THE U. S.

The Story of Coal
The Story of Steel
Forests and Flocks

The Milk Parade
We're on the Way (Transportation)

HEALTH AND SAFETY

We Drivers
Highway Mania
Bicycling with Complete Safety

Dangers of Dust
Stop Forest Fires

Health Film Series (Produced by Dr. David B. Hill)
1. Before Baby Comes
2. The First Year
3. The Child Grows Up
4. Life of a Healthy Child
5. Road to Health and Happiness

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IDEAL FILMS CORPORATION
28 E. Eighth Street
Chicago
2402 West Seventh Street
Los Angeles, Calif.

The Sound Film: A Challenge To Language Teachers

(Concluded from page 106)

with the plane as it rises high in the air. The pilot releases the tow rope and heads for the sea edge, where he locates a contour current rising over the seashore cliffs which enables him to cruise at leisure up and down the shore, out over the sea and over the land. The craft banks and turns, under perfect control of the pilot. Another sailplane, a two-seater, is encountered, and the two planes fly together for a short time. Finally, the pilot skillfully brings his plane in for a landing.

COMMITTEE OPINION—An excellent film for general showings and for flight training classes, boys' airplane clubs, and similar uses. Although the film is not of a specialized educational nature, it should be valuable for stimulating interest in general science, in physics, and transportation, as well as for exploratory classes at the beginning of units. Color, sound, and narration are excellent, and the fact that the camera was attached to the plane for the aerial scenes is an innovation which adds greatly to the interest, value and realism of the film by transmitting sensations similar to those actually encountered in flight to the persons viewing the film.

Producers Named Above

AMA. Automobile Manufacturer's Association, Transportation Building, Washington, D. C.

ASFL. Association of School Film Libraries, Inc., Room 819, No. 9 Rockefeller Plaza, New York, N. Y.

Contemporary, Contemporary Films, 49 Main St., San Francisco, California.


The Educational Screen
Quick-Check Your Slide Sets

WILLIAM J. BECKER
Chairman, Visual Committee,
Ithaca, New York, Public Schools

IN MORE than one visual library, considerable time
is spent rearranging slide sets after a "loan." Slides
are frequently disarranged numerically, turned in
the opposite direction, turned upside down, and, in a num-
ber of cases when two or more sets are loaned, some
are returned in a different case from which it was sent.

The following described and illustrated device will
simplify the checking of slide sets. It has been used
for several years in the Ithaca Public Schools Visual
Library with considerable
success. As
shown in the
drawing, one
or more lines
are painted
along the
tops of the
slide set, at
least one
parallel with
the run of
the box and
one diagonal.

Depending
upon the
number of
slide sets in the library, thousands of combinations are
possible. Of course, no two sets will have the same com-
bination to avoid slides from one box being mixed with
slides from another. How can different combinations
be secured?

1—By using varying numbers of lines. Start with
two, one parallel and one diagonal. Later when
color combinations have been exhausted go to
three.

2—By painting lines different colors. Virtually
thousands of combinations are possible by varying
kind of color, order of color, tinting color. Do not use tints that are nearly alike because in
the artificial light of many visual libraries, they
will look alike. In addition, do not paint lines too
close to the center because, in some combinations
they will be in correct position even if reversed.

3—By varying width of bands and distance between.

4—By varying slope of diagonal. Even two diagonals
can be used.

5—By varying the factors described in 1-4 in com-
bination with the others.

Glancing at boxes of returned slides, we can now
correct mistakes without taking out each slide. Slides
reversed or put in the box upside down can be instantly
spotted as well as slides from another box which will
show as a different branding arrangement. The diag-
ogonal line will locate slides out of order and missing
slides will cause a gap in the diagonal line.

Although it may take considerable time to mark an
total of slides in the manner described, so
much future time will be saved by this method that it
is recommended for all visual libraries having slides.
Third Annual Midwestern Forum on Visual Teaching Aids

The 1941 Midwestern Forum on Visual Teaching Aids will be held March 28-29 at the Congress Hotel in Chicago. Carefully planned classroom demonstrations, free discussions, and equipment displays will be features of the program, which follows:

FRIDAY, MARCH 28

9:30 A.M.—First General Session (Casino)
Purpose of the Forum
William C. Reavis, Chairman of Forum Committee, Department of Education, University of Chicago

Present Trends in Visual Education
Ford L. Lemler, University of Michigan
10:00 A.M.—First Meeting of Classroom Clinics
Elementary School Clinic (Casino)
Harry O. Gillet, Principal, University Elementary School, University of Chicago—Chairman
1. Elementary Science, Primary Division—Glen O. Blough Laboratory Schools, University of Chicago
2. Safety, Intermediate Division—Leslie W. Irwin, Laboratory Schools, University of Chicago

Secondary School Clinic (Florentine Room)
Ernest C. Waggoner, Public Schools, Elgin, Illinois—Chairman
High School Social Science—Introductory statement and presentation of demonstration class—Truman D. Fox, J. Sterling Morton High School, Cicero, Illinois

12:00—Luncheon and Round Table for Directors of Visual Education (South Grill)

Public School Directors, Joseph E. Dickman, Chairman, Director of Visual Education, Chicago
State Directors, J. E. Hansen, Chairman, University of Wisconsin
2:00 P.M.—Second Meeting of Classroom Clinics
Elementary School Clinic
Social Studies, 4th Grade: Introductory Statement—Eugene Blough; Demonstration—Margaret Scherer, Teachers, Oak Park Public Schools

Secondary School Clinic
High School Science Demonstration—G. I. Renner, Elgin High School

6:30 P.M.—Annual Banquet (Casino)
Speakers: David E. Walker, Sup't of School District 76, Evanston; Dean Gordon J. Laing, University of Chicago

SATURDAY, MARCH 29

9:30 A.M.—Final Session of Clinics
Elementary School Clinic
Social Studies, Intermediate Division—Mildred C. Letton and Ida B. DePencier, Teachers, Laboratory Schools, University of Chicago

Secondary School Clinic
Vocational Guidance High School Demonstration—Dr. E. G. Williamson, Department of Psychology, University of Minnesota

School Administrators Clinic (English Room)
William J. Hamilton, Chairman
The Use of Visual Materials in School Interpretation—Demonstration of films used and Evaluation by panel.

Michigan Visual Conferences

Two regional conferences on Visual Instruction were held last month in Michigan—at Wyandotte on February 17th, and at Fordson on the 20th—sponsored by
the Bureau of Visual Education of the University of Michigan. Mr. F. L. Lemler, in charge of the University Bureau, appeared on both programs. The meetings were designed to be informal discussions of the problems involved in the utilization and administration of visual aids, providing teachers with the opportunity to exchange ideas and ask questions.

Motion Picture Project Studies

The Committee on Motion Pictures in Education of the American Council on Education, 744 Jackson Place, Washington, D. C., announces the publication of a series of reports resulting from the Committee's three-year program of film evaluation. According to Charles F. Hoban, Jr., Director of the Motion Picture Project, "these publications have been designed primarily to be helpful to teachers and school administrators, in making available to them practical, objective reports on the selection, use, and evaluation of motion pictures, on methods of projecting, on the technique or making films in the school, on integrating school and community interests, and on underlying issues and problems."

The Studies now available are: A School Uses Motion Pictures, a report by the Staff of Tower Hill School; Films on War and American Policy, by Blake Cochran; Projecting Motion Pictures in the Classroom, by Francis W. Noel of Santa Barbara, California, Public Schools. Others to follow are: Selection, Use and Evaluation of Motion Pictures, and Students Make Motion Pictures, an account of film production by Denver schools.

Maine Cooperative Film Library

To meet the demand for educational films in Maine, the State University at Orono finds it necessary to expand its film library maintained to service the schools of the state, under the direction of Dean O. S. Lutes. The University proposes to acquire additional films by the cooperative plan in use in many school systems, colleges, and universities. With thirty schools subscribing to this plan, sixty sound films would be purchased on the basis of their frequency of choice by the participating schools. These schools then would have the use of two films each week during a period of thirty weeks each year at a cost of $100 over a two-year period.

Information Exchange Service

The U. S. Office of Education has announced the inauguration of an Information Exchange which will act as a clearing house for ideas and materials on education and national defense. Educators are urged to send to the Exchange material which they may have prepared recently in connection with the defense program. Such materials might include: organization plans, school and community programs related to defense activities; curricular modifications and classroom procedures found effective in building good citizenship, tolerance, etc.; photographs of such activities; visual aids, radio programs, etc., or descriptions of their use.

A staff of specialists will edit, classify and prepare
material for circulation on a free loan basis, in the form of originals, reproductions, digests, bibliographies, etc. A well-annotated catalog describing the various kits, books or folders will be distributed. Communications should be addressed to: Information Exchange, U. S. Office of Education, Federal Security Agency, Washington, D. C.

Bureau of Mines Films Go to Latin America

The large film library of the Bureau of Mines has been made available for the advancement of cultural relations with Latin America, it was announced today by the Department of the Interior. Motion pictures dealing with a variety of technical subjects already have been shown in Mexico, Brazil, Argentina and Peru, and in the last named country a regular schedule of showings has been established. Similar service to other South American countries may be inaugurated later.

The Bureau of Mines film library contains some 3,000,000 feet of film dealing with more than 45 subjects, and new titles are being added almost monthly. The pictures depict mining operations and related manufacturing processes; they show where minerals are found and how they are extracted from the earth, manufactured or refined into useful everyday products, and in what ways they are utilized and conserved.

American Film Center Grant

The American Film Center, Rockefeller Plaza, New York City, has received an additional grant from the Rockefeller Foundation sufficient to continue its work until January, 1943. During its two years of activity, the Center has supervised the production of twenty-one films, with six more now in work. A New Division of Program and Exhibition will provide adult education organizations and community forums with educational film programs at low cost. A Division of Installation will assist in the establishment of film production and distribution facilities. A new Research Division will make a comprehensive study of the motion picture audience, and coordinate its work with similar researches in radio and print.

Jack Finds a Way

(Continued from page 105)

er-director of the film, and Frank F. Harman, supervisor of the Photography Club, was director of photography.

Both shooting and editing were simplified by the breaking down of the script into scenes and shots, each numbered. A small blackboard, chalked with the corresponding scene and shot number, was photographed on a few frames of film before each shot was made. When the film was ready for cutting, the editors simply put the numbers in their proper order and the film was correctly sequenced. Editing consisted of viewing the film carefully, eliminating irrelevant material, and cutting the scenes to their proper length to carry the action smoothly. In no case was film left in the final production unless it contributed to the effect planned. Of the nine hundred feet of unedited film returned from the laboratory six hundred fifty feet were used in the first rough cut. This was later
Data on Summer Courses Wanted

The Educational Screen is again gathering information on all summer courses in visual instruction, for publication in the April and May issues.

Any reader knowing of such courses to be given next summer is earnestly asked to send us names of the institutions—with or without further data, such as: title of course, name of instructor, dates of duration, credits, contents of course.

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| Students are enthusiastic about viewing the film. It has already served as a springboard to numerous excellent discussions of bicycle safety.

(2) If the principle of learning through responsible participation is sound, there should be important effects on the safety behavior of those actually participating in the making of the film. More than seventy bicycle riders over a period of several weeks rode their bicycles in the ways which they themselves had chosen as important to safety. They not only demonstrated safe riding but they dramatized the reasons why safe riding is important. Safety rules to these pupils are no abstract memorized list.

(3) Although it was not primarily intended as such, the film has been as much a public relations medium as a safety production. The entire school, the mayor, the fire department, the local hospital, and numerous other local businesses all worked closely together toward the common end of bicycle safety. This experience can hardly fail to bring about on the part of these agencies a more sympathetic feeling for the school and its goals. From the mayor down these participating groups expressed enthusiastic support for the project.

"Jack Finds A Way" was our first motion picture—our camera was rented, our equipment borrowed—but its success has already encouraged school officials to consider the purchase of our own equipment and the making of further films of this type.

A Contribution to PREPAREDNESS

Our library of 16 mm. Sound and Silent Films contains a great number of subjects important to national defense training and preparedness.

AVIATION MECHANICS

A new vocational training series of 16 mm. Silent Films produced under the direction of an accredited C.A.A. school. Subjects now available are:

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<th>Making of an Airplane Fitting Airplane Welding</th>
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<td>Others who follow shortly are: Airplane sheet metal work, Airplane fabric finish, Airplane woodworking. All are two reels each.</td>
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ELEMENTS OF PHOTOGRAPHY

- Showing in detail all steps involved in taking, developing and printing a good picture. Based on training methods of the Signal Corps of the U.S. Army. Two reels Silent.
- WARNING
  - British Documentary Film of typical air raid, showing destruction, defense and restoration. 3 reels, Sound.

FILMS FROM BRITAIN

- A group of 28 pictures in 16 mm. Sound ranging from 1 to 2 reels each. Portraying a nation at war and covering invasion defense, conveying training to sailors, soldiers, and airmen; police activities, armament production, life of people and world factors.

Projector and Operator Service available.

Send for catalog of 2000 Educational and Entertainment subjects—for rent or sale.

WALTER O. GUTLOHN, Inc.
35 West 45th Street, Dept. E-3 New York, N. Y.
The Educational Screen

Current Film News

The Eastman Kodak Company, Teaching Films Division, Rochester, New York, has produced three new silent reels on India, and a timely reel on aviation.

The Punjab presents rural life in this British state, methods of irrigation, a market town, native school, and various household tasks such as making unleavened bread, churning, washing and spinning. There are scenes also of Delhi, capital of British India—buildings, shops and characteristic street scenes.

Glimpses of Industry in Mysore and Ceylon features modern and primitive industries: new and old irrigation methods, gold mining, manufacture of chemicals, distillation of sandalwood oil, silk industry, tea growing, coconut and cinnamon harvesting and preparing for market. Views in the scaport of Colombo complete the reel.

Hyderabad contains a variety of subject matter—street activity in Hyderabad city, minting of coins and printing of postage stamps, cultivation of rice and sugar cane, rug weaving, weaving metallic fabrics, embroidery, silver work, and the educational system.

Principles of Flight illustrates the elementary principles of lift and flight, in a kite, glider, and an airplane. Animations and straight photography of laboratory apparatus and wind tunnels are used to show the effect on flight of velocity of air currents, angle of inclination of the wings, and streamlining. The standard controls of an airplane are demonstrated.

The International Film Bureau, Inc., 59 East Van Buren Street, Chicago, Illinois, announces a new department for the purpose of selling prints of documentary and educational films. During the four years since its establishment the International Film Bureau has built up a large library of foreign language and social science films. The first film to be announced by the new department is:

One-tenth of Our Nation—16mm sound, 26 min. running time—presenting the story of Negro education in the South from rural one-room schools to modern progressive universities.

The American Film Center called together a Committee of Experts to control the content and philosophy of the film. Dr. Claude A. Barnett, one of the Committee, states the purpose of the film: "We wanted to tell the people of the United States something about Negro schools and colleges. We wanted to show everything from the hungry boys and girls in overcrowded one-room schools to the graduates of our great universities. One Tenth of Our Nation tells the story in its economic and social setting and it's a success story of Negro and white cooperation even though there still remains plenty to do."

The film was made possible by a grant of the General Education Board to The American Film Center. The Committee of Experts included Dr. Channing H. Tobias, Dr. F. D. Patterson, Dr. R. E. Clement, Dr. Arthur D. Wright, Dr. Charles S. Johnson, and Dr. Claude A. Barnett.

The film was produced by Film Associates, Inc., a company old of new experience and can now be seen and heard by 16mm audiences. Against the background of a modern story has been filmed selections of the most popular musical and lyrical numbers from The Mikado, Pirates of Penzance, Ruddigore and Patience. Featured in the cast are the well-known Gilbert and Sullivan artists: William Danforth, Frank Moulin, Vera Ross and Vivian Hart. Teacher's guide available.

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With Words and Music—7 reels. The immortal Gilbert and Sullivan operettas have at last found their way to the screen and can now be seen and heard by 16mm audiences. Against the background of a modern story has been filmed selections of the most popular musical and lyrical numbers from The Mikado, Pirates of Penzance, Ruddigore and Patience. Featured in the cast are the well-known Gilbert and Sullivan artists: William Danforth, Frank Moulin, Vera Ross and Vivian Hart. Teacher's guide available.

A scene from the film "With Words and Music."

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By itself, only a handful of sand—fine, pure, white crystals of quartz from a Pennsylvania hillside. But, blended with boron, sodium, barium, lead, phosphorus and other elements—fused and fined at white heat—cooled, sorted, annealed and selected—it becomes optical glass, one of the basic indispensable materials of national defense—and of modern civilization.

Thirty years ago America was wholly dependent on Europe for a supply of glass for optical instruments. But before the first World War had cut off that source, Bausch & Lomb scientists, at Rochester, New York, were at work on the development of a glass-making technique. By 1918, glass to fill the vital needs of optical manufacturing in the United States was pouring from the B&L glass plant.

Today, for binoculars and fire control equipment that are the eyes of the Army and Navy—for metallographic and spectrographic equipment that are the eyes of industrial research—for microscopes that are the eyes of all science—for spectacle lenses that are the eyes of the nation's citizens—America is completely independent of foreign supply.

BAUSCH & LOMB OPTICAL CO. • ROCHESTER, NEW YORK ESTABLISHED 1853
The Educational Screen

WALTER O. GUTFloh, INC, 35 West 45th Street, New York City, have made available to schools thirty-eight new Universal entertainment features, in 16mm sound, among which are such outstanding pictures as: "East Side of Heaven, Family Next Door, First Love, Unexpected Father and You Can't Cheat An Honest Man," with stars including Bing Crosby, Joan Blondell, Mischa Auer, Douglas Fairbanks, Jr., Hugh Herbert, Deanna Durbin, Adolph Menjou, W. C. Fields and Jackie Cooper.

With the approval of one picture, the school is automatically eligible for all the pictures.

Gutfloh has released also: "The Outsider"—reel—film version of the noted stage hit. This stirring drama of faith and love has won the plaudits of critics and nation-wide audiences throughout the nation Mary Maguire and George Sanders are in the featured roles.

The Eray Pictures Corporation, 729 Seventh Avenue, New York City, has collaborated with the Franklin Institute of the State of Pennsylvania, Philadelphia, in the production of a timely film: "Youth Takes to Wings"—60 min. running time—based on the Traveling Air Show of the Franklin Institute, and authorized by the Air Youth of America organization. The motion picture demonstrates the elements of aerodynamics and the development of aircraft design from boomerang and balloon to bombers and clipper ships. Slow motion studies of birds show how they control their flight, suggesting the application of mechanics to flight. The science of flight is further illustrated in the assembling and flying of small model planes. There are scenes of model plane meets where air-minded boys exhibit their models and test their skills. The accompanying sound commentary is given in simple language.

Fifth Films, Box 365, Hollywood, California, now have made fifteen films, the aim of which is to teach good social values, and appreciation of our government. Their two most recent pictures are: "Flags on Duty"—1 reel, sound and color—particularly suitable for teaching Americanism. A brief historical introduction suits the importance of the national flags of the United States. Flags of all kinds are presented with an explanation of their messages and uses: national flags, harbor flags, danger flags, decorative, and flags of identification.

Builders of the Broad Highway—2 parts, 1 reel each, sound and color. The subject of this film is the workmen of our country. The first part shows the contribution of each man employed on a road building job—surveyor, dynamiter, welder, electrician, etc., the work of the machines, and industrial dangers. The second part is devoted primarily to the portrayal of the work involved in building a highway bridge. Brilliant outdoor scenes in color, sound effects, and narration by Don McNamara enhance the appeal of these subjects.

Units of study are suggested for the films, and Study Guides are supplied with each.

Harmon Foundation, Inc., 140 Nassau Street, New York City, has released many new 16mm silent productions the past few months, among them the following:

On the Farm—2 1-reel units—a children's film made by Mr. and Mrs. Ray Garner, portraying activities of a typical day on a farm through the tasks of two small children cooperating in their parents' work.

Walk, Do Not Run—1 reel—a safety film made in cooperation with the Department of Public Schools of Providence, R. I. The film is concerned with need for fire drills and suggests procedure for actual school situation.

How to Use Filters; Lenses and Their Uses—1 reel each—two new additions to the series on "You Can Make Good Movies," photographed by Kenneth F. Spack.

Youth Lends a Hand; Work and Complementation—are 2 1-reel units made in cooperation with the American Friends Service Committee. The former presents the operation of student work camps from the point of view of the student, and of the inhabitants of the area in which the camp is located. The second film depicts lumber cooperatives, showing the way in which students combine their labor.

Bell & Howell, Inc., 1801 Larchmont Avenue, Chicago, has brought to this country several films from the Religious Film Society and other British sources, including "O'er Hill and Dale, County of the White Rose, Old Saxon, Armor, Swedes, and Western Highlands." From Australia, similar imports include: Teddy Bears at Play—a five-minute musical novelty showing the playful antics of the Honey Bear.

Nation Builders—2 reels—international prize-winner in the documentary class, presenting the history of Australia.

The Filmsound Library is offering also the new series of handcraft films, made in schools in various parts of the country. The first two in the series are single-reel silent pictures, Simple Wood Turning, and Simple Printing.

Eastin 16mm Pictures Co., Davenport, Iowa, has acquired exclusive rights to an educational feature film dealing with the founding of Texas, entitled: Heroes of the Alamo—70 min., 16mm sound—depicting the stirring events leading to the Texas War of Independence. The story centers around the lives of Almerian and Anne Dickinson, young settlers, as they are affected by the great events of the times. Among the historical characters introduced are Stephen Austin, Sam Houston, General Santa Anna, Davy Crockett, William B. Travis and Jim Bowie.

(Concluded on page 138)
THE PUNJAB
Rural life in the British-administered state of the Punjab. Primitive methods of irrigation; a typical village courtyard where household tasks such as making unleavened bread, churning, preparing curry, washing, and spinning are being carried on. A trip to a market town. A native school in the open air. Delhi, capital of British India; government buildings, shops, and characteristic street scenes. 1 reel—$24.

GLIMPSES OF INDUSTRY IN MYSORE AND CEYLON—Modern and primitive industries in the native state of Mysore and the island of Ceylon. Ancient and modern methods of irrigation; development of hydroelectric power and centralized heavy industry such as gold mining; manufacture of chemicals; distillation of sandalwood oil; the silk industry; tea; coconuts, and cinnamon harvesting and preparation for marketing. The seaport of Colombo: important buildings, street scenes, shipping. 1 reel—$24.

HYDERABAD
The city of Hyderabad—street traffic and railway station scenes. The minting of state coins and the printing of postage stamps. Agriculture—the cultivation of rice and sugar cane; threshing pulse. Cottage industries such as rug weaving and the weaving of metallic fabrics; fine embroidery, silver filigree and inlay work. Action scenes showing educational work—a mosque school; activities in the secondary schools and in Osmania University. 1 reel—$24.

Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.
Five Sound Kodascopes

Five new 16mm. sound projectors—priced from $295 to $320, and covering the widest possible range of school, industrial, and home needs—are announced by the Eastman Kodak Company, Rochester, N. Y. Similar to one another in exterior design, but differentiated in power output and other features, these Kodascopes offer a complete line from which to select a model that precisely fits existing projection requirements. Each projector is equipped with 2-inch f/1.6 lens but a choice of six lenses is available, in focal lengths of 1 to 4 inches. Available power output ranges from 10 watts up to 40 watts. All models accommodate 1600-foot reels, and are compactly designed for ready portability. Efficient, durable mechanism has been employed throughout. Special provision is made for smooth, unvarying movement of the film at the point where it is “scanned” for sound—an essential factor in obtaining the highest quality of sound reproduction—and either variable area or variable density sound films can be used with all models.

Lowest in price is the Model FS-10, which sells for $225 complete with 750-watt lamp, and all tubes. It has a rated output of ten watts, and operates only on A.C. The projector and speaker are built into one compact case which divides into two sections, one containing the 10-inch speaker, the other serving as a platform for the projector.

Sound Kodascope F operates on D.C. or A.C., and has a built-in motor generator to supply the right kind of current needed for the various electrical mechanisms, and a jack for microphone or phonograph pick-up. It comes in two cases, with brackets in the speaker case to hold a screen. Its price is $370.

Model FB is similar to Model F, but mounted for projection in a sound-proofed “blimp case.” Top of the case conceals 4-inch supporting legs for the projector. It sells for $400.

Kodascope FB-25 is available either with a single 12-inch speaker or with two speaker units, allowing the full rated capacity of 25 watts to be used. It has a sound-proofed blimp, and a jack for microphone or phonograph pick-up, which permits sound from either one to be mixed with sound from the film track. Prices are: with single speaker, $425; $450 for double.

Model FB-40 is almost identical in appearance with FB-25, but has a capacity of 40 watts, operates only on A.C., and is supplied with double speaker and separate jacks for microphone and phonograph pick-up. Priced at $520.

FILMSTRIPS ON SAFETY

Five new silent 35mm slide filmstrips, dealing with school safety, are offered for sale by National Safety Council, Inc., 20 North Wacker Drive, Chicago. Titles are: Play Safe, In Case of Fire, Safety on Two Wheels, Tom Joins the Safety Patrol, and Home Safety. Designed to provide effective safety teaching aids, these five films have been carefully prepared from authoritative manuscripts.

New Picture Unit on Americanism

Informative Classroom Picture Publishers, 48 N. Division Avenue, Grand Rapids, Michigan, have completed a new unit in their teaching picture series, Americans All—The Builders of Our Nation (1776-1941), consisting of 24 pictures — 8½x11 — with accompanying functional text. The set presents inspiring and vividly illustrated biographies of men and women who have helped build the nation — heroes of statesmanship, science, invention, exploration, medicine, art, music, industry, and other fields of service. They are not the only great men and women of America; but all have faced and overcome handicaps and won for themselves and for all of us some great victory. This unit is a timely contribution to the teaching of social studies and, particularly, of Americanism.

The text has been written by Marcellene Barnes who is a member of the Michigan State Curriculum Steering Committee, and by Barbara K. Anthony who is the Elementary Supervisor of the East Grand Rapids Schools. Many well known educators have participated in the planning of this new series which has been in preparation for nearly a year.

DEVELOPMENTS AT BELL & HOWELL

Bell & Howell announces that sound films now may be run on all new 16 mm. Filmo silent projectors. The sound, of course, will not be reproduced, but there is now open to owners of this popular projector a vast new field of entertainment and educational films. No longer need the owner of silent equipment be prevented from enjoying interesting and instructive films available only in sound versions. Also, the new Filmo silent projectors will eliminate the possibility of damaging the sound track should sound film erroneously be threaded on the silent projector.

New Recreational and Educational Film Catalogs, listing and describing both sound and silent films, have just been released by the Filmsound Library.

Rounding out the Filmo line of faster, fine quality, 16mm. projection lenses of the longer focal lengths, Bell & Howell introduces new “Incredible” 2½-inch F 1.65 and 4-inch F 2.5 projection lenses, which are said to provide greater brilliance, maintaining the high optical quality for which the slower lenses were noted. The 2½-inch F 1.65 lens is priced at $30.00, while the 4-inch F 2.5 lens costs $17.50.

For further particulars write to the Bell & Howell Company, 1801 Larchmont Avenue, Chicago, Illinois.

(Concluded on page 138)
At many points in the educational program, motion pictures with sound possess definite proven advantages over other types of visual aids. With the many improvements in sound-on-film projectors — and the new lower price levels — all educators should once more check into the possibilities of utilizing fully this latest aid to effective teaching. Today, every school, regardless of size, location limitation of physical environment or finances, may now provide equal learning opportunities with the aid of Amprosound 16 mm. motion picture projectors. In collaboration with educational film libraries, a program may be planned which will make an outstanding contribution to any school and community. Ampro Educational Dealers are trained especially to provide service and information on all phases of Visual Education.

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(ES 341)
Slidefilms for Pilot Training

A new visual course is helping to speed up ground school instruction of pilots in scores of pilot training centers throughout the country. It is the first step-by-step pictorial explanation that has been made of the subjects making up a ground school curriculum. In this new aviation course there are 24 slidefilms which tell the pilot what he needs to know about his airplane, the air in which he flies, and the ground over which he travels. It contains the bulk of the information concerning civil air regulations, navigation, and meteorology. Other subjects in the course, are aircraft engines, aerodynamics, instruments, and parachutes.

There are 1,724 pictures—diagrams, photographs, drawings, and charts—in the course. They give striking illustrations of traffic rules of the highway, portray weather in the making, show how lift is created, and how air flows over a wing. They clarify such problems as what is meant by power loading and wing loading, magnetic variation, the inner workings of flight instruments, the principles of combustion and engine operation, and the new radio procedure at control airports.

The Pilot Training Course is already being widely used by universities, junior colleges, high schools, and by operators training non-college groups under the Civilian Pilot Training Program franchise. It is even being employed in some Canadian training centers.

The film course, which is the product of the Jam Handy Organization, 2821 E. Grand Blvd., Detroit, Michigan, is based on the official ground school material of the Civilian Pilot Training Program and checked and approved by the Civilian Pilot Training Service of the Civil Aeronautics Administration.

Current Film News

(Concluded from page 134)

- Nu-Art Films, Inc., 145 West 45th Street, New York City have added a number of two-reel comedies and musicals to their releases, including The Stupor-visor, with Jack Norton and Kitty McHugh; Foolish Hearts with Phyllis Brooks and Tony Martin; What’s Lamey New, with Billy Gilbert and Jack Norton; A Werdine Story with Lew Fields and Frank Lyman.

- Swedish Travel Information Bureau, 630 Fifth Avenue, New York City, have several 16mm educational films on Sweden which may be booked on payment of transportation charges and handling free of 75c per reel for sound films, or 50c for black-and-white silent subjects.

- The sound films are provided with explanatory comments in English. Titles are Child Welfare in Sweden, Physical Training in Sweden, Swedish Industries, Sweden at Work and Play, Scenic Sweden. Three travelogues on Sweden are available in 16mm silent with English text.

- They also rent three films released by the Harmon Foundation: The Land of Sweden, Consumers Cooperation, and Agricultural Cooperation. These are two-reel subjects and available in color as well as black-and-white.

- Lester H. Kohn, 11 West Mosholu Parkway North, Bronx, New York, rents or sells two editions of a film on lithography, namely:

  The Technique of Lithography—2 reels, 16mm silent—dealing comprehensively with the production of a lithograph as a work of art, from the graining of the stone to the pulling of the final print.

  Making a Lithograph—1 reel, 16mm silent—a concise edition of the above.

The Educational Screen

Garrison Films, Inc., 1600 Broadway, New York City, reports in production a series of five Spanish Language Teaching Films, 1 reel each, 16 mm sound, designed for classroom use in high schools, colleges and adult education groups. The first subject is titled:

This Spanish Speaking World, with contents described as background documentation concerning the Spanish language and culture. The remaining four subjects cover respectively Pronunciation, Vocabulary, Idioms and Conversation. It is expected that these films will be ready for release April 15, 1941.

Garrison also announces the availability in 16 mm sound of the following foreign language features:

- Harvest—based on the novel by Jean Giono.
- Maria Chapelandina—from the story by Louis Hemm.
- Heritage—from the drama by Felici y Codina.
- Le Bonheur—based on story by Henry Bernstein.

- Norfolk and Western Railway Company, Roanoke, Virginia, is distributing free, through its Advertising Department, a new color motion picture, entitled:

The Power Behind the Nation—16mm sound, running time 38 minutes—depicting the importance of the bituminous coal industry to the economic life of the nation. Scenes in full color picture the origin of coal, mining, processing, transportation, distribution, uses as a fuel and as the source of countless valuable by-products. Narration is by Bob Trout.

- National Tuberculosis Association, 1000 35th Street, Washington, D.C., has completed a dramatic film designed especially to show the relationship between rehabilitation and the rest of the tuberculosis program. It is available free through affiliated state and local associations.

- They Do Come Back—16mm and 35 mm sound, running time 20 minutes—tells the story of a young couple who plan to marry but tuberculosis interrupts their plans and threatens their lives. The health facilities in their community give into action, Roy is restored to health and finds employment where his health will be safeguarded. The facilities for diagnosis, hospitalization and rehabilitation are vividly portrayed. Alois Havilla is the narrator.

- Weyerhaeuser Sales Company, Saint Paul, Minnesota, is preparing for free distribution a new 35mm technicolor and 16mm kodachrome sound production:

Trees and Homes—a sequel to Trees and Men, which has been in use since 1938. The new subject was filmed at the logging and mill operations of the Weyerhaeuser Timber Company at Longview, Washington. Producer of the film was James E. Fitzpatrick, well-known for his Traveltalks.
Also for the Visual Field—

"1000 AND ONE FILM DIRECTORY"

"1000 and ONE" "The Blue Book of Non-Theatrical Films," published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

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The first Supplement is ready—presenting, on 50 standardsize library cards, evaluations totalized from multiple judgments of the 50 films most widely used and scored—after actual classroom use—by the Judging Committee of 500 Teachers under the National Film Evaluation Project. Each succeeding Supplement will carry the next 50 films to attain their quota of Score Cards from the Committee.

Price per Supplement, with full explanations accompanying, 50 cents (postpaid if sent with order). (Sold only to owners or purchasers of "1000 and ONE Films," 10th edition).

VISUALIZING THE CURRICULUM

By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presees in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Throughout the text, the theory of visual aids is applied to textbook illustration. "Visualizing the Curriculum", itself a splendidly "visualized text", provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

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THE AUDIO-VISUAL HANDBOOK. (3rd Edition)

By Ellsworth C. Dent.

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."


PICTURE VALUES IN EDUCATION

By Joseph J. Weber, Ph. D.

An important contribution to the literature of the visual field. Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph.

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EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.


THE EDUCATIONAL TALKING PICTURE

By Frederick L. Devereux.

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of education. The first six chapters deal with the development of fundamental bases of production, with the experimentation which has been conducted, and with suggested problems for future research. The remaining chapters discuss the effective use of the sound film in teaching.

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**PICTURES**

**Informative Classroom Pictures**

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(See advertisement on page 131)

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Address communications to The Educational Screen, 64 East Lake St., Chicago, Ill.
A School-Made Film Which Stands on Its Own Feet

School-made films too often come out like home-made candy—all right for passing around to the family but not quite good enough to put in a store window. Too often the trouble has been that they have not started out in the beginning with anything particular to say and have made, perhaps, a record of school events or some local situation which is not understandable or applicable to people outside of the particular city or town.

The Harmon Foundation, in its Division of Visual Experiment, has been very much impressed within the last few months, however, in watching the work of a group of junior high school boys and girls in Norfolk, Virginia. The visual interpretations which they have made have been the outgrowth of their study and have substituted somewhat for the usual homework assignment papers which are turned in, graded, and that's as far as they go. In this case the "homework" serves a real tangible end and is available to a number of other young people in quite an understandable form. The young people who made the film have also actually experienced some of the things they were studying.

Their work in filmaking came about as the result of the interest of one teacher, J. J. McPherson, who had a photographic turn of mind. He found little difficulty in training the young people or arousing them to the idea of planning their studies in visual terms. Three films were made last year at the Blair Junior High School under his guidance. These were one short subject entitled *Patches In The Making*, in which it is sought to bring out the planning that goes into the presentation of a school play and how all departments of a school may cooperate to bring about a successful production; another film was entitled *A Personal Assignment* and this has to do with vocational guidance, where a boy and girl are both given an assignment to interview a vocational guidance expert in the city. As they talk to him, various scenes are shown to illustrate the advice he has given them. The third film, which is the only one more than a reel in length, is entitled *This Is Our Challenge*. It is the last film which has achieved the widest notice already and about which we wish to make particular mention.

This film was an outgrowth of the study of housing which Mr. McPherson took up in his civics classes and represents how a group of boys and girls in the eighth and ninth grade years can make a real, practical application of their school work, "In their study of major civics problems," says Mr. McPherson, "I encouraged my students to work out concrete projects. While they were studying housing conditions in Norfolk, a number of students decided that they would like to make a short movie in which conditions in Norfolk's slums could be shown and an answer to the problem could be given. Other classes in previous years had presented housing plays before the auditorium, built scale models of blocks of good and bad housing from actual surveys of slum property and drawn large numbers of posters. These students wanted to do something different and leave something behind as their contribution to a study of this problem. Since three classes were studying the same material, the class in which the idea originated decided to make the undertaking a joint project of all the 9B classes."

But how would you finance such a scheme? This is a question which would quite naturally come up. 8mm film was first thought of because the cost was so much less, but the students themselves had an idea that the 16mm film might make the finished product more widely available and decided to go ahead with it and then set to work to find their means of paying for it. *Twelve dollars* was donated by the principal of the school from his office funds, but in figuring up the costs it was clear to the young people that this was not enough. "Finally," says Mr. McPherson, "one chap suggested that we sell stock in the enterprise and then charge an admission fee and pay back the stockholders as much as possible. This idea was adopted. A business manager and two assistants were elected and a form for the stock certificate was adopted. After an actual share of stock was brought to school and examined, an art student in one of the classes drew the approved certificate form and then cut the mimeographed stencil. Each share of stock sold for 25c. Approximately $40.00 worth of stock was sold in the three classes.

With this amount of money in hand, it was possible to plan the actual production and outline the various kinds of work that had to go into the making of the film. There would be the research and planning of the scenario; there would be the photography, the selection of the sets, the props, the doing of the actual work on the photography; and there would be the titling and editing of the finished film, and finally, of course, someone in the group would have to do the pushing for distribution so that some of the original cost could be paid out.

After all these plans were outlined to the boys and girls, they were called upon to designate which phases of the production work interested them. The first committee which was selected was that for script writing and was composed of about six students. This group Mr. McPherson took on a tour of some of the slum areas so that they might get their ideas first hand as to what to cover in the script. This was quite properly included as a part of their research work but they...
had gone somewhat further than might have been the case in just a book study and paper assignment on local housing areas.

Much of the research for the script was taken from Mr. McPherson's own notes. As the teacher of the subject which considered the housing problem, and as he had given particular emphasis to this phase of civic life, his reference material was most readily available to them. "The writing committee," he says, "referred to their notes for facts and were able to draw upon observations made while on a class tour of slum areas for ideas. During class bells the entire classes were asked to suggest thoughts." One of the lighter notes in the film shows the slum woman rolling out some dough and reaching out to crush a passing cockroach. She returns immediately to her food preparation. "This," he states, "was one of the gems that an enthusiastic youngster produced. He will probably end up writing for pulp magazines or illustrating comic books."

"For two weeks the writing committee met after school every afternoon for about an hour to work on the scenario," Mr. McPherson related. "The group would gather around in a circle and begin to make suggestions. First the outline for the story that we wanted to tell was evolved. Then the scenes needed to portray the story were suggested and desirable titles were jotted down. Five or six times the whole scenario was revised and rewritten to smooth out the whole continuity as best the group could."

Some of the by-products of this script work are also mentioned by Mr. McPherson in that he found it was necessary for him to correct English constantly and to suggest an occasional word or phrase which would bring out most effectively what some student had expressed. It would seem that the young people had a coaching in English quite as well as they did in their civics and film making.

It was from the class itself that the two camera men were chosen, and others who formed the production crew, two boys to act as property men, one to act as script boy who also took down information regarding exposure and scenes, and two make-up girls. The cast of characters was also selected from among the pupils and none of them had had any dramatic experience before. The actual photography in the film was done by these two young school boys with the exception of a few scenes. The boys measured all distances from the camera but did depend at first on Mr. McPherson in the reading of the exposure meter for the lens aperture that would be used.

Of the actual problems in the photographic work, they encountered the usual number of technical difficulties. "First we needed equipment," reported Mr. McPherson. "Since photography is my hobby, I had lights that might be used, but we needed a camera and a photo-electric cell exposure meter. A local supply store loaned us a 16mm camera and I myself gave the exposure meter for a Christmas present. The sale of stock provided money to buy film and we were ready to shoot. Later one of the boys borrowed a Victor-5 16mm camera, which we used for the remainder of the filming. It was necessary to experiment with a roll of film to get correct exposures for our film. It was found necessary to build a titler, as well, and to test it with a few feet of film before shooting our titles."

As the theme of the film covers slum areas and then goes on to show what has been accomplished in certain localities in the way of good housing in slum areas, it was necessary to select the sets that would be used. Exteriors of slum areas were easy to find and to photograph. This was done in one Saturday when the entire production crew of Mr. McPherson's classes descended upon a local area in two cars and a myriad of bicycles and set up the camera for the shooting. A considerable amount of interest developed in the locality, but in spite of this there is a minimum of "camera niggling" and a sparkle and naturalness to the scenes.

The problem in this connection that did present itself was in finding an interior of an actual slum home. It was finally decided that this should be set up, on the basis of the research which had been done, in the coal bin of the school. As Mr. McPherson relates, "Some old pieces of scenery, which had seen their best days, were appropriated and painted a drab gray to resemble dirt-encrusted walls of the home in which the property men had gone to get ideas. Finally, one Saturday morning, all was ready and lights were arranged. The camera man was set to do his shooting when suddenly a phone call came from the office of the Superintendent of Education in Norfolk. He had decided it was best not to use the building as the location for a slum movie. The disappointment was crushing. But the gang got busy and carted the entire set outside into a vacant
The order, work, mighty model long do visual the a better difficulties. This their up practicality to 9x12 what A they feature time one the ii

Three shots from the film “This Is Our Challenge.”
Top: Norfolk’s housing conditions for Negroes.
Center: Housing at its worst, indicated by students.
Bottom: Sanitary equipment, a feature of model housing.

lot next to the school and set it up again. This time nothing but the high March winds interfered and the scenes were all taken by lunch time.” The wind is translated in the film itself in the blowing hair and dresses of the young actors and actresses, and as Mr. McPherson states, gives the appearance of a mighty drafty house.

The good housing sequence was photographed in a Farm Administration project called Aberdeen Gardens Settlement, located at Newport News. Here, again, the photography was done on Saturday.

When the film was first planned, a boy and a girl from the group who were able to do lettering were selected to make the titles. This they did on a 9x12 black cardboard, using a speedball pen and speedball white ink. Their work shows up very effectively in the film, not only from the point of view of their lettering, which is somewhat similar to what might be seen on a blackboard and gives that effect, but also from the angle of wording of the titles. They are simple, direct, and in many cases, as quick to create a visual image as pictures would be. A home-made titler, which appointed members of the class had constructed themselves, was used to photograph the completed titles and this was accomplished all at one time for all three of the films which were made.

The editing was pretty much supervised and carried out by Mr. McPherson, himself, although the processed film, as it was returned from Eastman, was previewed by the class members and the scenes were cut apart and spliced together according to the scenario plan.

Mr. McPherson emphasized the fact that any student production must have some adult supervision. “The students learn,” he says, “by having the teacher explain why one thing might be a better procedure than something else. It was necessary for me to work closely with all committees to keep them to their purpose. In a totally new undertaking, such as this, students of thirteen, fourteen, and fifteen, the age group with which I worked, would become discouraged at an early date if the teacher did not show them how they could overcome difficulties that confronted them.”

In the light of his own experience, Mr. McPherson makes five recommendations in order, as he says, to increase the practicability of using the making of motion pictures as an educational device in high school. First, he would limit the scope of the film to material that can be covered on film in not more than ten to fifteen minutes showing time. This would be a one reel subject. The housing film, he believes, should have been made in two parts. Second, limit the production time to a period not to exceed a month, and preferably not to exceed three weeks.

This Is Our Challenge was begun the first of March and was not completed until the end of May. “In the meantime,” he says, “the classes had finished the study of housing and had gone on to a number of other topics. The scenario called for locations that were hard to get and the cast was large enough to make it difficult to find a time when all could be present for filming. It was carried on outside of class, for the most part, and placed a great burden of extra work upon the teacher and the students for a long period of time. The expense of the undertaking was large in proportion to the relatively few students who were able to take an active part in the work.”

Third, plan to use this work as a means of allowing above-average students to develop abilities that are not taxed by ordinary classroom work. Fourth, allow free time in the schedule of any teacher who is to do this work. It calls for an enormous amount of planning in order to make it effective for the pupils. The amount of free time would necessarily depend upon the extent
of the film production work to be done, but the conducting of a project of this sort is easily equivalent to the teaching of an additional class each day.

Fifth, be sure that the students who wish to work on the film do not have other obligations that will prevent their participation in the activities of the group at frequent intervals. He believes that for those students who did participate in the production of this and the other films, the experience was most valuable. One of the values was in the spirit of cooperation which it developed. "The group," he says, "found it necessary to work together in order to get things done. Obstacles arose that required self-sacrifice and extra effort. Students of varying degrees of ability worked at the task that they were able to do and all felt a distinct sense of achievement as the project matured. They worked not so much for grades as to accomplish the job that was assigned to them. They were told that a grade could not be given on the work. They saw the necessity for discipline during staff conferences and during the filming of the scenes and most of them responded to my request for good conduct in an amazing manner—which was a lucky thing, because there were times when I was in no mood for horse-play. The willingness of the members of the production staff to carry out work assignments was also most pleasing. Sometimes they didn't know exactly how to do something, but they would always try."

This year the group is making a film which will show the activities of the various school clubs. This film is to be used as a public relations medium and also, it is hoped, will give new students some idea of the work of each of the clubs. It is expected that the film

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THE sudden death of Herman A. DeVry on March 23rd, 1941, removed an outstanding figure from the field of visual education and a greatly beloved man from his enormous circle of friends.

We have often pointed out that the development of the visual instruction field was possible only through the activities of business firms in that field. Visual education’s debt to the commercial producers of its material is probably greater than that of any other field of American education. Millions of dollars had to be spent in experimentation and test, invention and design—in chemical, optical and mechanical research and construction—in endless modifications and refinements, adoptions and rejections—to bring to the visual field the material available today. These millions would never, could never have been forthcoming for the benefit of the school field save from great commercial resources devoted to the heavy task. This development, over the period of a full generation, required great risk, great patience, great conviction. The commercial field has measured up to these requirements. An outstanding example of such achievement was Herman A. DeVry.

It was a colorful and strangely varied career that lay ahead of the nine-year-old boy who came to America from Germany with his parents in 1885. At the age of 18 he began his "business career" selling barber’s supplies in Texas. Shortly, further north, he was retailing skates and baseball gloves across a counter. He ran "motion picture theatres," such as they were in that day, in Galveston, Texas; in Bisbee, Arizona. But inborn genius for things mechanical soon gained ascendancy. He was now running a bicycle-repair shop in Denver, Colorado; then, an electrical fixture shop in Tulsa, Oklahoma, where he became Tulsa’s official City Electrician; there also he built an airplane! Tulsa newspapers, carrying accounts of his recent death, headlined him as “Tulsa’s First Airplane Builder.” He built intricate apparatus for stage use by Thurston and other magicians. Finally, about 1911, he came to his permanent home, Chicago, as cameraman with the Rothacker Corporation, and in his own cellar began spare-time work on his "first portable motion picture projector" for the visual field. To help the financing, he built Calliopes for circus use, his devoted wife doing the tuning which was beyond him. Another product of his tireless energy was a composite travel film, “Around the World in Ninety Days.” When Douglas Fairbanks brought out “Around the World in Eighty Days” in 1935, "H. A." remarked characteristically, “Well, in twenty years Doug’s only beaten me by ten days.” The full story of Herman A. DeVry’s career is of course included in Arthur E. Krow’s history of the field, “Motion Pictures—Not for Theatres,” which appears regularly in our pages.

We first met “H. A.” personally in 1919. From then on to the end it was our privilege and pleasure to be in close and continuous touch with him as an esteemed friend, the last contact being a telephone conversation on the last day of his life making a lunch date for “day after tomorrow.” We knew from intimate interviews his teaching plans, his boundless enthusiasms, his innate pioneering instinct, his fertility in invention, his genius for mechanics, and his varied and notable contributions to progress in the field he loved. But great as were his technical and commercial achievements, our warmest regard was for that unforgettable personality, compounded of deep humanness, utter sincerity, genial humor, staunch devotion to the field he believed in so completely, and generous sympathy and unwavering loyalty to his friends and fellow-workers down through the years. At his death he had just completed for the market a new projector with unique and distinctive features. His two sons, Edward B. DeVry and William C. DeVry, who have long been able associates of their father, will carry on the work under the same name and policies. The name of DeVry will live on in the history of the visual field to which he gave unstintingly his best years.
A brief summary of a noteworthy teaching procedure whereby 2 x 2" slides and records supplement films.

EARL B. MILLER
City Schools, Richmond, Indiana

The relative educational value of slides or movie films depends upon the nature of the results expected. In most pictures both stills and movies are desirable; the movies being of value where action is an essential factor. A picture of a football game, for example, would be more exciting if the entire picture were in motion but coaches may prefer slow motion or even a still picture for detailed study.

In showing many educational films there is a desire to stop the projector and view a single frame as a still or to have slow motion on the film. Both procedures have their disadvantages. In the first place stopping a sound film is out of the question. Silent projectors are sometimes provided with a stopping device but the results are often unsatisfactory. In order to protect the film, the brilliancy of the projection must be greatly reduced which results in a displeasing effect. Slow motion has its place but it requires a great amount of film, and still pictures might give as good or better results.

Since some parts of a picture are more desirable as stills and other parts would be dull and uninteresting without the action provided by motion pictures, it occurred to us that the best results could be obtained by a combination of stills and movies. A difficulty here presents itself. If slides and movies are to be used intermittently throughout the showing the presentation would necessarily have to be done by the instructor who has thoroughly organized his procedure and by no other person. Since it is sometimes necessary for student projectionists and other teachers to show the pictures we can readily see the problem.

We think the problem has been solved through our set-up. Our pictures are taken on both stills and movies. All scenes that lend themselves to still projection are photographed on 2"x2" slides or on 35mm. strip film.

In order to add sound, which is usually desired, we make recordings on 10" phonograph records. Inexpensive recorders have recently been so greatly improved that reproduction is quite satisfactory. Improvements have also been made so that record wear is greatly reduced.

The editing consists of cutting the film into the desired parts and inserting short strips of dark blank film. These blanks serve as a signal for the operator to switch to a still picture. The 35mm. strip or the 2"x2" slides which have been previously arranged, preferably in an automatic slide changer, are switched on by a 2-way switch. The slide projector and record player are connected to one side of the switch while
A School-Made Film Stands on Its Own Feet

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will probably be completed in a short time—well before the strenuous period at the end of the school year.

That the training in film work of the previous two years has been helpful is quite evident, says Mr. McPherson. "I hated to see this first session close because some of the boys and girls who have worked with me in film production for two years are going to the senior high school. They had become so proficient that I could send them out alone to take almost any type of shot, interior or exterior, and they could handle it beautifully. The first couple of hundred feet of the activities film (this year's production on extra-curricular school work) they have done almost without advice and have produced results that technically are far superior to the photography in the housing film."

So much interest from outside persons, including the Farm Security Administration, whose project was shown in This Is Our Challenge, developed under its own momentum that it was necessary to have a copy made for distribution. From the Wheeling, West Virginia, Housing Authority the following statement was made: "The cinematography group of the Ohio Valley Camera Club gave it the first viewing on Monday evening and were high in their praise of the good quality of the editing, titling, and the photography itself. Later in the week it was used four times at Linsley Institute (Boys' Junior College) where the dean was prevailed upon by some of the students for permission to do a similar job. Equally good reports came back from the principals of Madison School and Warwood High School and from Thompson M. E. Church, where two Boy Scout troops gathered to see it. The Y.M.C.A.

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MOTION PICTURES NOT FOR THEATRES

By ARTHUR EDWIN KROWS

The younger critics, ever ready to depreciate the findings of experience in which they did not happen to participate had only to look back to 1915 to see virtually all of these methods full blown in Mack Sennett's Keystone Comedies, if they did not care to go further back to the days of Eclair, Thanhouser and Lubin. But in those far-off seasons films had been despised by the intelligentsia, and fledglings reviewers were conscious of nothing but the echoing scorn. This foreign resurrection now was new to them, and they hailed it as progress. So Hollywood producers said, "If this is what the public wants, let us revive it too." Forthwith they turned their better equipment to imitations of the fashion, but down in their hearts their seasoned convictions remained, and they heaved a sigh of relief when the fad began to wane. Nevertheless, this disturbance of slowly perfecting professional method has proved useful in reminding true artists of resources which might otherwise have been forgotten or ignored. And, with schoolmen now attentive for being at the awakening of a visual education movement, this fact alone had an added importance non-theatrically.

When the native reaction was at its height, the services of cameramen who could best perform these fantastic tricks were at a premium. Carl Gregory could accomplish most of them at home on his celebrated optical printer. It would have been child's play also to John Holbrook. But they were "old-timers," and the present demand was for "new blood." None in this eddy of the youth movement reached the temporary fame of Alvin Knechtel, a clever young photographer whom I knew when he was an obscure but promising technician at Pathé. At the proper juncture of time and tide he found a place for his especial talents. He rang the changes on multiple exposures, shooting through prisms, zooming and performing other cinematographic slight-of-hand to the mystification and presumed delight of new audiences. In Hollywood he even attained the distinction of being credited on main titles for "camera effects," a precedent which his fellow-workers in the line were quick to seize for themselves. Then, as Alvin Knechtel became prosperous, he was able to indulge in his hobby of flying. About 1930 his ship crashed and he was killed.

The Puppeteers

In this period of the early twenties, attention was drawn to a fresh departure along a road opened long before by Commodore Blackton, when he worked magic with animated toys, and more recently noticed when Jack Leventhal made life patterns with blocks to train the soldiers. For this newest spurt that versatile genius, Tony Sarg, the illustrator, was in a way responsible. About 1915 Sarg, financed and otherwise encouraged by the noted stage producer, Winthrop Ames, had turned the main stream of his abundant energy into giving marionette shows, thereby becoming the acknowledged "father" of the modern puppet movement in America. The idea of presenting the puppets in films was in natural sequence, and there presently came to pass a series of novelty shorts entitled "Tony Sarg's Almanac." For this release Sarg prepared a number of comic episodes performed in silhouette by "prehistoric" characters. Unhappily they were not especially funny, but they were masterpieces of detail in motion.

To the uninitiated they seemed to be just extraordinarily smooth animated drawings. Actually, they were pictures of beautifully articulated, two-dimensional shadow puppets, clearly inspired by those of the old Chinese shadow theatre, photographed, however, by the well known animation "stop-motion" principle. As shadow plays these were not the first upon the screen. A recent series of silhouette performances on the film had been that entitled "Inland the Sailor," produced with human figures by the illustrator C. Allan Gilbert, under the Bray patents, and released through Paramount beginning January, 1916. So far as puppet plays in celluloid were concerned, they also had been occasionally known. One of the earliest in my own recollection was a marionette baseball game in Gaumont's "Reel Life," about October, 1916.

Sarg, with his manifold interests, was obviously too busy to execute the appalling amount of labor involved in these productions personally. That phase was cared for by Herbert M. Dawley, artist and actor. Herbert Dawley outfitted a small studio in his home town of Chat ham, New Jersey, not far from New York City, acquired a modest, but enthusiastic and efficient staff, and went to work.

With a camera poised overhead, Major Dawley photographed the silhouetted figures, but then, with a new kind of camera, substantially the same arrangement used for animated drawings save that his field of camera vision was much larger than usual. His animation table was so very sizeable, in fact, that he and his entire technical staff could sit upon it to confer, and frequently did. The cut-out figures representing human beings were, I believe, approximately four feet tall, with all other surrounding subjects in proportion. The articulated joints were moved bit by bit between exposures, with a mathematical accuracy, the foreign jolt to attention had an added importance non-theatrically.

When the native reaction was at its height, the services of cameramen who could best perform these fantastic tricks were at a premium. Carl Gregory could accomplish most of them at home on his celebrated optical printer. It would have been child's play also to John Holbrook. But they were "old-timers," and the present demand was for "new blood." None in this eddy of the youth movement reached the temporary fame of Alvin Knechtel, a clever young photographer whom I knew when he was an obscure but promising technician at Pathé. At the proper juncture of time and tide he found a place for his especial talents. He rang the changes on multiple exposures, shooting through prisms, zooming and performing other cinematographic slight-of-hand to the mystification and presumed delight of new audiences. In Hollywood he even attained the distinction of being credited on main titles for "camera effects," a precedent which his fellow-workers in the line were quick to seize for themselves. Then, as Alvin Knechtel became prosperous, he was able to indulge in his hobby of flying. About 1930 his ship crashed and he was killed.

Herbert M. Dawley's startling recreations of prehistoric life opened a new vision of possibilities in using movies for teaching apparatus.
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cators admired, but could not afford to buy. A few industrialists consented to try the technique, but the Major was not completely frustrated. Like Tony Sarg, he was blessed with other fascinating abilities. For instance, he was a puppeteer, and a good one. With his marionette companies he went on tours. He appeared in other plays. He painted designs. Over the pleasant countryside where he lives, they still talk about his stirring performance at the local little theatre in Barrie's "The Old Lady Shows Her Medals." I recall his efficient stage management of a new Broadway play by Austin Strong. He has taken from an overnight case in my office, and walked across the floor for my pleasure with an uncanny simulation of life, a yard-high Ichabod Crane that had entertained thousands in Dawley's own dramatization of Irving's "The Legend of Sleepy Hollow."

While working with two-dimensional figures in time-lapse or stop-motion photography, Dawley had been devising ways and means to present three-dimensional animated figures on the screen. Of course, regular marionettes might have served here, and, when it came to presenting persons, what could be said against trained actors? Merely that Dawley was thinking of simulating a life which mankind supposed to have existed but probably never actually knew, the period of the dinosaurs and the other strange creatures of a fabulous, prehistoric world. Cuvier may have "restored" a fossil beast from a single remaining bone, but Dawley planned to show the same animal living and breathing. As a puppeteer he understood action in the third dimension as a motion picture technician he understood the intricacies of photographing arrested motion; Sarg and he had long been intrigued by dreams of those dimly distant fairy tale monsters, and—why not try it?

Accordingly, late in 1918, Dawley re-leased a single reel subject called "The Ghost of Slumber Mountain," in which prehistoric monsters were shown in credible motion. It attracted attention briefly, and then, being followed by only another of the same sort, "Along the Moonbeam Trail," became quickly forgotten, save for the fight between a dinosaur and a brontosaurus, which reappeared in later years as introductory material for instructive pictures dealing with the history of the Age of Reptiles. Bookers remembered "The Ghost of Slumber Mountain" a little longer than usual because it was reported that its foreign rights had sold for the highest sum then paid for a one-reeler. If the educators noticed it, they made little or no comment, and seemed to have been stirred to inquire into further possibilities. Yet, both subjects mentioned were shown currently before the American Society of Zoologists.

The evening of June 2, 1922, at the Hotel McAlpin in New York City, the Society of American Magicians gave a testimonial dinner to Sir Arthur Conan Doyle, the English author, creator of Sherlock Holmes, spiritual leader. It was a long session filled with mystifying demonstrations. At one o'clock in the morning Sir Arthur presented his own "act," which proved to be a motion picture of renowned "psychic" and "preternatural." The reel had been produced, Sir Arthur confessed later to his friend Houllini, as part of an intended picturization of his story "The Lost World." Major Dawley read the newspaper account of it to them immediately. He entered a strenuous protest, alleging infringement of his patents and declaring that he would halt the "Lost World" picture by injunction. The actual producer, it transpired, was Willis O'Brien, employed by Watterson Rothacker in Chicago. O'Brien was a native of Oakland, California, a former cartoonist on the San Francisco Daily News, and sculptor's assistant at the San Francisco World's Fair in 1913.

The statement, subsequently made by Dawley and presented at a meeting of the Association, revealed the basis of his claims and the extent of his labor to produce his own "dinosaur films." With the permission and cooperation of Professor Henry Fairfield Osborn, director of the American Museum of Natural History, he had made carefully-checked preliminary drawings of the evidences there concerning prehistoric life, and had squared each "key position" of his represented figures with paleontological data. His patents covered articulated metal skeletons, artificial sinews and an elastic substance of his own devising for hides. These secrets, he surmised, had been applied without authorization by a man who had formerly assisted him and afterwards worked for Rothacker.

To these charges there were added those of Catherine Curtis, who, with careless disregard of some other ladies in films, described herself as "the only woman producer," and stated that in July, 1920, she had purchased from Watterson Rothacker the screen rights to "The Lost World" with the understanding that O'Brien and Dawley were to be employed to work out models and plan the method of photography. But the storm presently subsided, without further squabbling in public, and several years later "King Kong" was greater, with O'Brien credited for the model work. Much later O'Brien also did the "miniature" animation for the sensational film of the same production order called "King Kong." Some of the interesting further history of the upright and righteously indignant Dawley will appear later in these pages.

I suppose that I myself was a lesser pioneer in puppet pictures, in the non-theatrical sense, at least. It all transpired about this same time, when Dr. Iago Galdston, supervisor of the New York Tuberculosis Association, as it was called then, decided to attempt such a film for propaganda purposes. Remo Buffano, who since has become celebrated in his line, was then a struggling puppeteer living in New York's Greenwich Village. He was eager to try out his little figures on the screen, and, lacking the money to do it himself, proposed that the Association should pay the actual out-of-pocket cost, he, Buffano, to supply the play, the puppets and the operators. Galdston agreed, and called in Carlyle Ellis, with whom I was associated at the time, asking him, on the same experimental basis, to contribute the film production factors first for nothing and then at cost. Ellis consented to the latter plan, and, knowing that I relished camera adventures, referred the production to me. The first reel of one reel, was to teach health habits to children, and the central figures were to be a princess, representing good health, and a dragon, symbolizing disease. Buffano, filled with the Italian puppeteer's usual plots of the crusading knights of Christendom and the wicked Moors, had written a characteristic story around these elements. I adapted it into continuity form, and, after the script had been approved, Buffano and his wife costumed the puppets and designed the scenery. The background was printed in the usual way, to be viewed from one position. But the camera requires many positions; so, while Buffano looked on a little disappointingly at first, we rearranged his settings for our varying camera angles.

We started at eight o'clock one morning in a back room of Frank Thenen's office suite in the Candler Building, Buffano, his wife, and a couple of other operators worked the puppets, and Walter Pritchard turned the camera crank. At five minutes to midnight we put the last reel, and of sheds opening, put us out. The resultant subject, "The Hungry Dragon," was well liked and saw long service.

The Surge of Color

Probably the greatest concerted efforts at technical improvement had been to find a non-theatrical natural color process. The synthetic methods had their place, but they were not accurate renditions of the original scene. It is no wonder that the theatres sought it, for color is emotional in its effects, but, in most non-theatricals where emotion in the popular sense was not favored, the need was pronounced, too. Surgeons wanted to be able to distinguish veins, tissues and bones in their films of operations; botanists required color for their flowers; industrial critics used it for natural color of fabrics and precise shades and tints in textiles.

To achieve this end Kinemacolor had made common property a useful principle known to scientists since 1861 when Clerk Maxwell had demonstrated it in a lecture before the Royal Institution in London. He mounted two separate photographs of the identical scene through red and green filters. By projecting the prints through similar filters simultaneously, or in quick succession, presto, you have a colored picture! I have tried very simply to make this simple to those who have never tried it. Kinemacolor used the succession plan, running its film twice as rapidly as the ordinary black-and-white kind. The immediate, serious drawbacks were that
usual theatre projectors were not geared to such speed, the filter mechanism was extra equipment, and, of course, no exhibitor wished to go to the expense of making such changes until he could be assured of a steady supply of popular pictures requiring them. A difficulty, which was seen to be greater than was at first suspected as the early novelty wore off, was that the range of red and green in those pigments does not fully match that of the spectrum. The three basic pigmen-
tary colors are, roughly, red, yellow and blue, and green is a combination of yellow and blue, which, on a filter does not resolve itself so readily into its compo-
ients. The primaries in light are different from those in pigments—red, green, and blue-violet. There could, of course, be a third filter and a third picture to corres-
pond, but the film would then have to be run at the tearing speed of thrice the normal rate.

The practical line of development seen through the years. The colors must be actually on each individual picture for normal projection without filters. That answer was worked out temporarily in the next successful process called Prizma, by William V. D. Kelley. Kelley was born at Trenton, New Jersey, in 1877, ended with a career in high school, and is said to have had his first important business experience working in depart-
ment stores. In his Prisma process he photographed red and green images, too, but, in printing, put them one behind the other, rather than back of the film, and colored them directly there. His experiments work had been about 1912, but his first important public showing did not occur until the evening of February 8, 1917, when Prisma was exhibited at the American Museum of Natural History in New York, with a lecture by Dr. Ernest Fox Nichols, professor of physics at Yale. February 20 it made its theatrical début at the Strand, on Broadway.

In September, 1917, it was announced that the world traveler, Dr. Edward G. Salisbury, would photograph pictures of China and the process. At a celebrated traveler, Dr. G. A. Dorsey, undertook to photograph the vessels of the U. S. Navy, and his Prisma films resulting were shown in the first week of January, 1918, at the 44th Street Theatre, New York City. Prisma, Inc. was now well launched, and a staff was organized. Among others engaged was Howard Gale Stokes, until then and for seven years previously copy manager of the New York Telephone Company. Stokes became production manager of Prisma. He knew Color Processes and a year later editor of the Capitol Theatre Colorland Review made by the Prisma process, and in 1920 executive vice-presi-
dent of Prisma, Inc.

Nearly fifty distinct color processes for films have appeared in the quarter cen-
tury reviewed by these pages, and most of them were known basically when Prisma was in the lead. Technicolor, which was to supplant Prisma in popularity, was known as a name, at least, in 1916, when the corporation started in Boston with a method requiring the projectionist to keep two separate color images in su-
perimposition. The two separate films bearing the images were each of only one-
half the thickness of regular film, and the presently realized scheme was to cement these together, making a combined positive which might be shown effectively on any regular black-and-white projector. In unformed “Rahto” or “Film Row” gossip, this was commonly referred to as a “split film” process.

In December, 1916, C. A. (“Doc”) Willat, a great favorite in New York’s motion picture circuit pictures, left for Jackson-
ville, Florida, with a company of players and production assistants, to make the first Technicolor dramatic feature, “The Gulf Between.” This production was shown completed to admiring reviewers on Broadway, October, 1917. The lackers had their troubles, however, and Prisma was not affected at once by the compe-
tition.

Associated with the Technicolor group, and destined to become the foremost fig-
ure in American cinema, T. K. Kaelin, a shrewd, able chemical engineer, He was a New Englander, about thirty-six years of age, graduate of and one-time instruc-
tor at the Massachusetts Institute of Technology, widely traveled, cultured, recently director of the Research Labora-
tory of Electro-Chemistry and Metallurgy for the Canadian Government. Under his firm hand the Technicolor process changed and grew into something finer and more practical. At various times in the long transitional period it resembled other existing processes, and usually on each occasion the “Technicolor feature” was produced. Among those other firsts have been “The Toll of the Sea,” with Anna May Wong, “The Black Pirate,” with Douglas Fairbanks, and “Becky Sharp,” with Miriam Hopkins. The “Black Pirate” period, about 1926, brought to the world the first Technicolor films. The “Becky Sharp” heyday, beginning in 1935, glorified a lithograph process called “imposition,” using three colors super-
imposed by gelatine matrices holding the respective dyes, over a black-and-white key image made from the green negative. For the non-theatrical producers who could not afford the rather expensive leading color processes—or could not obtain them at all because on small orders service sometimes could not be had for several months—Brewster Color, pro-
vided by P. D. Brewster, president of the Irvington Machine Company, manufactur-
ers of motion picture equipment in the New York metropolitan area, was fav-
ered until the gradual disintegration of the Prisma organization made that pro-
cess easily available.

The technicians divide color processes into two broad varieties, “additive” and “subtractive.” By the additive method colored images are obtained by mixing colored lights, in the subtractive the image is already in combined colors on the film.

About 1925 the forces were gathering to arrange a real American début of one more important color process. Still, even this had been invented as early as 1908, in France, The rights to that so-called Keller-Dorian process were bought about 1925 by the Eastman Kodak Company of Rochester, which renamed it Kodacolor and, because of certain mechanical limi-
tations and a desire not to disrupt exist-
ing theatrical color processes used by company customers, introduced it first for home use, outside the movie industry. 

—In 1928 (Kodacolor is not to be confused with the later and more generally familiar Kodachrome.) It has become known also as the “lenticular” method. A tri-color filter, in bands, is fitted to the lens or aperture of the projector. The filter itself is of an especial sort, being engraved with hundreds of tiny round bumps, each of which separately reflects the three colors of the filter and thus pro-
vides its own color separation of the light rays. Reliability is provided by the image. As it would be extremely difficult and perhaps impossible to make contact prints upon similarly engraved positive film, the negative is developed beyond the usual point to convert it into a positive. As a positive it is then projected, the color filter is used and the result upon the screen is generally very lovely. The only grave trouble is that there is but one print of the given subject, and no negative. Experiments which bear promise of providing prints are along the lines of re-photographing the projected image into a light-sensitive film. The Eastman Kodachrome process is “subtractive,” the film having several coatings, each layer sensitive to a differ-
ent color.

Commercial advantage in all of these processes requires long and costly development of a chemical process to produce duplicate prints of uniform quality. Production charges are gradually descending. Duplication of prints is not yet practical in all cases. The problem of their uniformity still has vexations aspects involving unsatisfac-
tory dyes, uncorrected projection lenses and uncontrolled projection light. Under unceasing, intelligent assault the problems are breaking down. Quite certainly the non-theatrical field will one day have col-
or, true in value, nominal in cost, plenti-
ful. But, in those early years of the visual educational films, pictures made in this way from the amusement screens, was just an empty dream.

Training the Teachers

With the first sweep of the post-war visual education movement it became in-
creasingly clear that a problem correla-
tive with that of providing school films was to train the teachers. Not how to apply them, that is (although that was a question serious enough), but how to obtain and operate projectors, how to splice film, how to care for the picture supply, and where to get all the various items required by the whole activity. It was especially this problem because so many eager school pioneers were depending for their results on second-hand machines and worn the-
atrical product. For those able to afford new equipment and lucky enough to have it, there were, of course, the usual printed instructions provided with every machine.

Such a booklet was James R. Cameron’s Motion Picture Projection, distributed, beginning in 1921, by the Theatre Supply Company, of New York.

(To be continued)
How Can We Bring About Better Utilization of Visual Materials?

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THERE is general agreement in the literature of the visual field concerning the need for the training of teachers in the use of visual aids. The consensus of opinion is that teachers must be shown the possibilities of visual materials and given some help in their utilization if the visual idea is ever to become a completely effective, dynamic, educational force. It is, therefore, the purpose of this discussion to find ways and means of improving both "pre-service" and "in-service" training of teachers in visual techniques.

This consideration of teacher preparation is pointed to a definite program of action. At least, an attempt is made here to compile some definite recommendations which school superintendents, principals, directors of visual education, and heads of teacher training institutions may wish to consider and follow. This memorandum of possible "things to do" is built around the following five questions:

I. How can we improve the Organization of the Visual Training Program in Teacher Training Institutions?

II. How can we improve Existing Basic Courses in Visual Instruction?

III. What can be done to Stimulate the Needed Growth of Visual Courses?

IV. What are the Most Effective Devices of Helping Teachers-In-Service?

V. What can we do to Increase the Number of Departments and Directors of Visual Instruction?

I. How Can We Improve the Organization of the Visual Training Program in Teacher Training Institutions? One of the most constantly debated issues involved in pre-service training is whether teachers should be trained by separate visual instruction courses or by means of special methods courses. The proponents of the latter method argue that little is accomplished in the study of visual tools unless they are related to subject matter content and used in learning situations in which they are designed to function. Another argument is that the field is too broad for any one person's grasp or treatment. Proponents of the separate course method say that the important information to be gained about the tools and their use is so extensive as to require separate treatment. They also point out that many teachers of special methods are untrained in the use of visual materials, that as a practical necessity, the "core" course is needed as a starting point and that unless special attention is given to these visual tools, no attention will be given.

That these two methods are not unalterably opposed is rarely recognized. The question is not an "either-or" proposition. There is truth in both sides. Visual materials should and must be studied in their functional relationships. Attention should be given to the tools in special methods courses where such courses exist. Separate visual instruction courses are needed for the reasons given. Above all, opportunities to utilize these devices under helpful supervision in directed or "practice" teaching courses must be provided. The question is not which one of these plans we should undertake, but how may we set out to incorporate and integrate all of them into a meaningful, effective and efficient program for the prospective teacher. Carefully planned attention to visual aids in each of these areas does not constitute over-emphasis of the visual idea. It is rather the consideration which prospective teachers must give to the "tools of their trade." The following recommendations, therefore, seem pertinent for teacher training institutions:

1. Give due attention to visual materials in the methods courses in specific curriculum areas. If the teachers of such courses lack training and experience with visual aids, the director of visual instruction or the person who teaches the general course should work with them in special meetings, conferences, and the like.

2. Integrate the work in the special methods courses, a separate course in visual instruction.

3. See that opportunities and facilities for the utilization of visual materials are provided in directed teaching courses.

4. Integrate all of these activities into a meaningful, whole program.

5. Offer the general or separate visual instruction course during the regular session.

6. Offer the visual instruction course as an undergraduate course as well as a graduate course.

7. See that instructors in the subject matter fields in the college training courses use visual materials in their teaching.

II. How Can We Improve Existing Core Courses in Visual Instruction? Separate courses in visual instruction are subject to much deserved and undeserved criticism. Recently someone remarked: "I understand that visual aids courses generally are pretty poorly taught." When he was asked in what respects they were poor, he could not answer. On the other hand, more definite comments have come from teachers who have taken such courses: "That course was too theoretical." "We were taught photography, but little else." "It wasn't mostly motion picture appreciation." "I can operate projection equipment now, but I do not feel very confident of my ability to teach with it." "All we did was look at motion pictures." "The instructor was married to lantern slides." After such comments, there is a real pleasure in hearing good reports: "The course was very helpful in my teaching." "It was the most practical education course I ever had." "It was something definite and tangible—something we could get our teeth into." These teachers appear to be probably some evidence of the success, or lack of it, which we are attaining in visual aids courses. How can we bring about the good evaluations and avoid the unfavorable ones? What can we do to improve existing courses? Some possible answers are:

1. Conduct the study of the various visual aids, insofar as possible, with due regard for their functional relationships in definite areas of instruction. Provide opportunities to observe the actual classroom use of tools. Include demonstration lessons in the course. Create learning situations for purposes of demonstration. Apply as many visual techniques as possible to the teaching of the information content of the course.

2. Make the visual instruction course a laboratory course. Include in the laboratory as many visual materials and units of equipment as possible. Provide opportunities in the laboratory for actual practice in the selection and evaluation of materials, the planning of utilization, and in the preparation or production of materials. The laboratory is the place to learn the mounting and filing of flat pictures, the making of lantern slides and other still picture types, the operation of projection equipment, the making of exhibit units, the use of sound recording apparatus, etc.

3. Attempt to develop leadership in the field. Make one of the objectives of the course the growth and encouragement of those teachers who may func-
proceedings of the D. V. I. Meeting

2. Make the teacher demand for visual courses known to teacher training institutions through existing educational organizations.
3. Make teacher preparation in visual techniques a requirement for certification. This was generally not appreciated this fact.

4. Emphasize to teacher placement agencies the need and demand for work in visual instruction courses. In applying for positions, teachers should list such experience in their credentials.
5. In hiring teachers, superintendents might specify such training as a desirable qualification.

6. Help institutions locate or develop personnel with the experience and qualifications for teaching visual aids courses.

IV. What Are the Most Effective Devices for Helping Teachers-In-Servicemaximum? in the Use of Visual Materials? Superintendents of schools, departmental supervisors, city and state directors of visual instruction, can accomplish a great deal through the following methods:

1. Encourage teachers to enroll in visual aids courses during their work in University or college summer sessions.

2. Organize and promote extension courses or evening classes for teachers.

3. Organize regional conferences on visual problems.

4. Conduct short courses or a series of informal meetings for the purpose of helping teachers with special problems.

5. Conduct annual state-wide visual instruction institutes.

6. Work with teachers in their faculty meetings or in-service meetings.

7. Provide helpful supervision of class utilization of visual materials.

8. Supply printed materials, monograms, handbooks, on matters which teachers need to consider.


10. Integrate the in-service training program closely with the work of departmental supervisors and existing faculty committees.

11. Provide improvement sheets or self-analysis check-lists so as to enable teachers to evaluate their own use of visual aids.

12. Recognize outstanding work with visual-sensory materials.

V. What Can We Do to Increase the Number of Departments and Directors of Visual Instruction? The solution to most of the difficult problems involved in the utilization of visual materials lies in the work of a competent director of visual instruction. "In-service" teacher training is one of these problems. In addition to the mechanical activities involved in the administration of a visual program, as we have seen, a host of teacher training and supervisory functions. These activities are most effectively handled by a director of visual instruction. The personnel in charge of the visual program is considerably more

important than materials and equipment. Given a director of visual instruction, materials and equipment will follow in a well-organized, systematic, intelligent, supervised program of utilization. But school superintendents and boards of education generally have not appreciated this fact.

Materials and equipment are still purchased without any special provision for administration. No money can be found for even a half-time supervisor or director. Yet, the director's activities can vitalize and help more departments and areas of instruction than any other school program.

How can we convince the hesitating school administrators and the doubtful school boards?

1. Arrange for the school superintendent, who is sufficiently interested, to visit a good department under a good director and see its operation at first hand.

2. Emphasize the administrative phase of the visual program in formal visual instruction courses, particularly at the graduate level.

3. Persuade superintendents to include discussions of the administration of visual work on the programs for their meetings.

4. Show school administrators how the construction of visual problems which exist in the local system are handled in other schools of comparable size.

We have tried to indicate some definite ways of improving the utilization of visual materials through more effective "in-service" and "pre-service" programs. Teacher education is a matter which we cannot afford to neglect. We cannot pass such training off as "the other fellow's job." It is our job, and must be done well. The questions set forth here are important considerations for all of us. The suggestions made are not comprehensive, but may serve as the point of departure for further thinking and action. It is hoped that some of the recommendations will be helpful in attacking both phases of the teacher training problem.

What Visual Aids Are Schools Producing?

Summarized by

WILLIAM G. HART

Dearborn, Michigan

The following generalizations represent a synthesis of the animated two-hour discussion:

1. Teachers are especially interested in the production of 2 x 2 slides, glass slides, and movies. All questions and comments dealt with one or more of these three devices.

2. There is great interest in 2 x 2 color slides. More than half the total discussion time was devoted to the making of Kodachromes. It was pointed out that these slides provide the cheapest way by which the average teacher can get natural color, and that the camera and projection equipment are highly portable and relatively inexpensive. In addition, such slides can be produced by fairly simple photographic techniques.

3. A major problem is that of helping


tion effectively for in-service training purposes in their own school systems. Suggest the possibility of growing into directors of visual work in formally organized departments of visual instruction. Consider carefully the methods and problems of in-service teacher training. In this way, the general course may become a continuously expanding system of disseminating important information.

4. Realize fully the importance of building a successful visual course, and the dangers of a mediocre one. Considerable attention is centered on visual instruction courses. They are "on trial." They must prove themselves. Continued success will mean more favorable support from teacher training institutions. Quarters of the emphasis means the realization of the visual aids movement. The instructor, therefore, has responsibilities not only to his class, to his institution, and to himself, but to the whole visual-sensory aids movement.

5. Help students to evaluate terminology in the field. One of the greatest needs in the visual field is an accurate and meaningful nomenclature. Many of the loose and narrow interpretations and possibly some of the questionable procedures which persist are due to an inadequate, overcomplicated terminology. We have long been aware of the inadequacies of such terms as "visual education" and "visual instruction." The term "audio-visual" has the disadvantage of delimiting the field to the sensory experiences of "seeing" and "hearing." The teachers find that the materials we are studying are supplementary, not indispensable. The student will still find in the literature ridiculous references to "educational movies" as well as to such hackneyed pronouncements as "One picture is worth 10,000 words," and "87% of all our learning is visual learning." On the other hand, "perceptual learning" is a new and promising phrase which puts emphasis on learning, where it should be, and suggests the importance of sensory experience and pupil reaction to that experience. Unless students become aware of the particular weaknesses and merits of the various terms, we shall probably never develop the accurate, descriptive terminology which will give meaning and dignity to the field.

III. What Can Be Done to Stimulate Needed Growth of Visual Instruction Courses? The following general recommendations may suggest more specific ways and means to stimulate the growth of existing courses in visual aids:

1. Make existing courses completely successful.

2. Make the teacher demand for visual courses known to teacher training institutions through existing educational organizations.

3. Make teacher preparation in visual techniques a requirement for certification. This was generally not appreciated this fact.

4. Emphasize to teacher placement agencies the need and demand for work in visual instruction courses. In applying for positions, teachers should list such experience in their credentials.

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The National Education Association group discussing this at the Atlantic City meeting adopted the following resolution:

"The Department of Visual Instruction of the National Education Association recommend to teacher training institutions the adoption of a program in perceptual learning which will include a basic course with laboratory facilities, integrated with special methods courses in definite curriculum areas and with directed teaching experiences which will give experience in the use of visual equipment and materials."

"It is further recommended that the Executive Committee direct the Secretary of the Department of Visual Instruction to communicate this resolution to the proper authorities in teacher training institutions."
The Visual Aids We Have for Defense Education

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DURING the past few months there have been several statements made concerning the relationship of education to defense. The Educational Policies Commission reported that "the imperatives of National defense are military, economic and moral." They also stressed the necessity for an understanding of the nature and goals of democracy. This broad interpretation of the program of defense education means that the best visual aids in defense are not, for the most part, those which have been whipped together since the fall of France, but those which have been in most of our good libraries for many months. If defense means a better understanding of democracy, increased economic efficiency, better health, and a growing appreciation of what we have to defend, then we have visual aids which can be used for defense education.

With this interpretation of the topic, it is obviously impossible to enumerate all of the visual materials which could be used. Therefore, I propose to suggest several areas of defense education in which visual aids exist and may be profitably used. Films are used most often as examples, since I am most familiar with film materials. The films listed are given as illustrations only; there are, no doubt, many others which are equally as good.

First, there is the task, suggested by the Educational Policies Commission, of morale, which includes an understanding of, and a deep loyalty to our democratic institutions and ideals. For this purpose there are such films as The Perfect Tribute, Servant of the People, Declaration of Independence, and other of the historical shorts which are now available through Teaching Films Custodians, George Washington: His Life and Times (Eastman), and Early Settlers of New England (Erpi) as well as the Yale Chronicles of America can be used in this connection. 1938: A Year of Contrasts (Films Incorporated), though in need of some revision in light of changing events, gives a modern application of some of our historic ideals of democracy. For calling attention to some of the tasks which remain in perfecting democracy, such films as The Merit System Advances (Municipal Civil Service Commission) could be used.

A second area in which visual material may make a contribution to defense education, is in developing a better understanding of America, its land and its people. We are most willing to defend those things which we know and understand. America will be safer when youths of New York City know something of the Kansas wheat farms; when the people of the cotton fields of Alabama know more about the people of the coal mines of Pennsylvania; and when youths of the rural West understand something of life in Chicago and Washington. We have been attempting to do this for years in social studies and geography, but we must intensify our efforts. The world as it is today makes it more important than ever before that we feel the unity which comes from knowing more about each other. Such films as The River (U. S. Dept. of Agriculture), The Corn Farmer (Erpi), and The City (College Film Center), and many others, can be used for this purpose.

A third consideration in defense is our relation with our neighbors of this hemisphere. Just as a better understanding of our own country may contribute to our national strength, so a better understanding of the countries of this hemisphere may contribute to our
The Educational Screen

Flag assembly of Pan-American republics, from "The Last Stronghold."

Hitler and Mussolini reviewing troops in "Germany Invades Austria."

Scene in an airplane plant, from the film "How to Make an Airplane Part."

mutual defense against foreign aggression. There are military aspects of these relations, but equally as important are the economic and cultural. The American Film Center prepared a "Latin American Supplement" listing many of the films in that area. The Eastman silent films on Mexico, and Central and South America are familiar to most of us. Erpi has recently released five films dealing with different aspects of South American life. A number of good films may be obtained through the Pan American Union. Films dealing with Canada should also be useful in this connection.

A fourth aspect of defense is the building of a knowledge and understanding of what has happened and is happening in Europe. Without this background, we cannot proceed on an intelligent program of the defense of America, for we would not know what we were defending against. This is the subject of the American Council on Education's publication, Films on War and American Policy.

Such films as The Exploitation of Germany (Visual Library), The League of Nations (March of Time), Germany Invades Austria (Castle Films), and Inside Nazi Germany (March of Time), and The Last Stronghold (Films, Inc.) may be of great value in giving this understanding and background. Many films related to this topic have been and are being made available. Such materials should do more than tell of the horrors of war—they should contribute to an understanding and appraisal of the forces in conflict. In the use of the film in this area, it is particularly desirable that they should be used critically and with a sense of sequence.

A fifth area is health. We seem to be at about the same point in our thinking here as England was at the time Enough to Eat (Museum of Modern Art Film Library) was made. We are hearing of large numbers of army rejections for physical defects. The films which we have on health are just as useful as they ever were, but they need to be used more and better. The films of the National Tuberculosis Association, Social Hygiene Association, and the United States Public Health Service, along with the familiar film on human physiology, can all be thought of as useful in defense health education.

A sixth area deals with economic and military defense. Here the films vary from those giving a broad overview to those which are designed to do a specific job. For example, The Machine Tool Maker (Erpi) can give an appreciation of the importance of that worker and an impression of how he works, but it will be of very limited value in teaching exactly how to run a lathe. Conquest of the Air (Films Incorporated) fulfills a quite different need from How to Make an Airplane Part (Guthlohn), or Principles of Flight (Eastman). The United States Maritime Commission's film, Ships and Men, can give an idea of the effort which is being made to provide America with an adequate number of merchant ships manned by competent crews. Films dealing specifically with military and industrial training problems
are being made by the Federal Government. However, any film which deals effectively with the wise use of our resources and man power is potentially useful for developing an understanding of economic defense.

Dr. Francis Brown, in reporting at a Washington meeting on the defense activities of American Colleges and Universities, said that over 200 such institutions have committees on defense education. Such committees should not be willing to work with directors of visual education in making a survey of the visual materials useful for National defense which are available, or can be made available, within the area in which the school or college is located. Materials might be selected around some such headings as have been suggested in this report. In this way the films and other visual materials in the libraries of this country might be classified in terms of their contribution to national defense. The committees could make specific suggestions as to the adaptation and use of these materials. Particular attention could be given to the problem of sequence. A helter-skelter use of films cannot contribute to an orderly development of a topic nor result in clear understanding and thinking. Such a service—selection and adaptation of visual materials for defense education—would call attention to many materials which are now being overlooked, and would contribute to their effective use. Bulletins and pamphlets could be issued listing the results of the study available to teachers. In addition to our regular school groups, we must think of the adult groups which are interested in national defense and anxious to get material which will be useful to them. A well-organized series of visual materials could become the basis of the curriculum for such a group.

In a discussion on the Town Meeting radio program of a few weeks ago, Dr. Dykstra, Director of the Selective Service System, said, "I hope it is going to be possible for the Army to teach the schools the art of visual education." It may not be necessary for us to learn the art of visual education from the army but this emergency may give us an opportunity to do some of the things we have been wanting to do for a long time. If we can get groups of educators to think in terms of specific visual materials to do a specific educational job, we may be able to demolish the idea that visual aids are educational trivia--and get them to see that visual materials can be a substantial and vital part of the educational program.

Free Materials—a Blessing or a Blight for Education?

A Symposium of Opinions

Introductory Remarks

O. H. COELIN
Editor, Business Screen, Chicago

My place as the first speaker in this forum seems to pre-destine me to the task of defining a subject as formidable as the blind man’s elephant. The ultimatist suggestion is that this animal is a near-relative of the Trojan horse, suggested by the question, "Are these free materials a blessing or a blight for education?" That would seem to put me in the unenviable position of defending something quite unworthy of defense or possibly of praising those who have not asked for it.

The plain unvarnished truth is that there is no organized effort of any kind on the part of business which today seeks to contribute unworthy film materials to the schools. There are plenty of so-called commercials in your film libraries. A very large proportion of your really worthwhile educational materials can be traced back to commercial sponsors—most of them supplied at the school’s own request—used with great effectiveness over a period of years—and a good many long since forgotten by their original donors. That there are frequent examples of misuse of many other kinds of commercial films is as apparent to business as it is to you who have pioneered the cause of visual instruction. Many factors contribute to this, not the least of which is the inadequacy of purely educational materials. It is with no little surprise that the sponsor of a film intended solely for the improvement of his own salesmen receives a request for school showing. I can say to you with all truth, and sincerity that the ulterior motives of the greatest part of big business are founded in nothing more than the attitude they take toward encouraging student trips through their factories. With some this is one of the traditions of industrial leadership, with others a genuine social-mindedness exists.

What you and I are interested in discovering and defining is the first half of your question—where, if anywhere, are the free materials that are a blessing? You have a responsibility here that is as great as that of business. You can help to establish criteria that will enable those who follow your guidance to shut out unsatisfactory materials. And you can, through understanding and cooperative effort, encourage the production and editing of materials that will help bring to the classrooms of America a true picture of a nation at work, a true conception of the jobs which those you teach today will fill tomorrow, a better understanding of the whole panorama of our democracy at work. You can do this and we can help—and the results of our efforts will not only improve many existing situations but they will enable education to reach that goal of wholly independent action.

Listen for a moment to the pulse of America—in the industrial centers of the country, the hammers and the lathes, the beating and turning of both the ploughshare and the sword. Today our nation’s defense demands an increased program of technical education, a thorough understanding, by those who will man the machines, of the nation’s economic and mechanical resources. At such a time when the production lines of American industry constitute the first line of our nation’s defenses, it is vital that we utilize every efficient means at hand to help the
safety in achieving their part in this program of preparation and production. Business Screen is proud of its oft-stated policy of demanding higher standards of industry's film material when it is intended for use by schools. Not only from the research of those who have observed this criterion are worthy of praise and mention. The widespread use of such films as *Alaska's Silver Millions*, of various safety subjects such as *Metropolitan's Once Upon a Time*, of industrial productions such as RCA's recent films and those of Steel, General Motors, Western Electric, General Electric and a lengthy list of others. Many of these possess fine qualities of technical perfection, little advertising beyond a credit line, and they far outnumber the occasionally bad subjects with too large a proportion of advertising, an insincere message or general technical imperfection.

Let us together seek out and evaluate those which are best, set them up together with standards of suggested improvement. Business will not seek you out. But you can take what you need from it and you can thus set up a common sense program that will make a real contribution to the present problem. We will help wherever we can in such an evaluation and we can do so free and unfettered. There is potential negative material for a hundred vocational and technical guidance films available to you, use and extend the use of films that yourselves can determine as worthwhile and this discussion will have real significance to the cause of visual education everywhere.

My definition of the subject agrees with the one Godfrey Elliot proposed in an article written for each issue of the publication, "the first thing the school is looking for is good factual films. The mere offer of a "free" industrial film no longer intrigues the school user; there must be something in that film that will make a definite contribution to the school's objectives, as well as meeting some well-defined standards of construction, photography, and editing."

It also agrees with Cline Koon's statement that "where the subject matter is ably and objectively covered, without any hawking of trademarks or other advertising, such films may be used to advantage."

We who are gathered here work together with the practical result of increasing the amount of truly educational materials that will make possible the maximum use of projectors in use and thus arrive at the goal toward which all of us truly strive — enough equipment in use to justify the uninterrupted production of the finest educational films, edited and produced according to the highest educational standards. Let every phase of the situation serve to aid you toward that goal.

**The Educational Screen**

**BOYD B. RAKESTRAW**

Assistant Director  
University of California  
Extension Division, Berkeley

**Safety Procedure in Grinding an Axe**

**Proceedings of the D. V. I. Meeting**

We all realize, we all have realized for years, we are all realizing, that every time we use a free film, other than those produced and distributed from endowed educational sources, we are grinding somebody's axe. Before proceeding further in this discussion of "Free Materials, A Blessing Or A Blight For Education," let me make it clear that I think axe grinding, conducted in a union shop under fair labor conditions, is excellent employment. But I am equally concerned that I don't work overtime at an advertiser's grindstone. It is a truism to say that "We-e-e-ell, there are many points to be considered in regard to free materials." Of course there are many points to be considered; all of us have an individual list of them. But, looking at the field broadly, let's survey a few of these points which are in favor of this type of film.

We know that the business film, the advertising film, or "free" film has certain advantages. Such films are beautifully produced, possibly because industrial films can put more money into a film that sells than educational concerns can put into a film that teacher. We know that such films usually show excellent workmanship and technique; that they make available instruction materials which might not ordinarily reach the screen; that they provide an insight into operations, production methods, and general procedure of business and industry. We know that these films provide excellent materials for social studies and educational guidance and bring a knowledge of the industrial sector of our economy to students, and we know that right now, when national unity is a keynoted challenge to us all, such knowledge can well become essential in our everyday decisions. Lastly and crassly, we know that these films are available for small fees, or for no fee at all.

If I stopped at this point, and if you were lay men-and women, I would expect an immediate chorus of "Well, now, isn't that fine?" And if I could stop at this very moment, I myself would be inclined to join you. It is to both your loss and mine that I must continue.

For these films, naturally enough, were not designed for classroom use. They do not fulfill the entire function of educational films. They are appendages to rather than vitals of the visual system. They require teaching rather than projection to a class, and teaching is all too rare in this connection, as yet. Without this teaching, they provide the student with distorted values, one-sided viewpoints, and readymade propaganda. But for all that, they are in the visual field. It is necessary and valuable that we grind axes, for the advantages of such films are evident if we can perfect the edge for our use, if we can get the nick out of our axe blade. Now grinding an axe involves, besides the axe, a sure touch, a grindstone, and a set of safety rules. Today we have all these things in visual education—except a safety procedure. Is it too much to expect that we can achieve that, too?

To my mind we might start with the "free" part of the materials. It is my personal conviction that this feature has proved more of a retarding factor to visual instruction, and to the advertiser himself, than it has proved a stimulating one. I know of a crusty old school principal who will use nothing but these free films. Why, he asks smugly at visual conferences, should he spend money for films when he can get them for nothing. I had a chance to see one of his presentations not so long ago, not such a bad film either; but as I was waiting outside the door as the students came in, I was amused to hear one of them say, "I wonder what old So-and-So is going to try to sell us today.

Now, to eliminate this evil of adulterated advertising, in industrial advertising, it seems to me that education can be served best and at very small expense if we who are interested in visual instruction would establish through our national organizations a committee on cooperation with producers of such films. This committee could secure at cost a print of the film in question, circulate it to a number of members and secure their recommendations on its value, its probable value if certain sections were deleted, its overall possibilities as a teaching medium.

At this point, and with a set of concrete recommendations, the committee could approach the firm and attempt to arrange terms of sale for distribution of prints on this basis. In discussion the points recommended by member-libraries could be stated, one and a mutual agreement reached. Visual instruction would thus gain a valuable teaching tool. The cost? It consists of the price of prints, if not donated, the cost of cutting and re-editing, the cost of distribution. If handled properly it would amount to not more than twenty cents per rental day.

But, you ask, will the producer of the film agree to this? Because it has never been tried on this basis, the basis of visual instruction, in a mutual agreement, there can be no answer, but it seems to me reasonable that he would. What does he lose? In the long run your producer loses nothing, for through increased distribution, by allowing his film to be made into a useful teaching tool, he will reach a wider audience than he could have reached before. And in this method of handling the problem, all credit is given where credit is due. The only difference is that we keep our students from wondering "What old So-and-So is going to sell us today," and substitute for them an interesting and instructive record of importance to their education.
Another step in our safety procedure is a bridge in a long time program. It necessitates undertaking a study of the appeals used by the producers of the type of film we are discussing today, and making the results of that study available to every user of visual aids. Such a study, perhaps on the order of those of the Institute of Propaganda Analysis, with which we are all familiar, would make it possible for the individual teacher to evaluate properly, to make a thorough presentation of the individual films projected in the classroom, and to prepare a presentation of all sides of whatever situation, or process, was under discussion.

The last safety factor I have to mention is the most effective, the most necessary. It is a matter of long-time effort, a matter of vital importance not only in this regard, but in connection with the entire visual movement. Teacher training! For too long we have sat and watched the field of visual instruction develop, if such it can be called, in the hands of amateurs who feel that, with modern equipment, all that is necessary is that one press the switch, the pictures do the rest. Visual instruction is the technique of instruction which necessitates specialized training in much the same manner as does coaching athletics. But how many courses are available in physical education in our universities today; and how many courses are available to teach the art, the art of visual instruction? True, there has been, from the school library shelves because they carry advertising? There would be an immediate justification for condemning the free film on grounds of advertising if the school used the films of one sponsor to the exclusion of all others.

What constitutes objectionable advertising in free films? Are all free films to be barred from the school merely because a few sponsors have been offenders?

Who says that propaganda in free films is harmful to students? Upon what evidence can we state that free films have the power, through the student, to influence the purchasing policies of the family?

Isn't much of this predicated upon personal opinion which has resulted from the film's impact on our adult prejudices? Do we possess objective evidence to support any of the charges made against the free film? I, for one, say that the problem is too important to warrant objective evaluation before we assess any hands-off attitude.

Regardless of what we may say against the free film, there is much to recommend it for favorable consideration. The school owes much to the free film and its sponsors.

The free film's producers and sponsors have been responsible for much of the progress in the sub-standard field. Improvements in film stock and projectors have come about largely through the free film. Free films, of our own making, could exist on school business alone, and they could never have reached their present performance peak through school sales alone.

The free film has provided film learning opportunities in fields that are not entered by the commercial classroom film, in addition to enriching and extending other areas.

The free film has made its greatest contribution by helping to popularize the educational use of motion pictures. It has helped hundreds of schools get a program started. The typical school user of films purchased a projector through local effort, then turned to the free film field to carry on the program until the school could find the money necessary for the rental and purchase of classroom films.

Much of the complaint against the free film is justified on the basis of those films whose sponsors have availed themselves of the fact that they should be circulated to schools, sponsors who never invited school use but had it thrust upon them by schools who did not choose their free films as wisely as they would had they been compelled to pay rentals on them. To the credit of the sponsor who invites school circulation of his free film it must be said that he also invites cooperation in improving his film product.

Here, at the point of origin, is the place to start work on this problem. If the sponsor is sincere in wanting school circulation for his films, then provide him with the opportunity for him to secure school advice, school opinion, and competent, common-sense criticism. Where can be
learn whether the film treatment he plans will be acceptable for school use. Who will tell him that the 45-minute film he plans should be cut to 20 minutes? If he wants information, let's provide the source to which he can apply.

Some Suggestions for Improving Free Material

ERNEST R. LAFOLLETTE
John D. Pierce Jr. High School
Grosse Pointe, Michigan

THE typical efficient teacher gives much time to the careful planning of classroom work. Consideration is given to special techniques in the learning process, economy of classroom time, selection of worthwhile pupil experiences, etc. Certainly the teacher has the right to expect certain standards in any visual materials brought into the classroom.

Free films have gained preferential entrance to many schools because they have been well advertised, they cover special subjects, and they cost less. A few years ago, when the writer's experience in the visual field began, they constituted the main stock available outside of the DeVry and Eastman classroom teaching films. At that time we accepted them without question as a blessing. Only since we are now gaining a better supply of specially made educational films are we securing better comparative standards on which to judge the real quality of the free stock. Teachers can find faults in all films brought into the classroom for no combination of pictures and description prepared in advance can fit classroom needs perfectly. We can only say that certain faults do appear more frequently in the free stock although there are many exceptions. Much depends upon the teacher's own carefulness in selection, previewing, and general use.

The most frequently mentioned shortcomings seem to be the following:

(1) Free films tend to be theatrical in make-up and presentation. They give preference to the spectacular rather than the true.

(2) The films tend to be a collection of scenes not too carefully selected and bound together loosely by titles or voice description. Proper sequential arrangement of materials is frequently lacking.

(3) Films produced by single concerns fail to present the full scope of the subject.

(4) The photography contains a poor balance of distant and close-up shots in the ratio needed for student understanding.

(5) Undue portions of the film are frequently given to sales interests of the products or services.

(6) Certain school subject areas, such as science and geography, are more completely covered than others.

(7) The running description in word or voiceover form is not always the best. This is frequently overdone. The visual action of the film should be so meaningful that the running description may be supplementary.

(8) Teachers' guides are not usually provided.

(9) Booking conditions are more uncertain. Some concerns are very lax in notifying teachers of arrangements and in sending material on time.

(10) Films reach teachers in poorer condition.

(11) Unbiased "consumers' guides" are generally lacking. Teachers have to rely on the word of the producer as to the possible usefulness of the film for the classroom.

Teachers usually sample free films in their first use of film materials. This introduction has frequently been none too satisfying and has resulted in attitudes against the further use of visual aids of this form. Such reactions have tended to discourage the general spread of all educational film and to lessen the amount of money made available for visual aids.

Many schools make use of numbers of free educational films for general auditorium programs or noon hour showings. They do so without previewing the films or providing for any effective correlation with classroom activities. Students learn to judge such films for their entertainment qualities when such random use is made. Such presentations make it extremely difficult for teachers to get the best results from educational films in the classroom. Furthermore, it leads teachers to the improper use of such materials.

Looking the Gift Horse in the Mouth

WILLIAM H. HARTLEY
State Teachers College, Paterson, N. J.

JEROME, a writer of the fourth century, who some found fault with certain of his words, replied that they were free-will offerings, and that it did not behove his readers to look a gift horse in the mouth. The modern teacher to whom a goodly number of gift horses has been offered has found it necessary not only to look them in the mouth, but to make a thorough examination of the entire animal to make sure that it is a horse and also to make doubly sure it is not a Trojan horse from which might emerge enemies to efficient and honest education. To aid in this examination of the true nature and structure of the above mentioned beasts, I respectfully present the following ten criteria for the evaluation of "free" materials.

1. Would this material be just as welcome and as usable if it were necessary to purchase it with the money of the taxpayers who support our public schools? In listing "free" materials I am inclined always to put quotation marks around the word "free". We pay a price for everything we get and use. Too often the materials we get for use in schools are not worth the price we pay for them. In the case of free materials we pay the price of cooperation with an advertiser or propagandist in presenting his ideas to our children in the name of education. Is the material in question worth the price we must pay for it? Would it still be desirable if it were necessary to pay for it at the usual commercial rates?

2. Does this material serve objectives worthy of a place in a public tax-supported school? The many charts on soil conservation obtainable from the United States Department of Agriculture are welcomed by teachers because they help to guide pupils toward objectives which most agree to be worth while. Can we say as much concerning the materials urged upon the schools by patent medicine firms? To attain worthwhile goals we must utilize worthwhile materials.

3. Do the educational aspects of the material predominate or are they incidental to propaganda? All of us no doubt have seen free films many reels in length in which there was less than a hundred feet of material which could be classified as educational in the sense that it contributed to the lessons with which we wished to teach. Time after time it has been my disappointing experience to order material which the producer recommended as being educational only concerns providing free materials do so with the hope that the contributions will be a blessing to Education. Schools can help to make these productions more useful. Teachers must not stop short with criticism alone. Here are a few suggestions on what could be done:

(1) Teachers could make a survey of the films needed and prepare such a list for all interests wanting to provide free materials.

(2) Teachers could specify certain standards for educational films in general. These standards could apply to techniques in the makeup and content as well as to production.

(3) Producing interests could employ qualified educators who would have direct control on the subject content of the films.

(4) Teachers' guides could be made available.

(5) Films could be deposited in central distributing units in a proportion of at least one to a state. These units could be empowered to provide estimates of the quality of the films and to provide care and booking arrangements.

(6) Teachers could provide rating scales of their own on such films.

With all the criticism that is given to free visual materials the word "blight" could be avoided. The blight could at least be turned into a blessing. But until teachers declare themselves on what they want and until schools offer material assistance in production, the quality of free materials will continue to fit standards set by the present producers.
to find it to be a glorified sales talk with an attempt at material material. Did I use it? Get the behind me temptation and help me to send it back after the preview rather than present it to my class simply because I have it on hand.

4. Is the material accurate in detail, honesty, implications, and straightforward in the manner in which it presents useful information? If the best possible materials are to be utilized by the classroom teacher, exacting and stringent tests must be applied to them. Simply because this is not a fair or at least cost is no reason why it should be exempt from minute examination. Indeed, if the teacher is to avoid lending himself to questionable enterprises such examination must be made.

5. Does the material definitely correlate with the course of study on the grade level for which it is being considered? There is, to be sure, a place at any level in the school curriculum for enrichment material, often not directly related to the work at hand. In selecting this and more directly related material it should prove helpful to examine it in the light of the background, needs and abilities of the group to whom it is to be presented.

6. Does the material measure up to the high technical standards which should be constantly maintained in our classroom? Too often free material meets this criterion to perfection yet fails in other important respects. With the great resources at his command the advertiser prepares his material with great care and presents it with an artistic flourish impossible to the producer who must satisfy limited school budgets. This criterion should not be overlooked but it should not be allowed to outweigh many important considerations.

7. Is there space to tell its story in a simple, straightforward, courteous manner, free from objectionable and blatant advertising? It is true that our ears have become somewhat hardened to sales talk because of the great amount of it which we hear over the radio, but it cheapens education if we bring this type of material into the classroom. True, if the class is studying propaganda analysis, then there is a place for propaganda in the classroom, but if the class is studying transportation it is discouraging to have the lesson interrupted at regular intervals while some smooth-tongued individual extols the advantages of a particular brand of motor oil.

8. Will the use of this material stimulate pupils to further desirable activity? If a free chart will foster better health habits in a child, then it contributes to the educational process; but if the principal result is a feverish contest to determine how many wrappers of a particular brand of soap may be collected in a given length of time then the use of this material is questionable.

9. Are the motives which prompted the advertiser to furnish this material to the schools such as to invite cooperation of the school authorities? I grant that it is sometimes difficult to deter-
### Summer Courses in Visual and Audio-Visual Instruction, 1941

Compiled in cooperation with The Society for Visual Education

The following courses have been reported to date. Figures in parenthesis show credit hours. An additional list will appear in May.

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<td>H. A. Henderson</td>
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<td>Visual Education (2½)</td>
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<td>Indiana State Teachers College, Terre Haute</td>
<td>June 9-Aug. 1</td>
<td>L. C. Larson</td>
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<td>Mr. Ramsey</td>
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<td>Iowa</td>
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<td>June 4-Aug. 21</td>
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<td>State University, Iowa City</td>
<td>June 9-Aug. 1</td>
<td>Donald McCavick</td>
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<td>Visual-Sensory Aids in Teaching (3)</td>
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<td>University of Kansas, Lawrence</td>
<td>June 11-Aug. 6</td>
<td>H. S. Montgomery</td>
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<td>Visual Ed. in Elem, &amp; Sec. Schools (2)</td>
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<td>Kentucky</td>
<td>University of Kentucky, Lexington</td>
<td>June 16-July 19</td>
<td>Gayle Starnes</td>
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<td>1st term—Motion Pictures in Ed. (3)</td>
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<td>2nd term—Audio-Visual Aids (3)</td>
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<td>Louisiana</td>
<td>Louisiana Polytechnic Institute, Ruston</td>
<td>June 2-Aug. 2</td>
<td>Louis Clifton</td>
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<td>Use of Audio-Visual Aids in Classroom (3)</td>
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<td>June 5-Aug. 15</td>
<td>G. A. Zernott</td>
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<td>Visual Educ. in Primary Grades (3)</td>
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<td>State University, Baton Rouge</td>
<td>July 2-July 25</td>
<td>C. C. Henson and Harley Smith</td>
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<td>Audio-Visual Short Course (3)</td>
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<td>Maine</td>
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<td>July 7-Aug. 15</td>
<td>E. Carleton Moore</td>
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<td>July 7-Aug. 15</td>
<td>Paul S. Miller</td>
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<td>June 23-Aug. 1</td>
<td>Henry Brechbill</td>
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<td>Massachusetts</td>
<td>Boston University, Boston</td>
<td>July 7-Aug. 16</td>
<td>Earl A. Brooks</td>
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<td>Visual Methods in Nature Study (2)</td>
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<td>The Use and Management of Visual Aids</td>
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<td>James R. Brewer</td>
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<td>in Ed. (3)</td>
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<td>The Collection, Preparation &amp; Projection of Teaching Aids (2)</td>
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<td>James Barclay</td>
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<td>Harvard University, Cambridge</td>
<td>July 7-Aug. 16</td>
<td>J. R. Brewer</td>
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<td>Principles of Teaching Audio-Visual Aids (3)</td>
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<td>Non-Credit Lab, Course in Audio-Visual Aids</td>
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<td>University of Iowa, Iowa City</td>
<td>June 30-Aug. 8</td>
<td>James R. Brewer</td>
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<td>Western State Teachers College, Kalamazoo</td>
<td>June 25-Aug. 8</td>
<td>Ray C. Pellett</td>
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<td>June 30-Aug. 8</td>
<td>Verne Stockman</td>
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<td>June 30-Aug. 8</td>
<td>Floyd Leib</td>
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<td>Visual-Auditory Aids in Education (2)</td>
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<td>University of Michigan, Ann Arbor</td>
<td>June 30-Aug. 22</td>
<td>Ford L. Lemler</td>
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<td>Visual &amp; Auditory Education (3)</td>
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<td>Seminar in Secondary School Curriculum (2)</td>
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<td>Western State Teachers College, Kalamazoo</td>
<td>June 30-Aug. 8</td>
<td>Clifford P. Archer</td>
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<td>Minnesota</td>
<td>State Teachers College, Moorhead</td>
<td>July 9-July 18</td>
<td>A. M. Christensen</td>
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<td>Audio-Visual Aids to Education (4)</td>
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<td>Central State Teachers College, Winona</td>
<td>June 9-July 18</td>
<td>Alice Grannis</td>
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<td>Utilization of Community Resources (4)</td>
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<td>University of Minnesota, Minneapolis</td>
<td>July 8-Aug. 29</td>
<td>Clifford P. Archer</td>
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<td>Byron L. Westfall</td>
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<td>University of Missouri, Columbia</td>
<td>June 16-Aug. 8</td>
<td>W. C. Bicknell</td>
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<td>Problems in Visual Education (2)</td>
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<td>Montana</td>
<td>State Normal College, Dillon</td>
<td>June 9-Aug. 8</td>
<td>Paul Anderson</td>
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<td>Visual Education (2)</td>
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<td>State Teachers College, Slippery Rock</td>
<td>June 16</td>
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<td>Visual Education (1 or 2) A. P. Vincent and R. A. Waldron</td>
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<td>State Teachers College, West Chester</td>
<td>June 23-Aug. 22</td>
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<td>Thomas Helm</td>
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<td>Temple University, Philadelphia</td>
<td>June 30-Aug. 8</td>
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<td>Projection Apparatus (2)</td>
<td>John F. Garman</td>
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<td>Illustrative Materials (2)</td>
<td>John Garman</td>
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<td>University of Pennsylvania, Philadelphia</td>
<td>June 30-Aug. 12</td>
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<td>Visual &amp; Sensory Techniques (2)</td>
<td>J. H. Minnick</td>
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<td>Waynesburg College, Waynesburg</td>
<td>June 16-Aug. 15</td>
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<td>Visual Education and Sensory Techniques (3)</td>
<td>C. O. Riggs</td>
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<td>Audio-Visual Aids to Ed. (3)</td>
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<td>Acquisition, Care &amp; Use of Films, Slides, Pictures, etc. (3)</td>
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<td>Audio-Visual Education (3%)</td>
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<td>East Texas Teachers College, Commerce</td>
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<td>Administration of the Audio-Visual Aids (3)</td>
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<td>Southern Methodist University, Dallas</td>
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<td>Stephen F. Austin State Teachers College, Nacogdoches</td>
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<td>Brigham Young University, Provo</td>
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<td>Lectures on Visual Education</td>
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<td>State Teachers College, Fredericksburg</td>
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<td>Laboratory Course in Audio-Visual Instr. (3)</td>
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<td>Audio-Visual Aids to Curriculum Activities (1)</td>
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<td>Graduate Workshop in Education—Special Problems in Audio-Visual Education (1 or 2)</td>
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<td>Ruth Livermore</td>
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<td>Concord State Teachers College, Athens</td>
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<td>Workshop in Audio-Visual Aids (2-4)</td>
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<td>West Virginia University, Morgantown</td>
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<td>Ed. 139; Visual Education (2½)</td>
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<td>Eastern Washington College of Education, Cheney</td>
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<td>Visual Sensory Aids in Education (2)</td>
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<td>Wisconsin</td>
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<td>Stout Institute, Menomonie</td>
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<td>Visual Education (2)</td>
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<td>Experiments in Visual Education (2)</td>
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(Continued in May)
Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

will be the theme. Thursday could be left free for guided (or unguided) visits in the Boston area. May I urge especially those members who are to attend the Boston meetings to let me have their suggestions immediately. We want to meet your interests and needs.

Insignia

Department member M. R. Klein of the Nathan Hale Junior High, Cleveland, thinks that we should have some insignia that could be used on Department stationery, posters, to head these columns, and in other places where a sign of distinction is appropriate. He not only made the suggestion, but made that suggestion concrete by submitting designs. In turn, I submit them to you for your comment, suggestions, approval, or inspiration.

New Members

Have you sent any new names lately to Ward C. Bowen, State Education Department, Albany, New York, of those people who are not members of the Department, but who should be?

Sincerely yours,

PAUL C. REED
President

Notes From the Field

Michigan

Several members of the D.V.I.—Keith Elliot, Principal of the Verona School, Battle Creek; Lewis Lash, Principal of the Willian Ford School, Dearborn; Roy E. Robinson, Director of Visual Education, Highland Park; and W. W. Whittinghill, Director of Visual-Audio Education, Detroit—formed the major part of the committee preparing the 1941 yearbook for the Department of Elementary School Principals for the State of Michigan. The title of the yearbook is “The Implications of the Motion Picture in Education,” and is a companion to the 1940 yearbook, “The Implications of the Radio in Education.” Release date of the yearbook is at the May conference of the department in Detroit.
FREE BOOK TELLS HOW TO:
- Train teachers to use motion pictures
- Choose films; integrate with curriculum
- Extend your use of motion pictures
- Select the most effective equipment
- Administer a visual education program

Whether you're using or contemplating using motion pictures for teaching, you should read this book. Compiled from the experiences of leading visual educators, it presents practical, school-tested solutions to the problems educators encounter. Use the convenient coupon to request your free copy.

Filmosound "UTILITY" now only $3.99
At this new low price, it's easier than ever to have the extra advantages of this projector. Its powerful amplifier, 12-inch speaker, and fast F 1.6 lens give it ample capacity for large school auditoriums. It is easily portable, too, for classroom use. Reproduces silent as well as sound films. Has clutch for still projection and reverse for running film backward to repeat sequences. Send coupon for details. Among the many B&H models there's one for any school need.

FREE PERIODICAL for Visual Educators
You'll benefit from reading Filmo Visual Review, new B&H quarterly dedicated to the interests of visual educators. It's free to all schools whose motion picture equipment, regardless of make, is registered with Bell & Howell. Register now by filling in the coupon fully, and you'll get the next issue.

NEW FILM CATALOGS READY
If you don't have the 1941 B&H Filmosound Library Catalogs, get them now. They are expanded source books of select films, reviewed objectively and newly arranged for your convenience. Free to projector owners; 25c each to others. Mark coupon for your copies.

Bell & Howell Company
1817 Larchmont Ave., Chicago, Ill.

Please send: ( ) Free book, Filmo on the Faculty
literature on sound ( ) silent projectors; ( ) Filmo Visual Review (quarterly)?
catalog on educational, ( ) recreational, ( ) religious films.
We now own ( ) sound ( ) silent projectors of
make.

Name
School
Address

City State

Precision Made by
Bell & Howell

This compact, portable model consists of the famous Da-Lite Glass-Beaded surface, metal case and tripod—all in one unit. It is the only screen that can be adjusted in height without making separate adjustments of the case. There are no set screws to tighten. The Challenger is raised to desired height by simply releasing a spring lock and raising the extension rod. Because of its greater convenience and brighter pictures there are few rest periods for the Challenger. It doesn't require them. It is sturdily built for extra hard usage. The handle bracket for example has a wide flange that encompasses the case. (The handle is not attached to the thin metal side of case). Square tubing in the center rod of the tripod and the extension support keeps the case aligned.

Write today for 48 page Screen Data Book giving full information on the Challenger and other Da-Lite Screens (including the electrically operated Da-Lite Electric) and helpful suggestions for selecting proper screen surface.

Da-Lite Screen Co., Inc.
Dept. 4 ES, 2723 North Crawford Avenue, Chicago, Illinois
The Division of Extension, Louisiana State Normal College, held a conference on audio-visual education at Natchitoches on Friday, February 14, and Saturday, February 15. The conference included two sessions devoted entirely to demonstration lessons using audio-visual aids. Motion pictures, slides, phonograph records, film strips, and maps were demonstrated in classroom situations. Other topics of interest were school production of films, projection problems, teacher education, and audio-visual materials in various areas.

A division of audio-visual aids has been added to the Louisiana State Department of Education, with Miss Mary Clint Irion as supervisor. Miss Irion goes to Louisiana from Los Angeles, California, where she has been in visual education work with the Los Angeles County Schools.

R. H. Mount, President of the Louisiana Branch of the D.V.I., is now Director of Visual Instruction in the Louisiana Polytechnic Institute, Ruston. Mr. Mount was formerly principal of the teacher training school and chairman of the visual education committee of the same institution. Polytechnic is the first Louisiana institution to have a full-time director of visual instruction.

Texas

Culminating a year’s work since the organization of the Radio-Visual Aids section of the Alamo area, Texas State Teachers Association, a section meeting was devoted to a demonstration of classroom use for both radio and visual aids. The meeting was held March 7 in the Pan-American Room of the Gunter Hotel, in connection with the regular convention. Approximately four hundred persons were present.

The program began with a declaration of purposes by Miss Emma Gutzeit, Director of Radio and Visual Education, San Antonio, and a brief talk on Radio in Education by Miss Frances Scarborough, Educational Director of KTSA. The major part of the program consisted of a carefully prepared demonstration to show teachers how a motion picture and a radio broadcast can be coordinated in the classroom. An American history class from Burbank Vocational School under the direction of their teacher, Miss Lucy Posey, carried on the demonstration. They listened to the American School of the Air broadcast on Immigration, participated in a follow-up student broadcast, and witnessed a motion picture on Immigration. The lesson closed with a demonstration by two immigration officials, showing how an alien is inducted into United States citizenship. At the conclusion of the program teachers were invited to make a tour of the studios of KTSA.

New England Branch Meets

"Visual Aids in Defense of Democracy" is the theme of the Visual Education Conference to be held by the New England Branch of the D.V.I. on May 3rd at the University of New Hampshire. Mr. Henry B. Stevens, Assistant Director of General Extension Service for the University, will act as Chairman at the morning session and present an address of welcome. Other topics and speakers are: "Aims of the Department of Visual Instruction" by Professor Abraham Krasker, President of the New England Branch; "In-Service Training of Teachers" by Dr. Lloyd P. Young, President of Keene Teachers College; "Successful Methods in Using Visual Materials" by Dr. Charles F. Hoban, Jr., American Council on Education; "Visual Education in Junior High Schools," by Raymond I. Beal, Principal, Junior High School, Portsmouth, N. H.; "A Supervisory Union Visual Education Program" by Superintendent Laurence O. Thompson, Keene, N. H.; "The Wartime Use of Motion Pictures in Britain" by Richard Ford of the British Library of Information; "Education in Defense" by Dr. Fred Engelhardt, President, University of New Hampshire; "Visual Aids as Curricular Materials" by Dr. Howard R. Jones, Assistant Professor of Education, University of New Hampshire; "The New England Educational Film Association" by R. Haven Falconer, Assistant Professor of Education, University of New Hampshire. Panel discussions will be held on the following topics: "How Can We Bring About Better Utilization of Visual Aids?"; "Are Free Advertising Visual Aids a Blessing or a Blight for Education?"; "Should Schools Produce Their Own Visual Materials?"; "Are New Hampshire Schools Adequately Equipped for Using Visual Aids?"; "Can the Schools Be Better Served?"

Pittsburgh Audio-Visual Conference

The final meeting in a series of four monthly audio-visual conferences arranged by Dr. John Hollinger, Director of Science and Visualization, Pittsburgh Schools, and Herbert T. Olander, Instrutor in Audio-Visual Aids at the University of Pittsburgh, will be held at the University on the morning of April 26th. The subject to be discussed is "The Place of the Library in a Visual Education Program" and Miss Marguerite Kirk of Newark, New Jersey will speak on that topic. There will be showings of a silent motion picture "Jack Learns to Use the Library" and of a filmstrip subject "Know Your Library." Mr. Ross Cibella of Pittsburgh will give a brief statement of "The Use of Microfilm by Libraries." Microfilm Readers will be exhibited.
Nebraska Has Visual Education Clinic

The first Visual Education Clinic ever held in Lincoln was on March 8, 1941. It was sponsored jointly by the Lincoln public school system, the Extension Division of the University of Nebraska, and Teachers College of the University of Nebraska. Over three hundred persons were registered at the Clinic with representatives from seventy different towns. Over a hundred attended the noon day luncheon.

The Visual Education Clinic opened in the morning with greetings by Dr. A. A. Reed, Director of the Extension Division of the University of Nebraska. The theme of the morning session was "The What, Why, and How of Visual Education," Superintendent M. C. Lefer presiding. The afternoon session used the theme, "How to Produce Visual Aids in Local Schools," Mr. Sam Adams, NYA Supervisor, presiding. The out-of-town speakers were Mr. Douglas Dunham, Director of Visual Education at Norfolk; Mr. Leo Smith, Omaha South High School; Dr. J. A. Moore, Wayne State Teachers College; Supt. Paul Combs, Valley; Supt. J. R. Vinckel, Blair. The last two speakers addressed the luncheon group on administration of visual aids in public schools, and the need for a film library.

The committee responsible for the Visual Education Clinic at Lincoln were: Mrs. May W. Morley (Chairman), Miss Mary O'Connor, Mr. E. L. Blue, Mr. C. O. Morrison, Mr. R. W. Howland, Mr. T. V. Goodrich all of the Lincoln public schools; Mr. Sam Adams, NYA Supervisor; Mr. James W. Taylor, Supervisor of Visual Education of the Extension Division.

ANFA Convention

Panel Discussion Sessions on problems of the visual education and non-theatrical motion picture fields will highlight the program of the Third Annual Convention of the Allied Non-Theatrical Film Association Inc., to be held at the Hotel Astor, New York City, April 18th and 19th. The program opens on Friday, April 18th at 4 P.M. with a General Membership Meeting, to be followed in the evening by Panel Discussion Sessions on the following topics: Libraries and Their Problems; Legislation and the Non-theatrical Field; Projector and Equipment Sales; Distribution and Projection Servicing of Industrials; Distributor Problems; General Welfare; Utilization of Product. (The Panel Sessions, beginning at 8 P.M. will be open to visitors.) On Saturday afternoon, a concluding General Membership Meeting will be held to elect officers for 1941-42, and in the evening a Dinner-Dance for members and non-members and their guests. The convention will mark the conclusion of two years of active efforts on the part of the ANFA to improve the standards and welfare of the entire non-theatrical film industry.

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In and for the Classroom

ORIGINALLY DESIGNED LANTERN SLIDES FOR STAGE SCENERY

ANNA J. THOMPSON
Art Supervisor, State Teachers College
Indiana, Penna.

LANTERN slides are generally associated with illustrated lectures of travel, science work, Christmas story reproductions, and the study of great master artists. Some experimental efforts on the part of Art teachers and their pupils in modern schools have resulted in the discovery that lantern slides afford a splendid medium for creative work in their special stage productions. While lantern slides have been made and used for more years than children in the schools can remember, it was not until recently that they were employed for the purpose of stage scenery for dramatic productions. Since many school superintendents rate slides as valuable equipment for visual instruction, and proclaim that teachers in their respective schools make good use of lantern slides and projectors, they will find in this projected scenery technique additional uses for their materials of instruction.

Many school systems own one, two, three, or more lantern slide projectors to fill the wants of the many teachers who need them in the various classrooms at the same time. Within recent years many schools have also purchased such materials as frosted glass slides, cover glass slides, lantern slide crayons and inks, masks, binding tape, etc., for the purpose of providing "pupil-teacher-made" lantern slides in the various grades of the schools. If such materials are not already on hand they can be purchased with little expense, and used for original creative design work for "projected scenery."

Slides definitely designed for use as stage backgrounds may be projected upon the background drops or on plain curtains of the stage during the various scenes of the school play or musical programs, with a number of distinct advantages to both the workers and the audience observers. The simple shifting of the lantern or of the lantern slide by the lantern slide operators, materially lessens the time usually needed by amateurs in their changes of scenery. The lantern slides also effect a saving of time and the expenses occasioned by the construction and painting of large stage flats. The physical labor of moving the customary scenery on and off the stage requires a large stage crew, with the inconvenience of excusing pupils from classes, shifting programs and the like. The projected scenery reduces this factor to a minimum.

Certain stage conditions are necessary, however, to make the stage projected scenery successful.

The stage needs to be one, preferably, with enough space directly behind the back drop of sheer light colored muslin, to project the background of the desired size on this muslin curtain. The curtain used should

Conducted by WILBER EMMERT
State Teachers College, Indiana, Pa.

be thin enough for the light to shine thru, but opaque enough for the color to show against it. The width of the curtain is a factor of considerable concern. If it is extremely large, two, three, or even more lanterns will be needed to project the whole background as a continuous scene. If the projected scenery becomes a regular feature of dramatic productions, it might be well for the school to purchase different "wide angle" focal length lenses for the projectors. With ideal conditions, the shift of scenery is accomplished by a change of slides in each of the respective lanterns used.

All stages are not ideal for lantern slide projected scenery work because of too little space behind the curtain drop and/or their large width dimensions. In such cases the projection must be made from in front of the stage and the actors. The projectionist then operates the lanterns from a table located far enough back in the auditorium to give the scenery the required size to fill the screen. If the auditorium has a balcony, the projection work will be less conspicuous if done from there than when operated from the auditorium proper. In such a position much more of the projected scene will be above the heads of the actors. The designer of the slides must now deal with the conditions of having the actors in the beam of light. Hence all dark color and very intense colors must be arranged to be projected above the heads of the actors, otherwise the shadows and strong colors will fall on the players and eliminate them from the view of the spectators. Since the actors
are the most important part of the stage, the scenery must be designed as a background for them and their work. The artist designer of original slides for stage sets needs to be aware of the limitations of the individual stage, then produce artistic settings helpful to the actors. These scenes must be in keeping with the purposes of the act, and always designed as a background for the actors.

Some people prefer the soft color results that may be obtained by the special slide crayons, rather than the brilliant colors from the lantern slide inks. All colors need to be transparent, hence wax crayons are to be avoided in this work. That is why lantern slide company materials produce better results than any other type for problems in color projection situations. The common lead pencil is very useful in blocking out the design, and giving definite boundaries to parts of the scene. A splendid feature of etched glass slides is that which makes it possible to wash the crayon or inks from their surface and use the slide over and over again.

Interesting designed slide results may be projected on the closed front curtain by using an intense color for only a few minutes, or during the short time a reader or speaker needs to give the introductory remarks. In such cases the audience will generally not see the speaker if he stands in front of the curtain and directly in the projected design. This type of front curtain projection would very likely not be used unless stage conditions precluded satisfactory projection on the back drop curtain.

A School-Made Film Stands on Its Own Feet

(Concluded from page 149)

...group used the film Saturday evening in connection with their regular program for school age boys and reported that several asked for information about our housing project after they had seen two regular feature story films, too."

From the experiment which Mr. McPherson has conducted in the making of school films, it would seem to be logical to suppose that where a school film is the outgrowth of study work in the regular program and is well organized under teacher supervision, it can become a very excellent medium for use by other school groups in their actual study. A further step would be the eventual linking together of all efforts by schools in this direction and a production and distribution program that would tie in with many of the regular courses now in the curriculum. Thus it would be a real visual expression service by young people for young people, stimulating to them and educational, as well.
The Third Midwestern Forum on Visual Teaching Aids

The Third Annual Midwestern Forum on Visual Teaching Aids met at the Congress Hotel in Chicago on March 28th and 29th. Purpose of the Forum was stated at the first general session by Dr. Wm. C. Reavis of the Department of Education, University of Chicago, and general Chairman of the Forum. He outlined the aim of the two-day meetings as an effort to provide opportunity for visual educators to "see how it's done" through the use of actual classroom demonstrations. Believing that progressive teachers and school administrators are interested in the effective use of all types of visual aids, the program of the 1941 Forum was built on a horizontal rather than a vertical plane, and a careful search was made to provide demonstrations in a wide range of subject matter. "Present Trends in Visual Education" was the theme of the morning address by Mr. Ford L. Lemler, Director, Bureau of Visual Education, Extension Division, University of Michigan. Immediately following Mr. Lemler's remarks, the group separated for the first meetings of the elementary and the secondary school clinics.

The Clinics

Keynote of the classroom clinics was the demonstration of teaching procedures in the use of visual teaching aids in actual classroom situations. Demonstration subject matter varied from science to vocational guidance with decided emphasis on social science, not surprising in these days.

Elementary Clinic

Chairman of the elementary school clinic was Mr. Harry D. Gillet, Principal, University Elementary School, University of Chicago, while Mr. E. C. Waggoner, Director of Science and Visual Education in the Elgin Public Schools, Elgin, Ill., presided at the meetings of the secondary clinic. Each clinic had three sessions, following a similar pattern in each of introduction, class demonstration, and discussion by the "audience."

Science as taught in the primary division and safety as taught in the intermediate division was the double subject of the first session of the elementary clinic, the demonstrations being presented by Mr. Glen O. Blough, and Mr. Leslie W. Irwin, both teachers in the Laboratory Schools of the University of Chicago. This was followed in the afternoon session by a social science demonstration at the third and fourth grade level, presented by Miss Eugenia Humble and Miss Scherer, both teachers in the Oak Park Public Schools. The demonstration class of thirty eager youngsters explored their Mexican neighbor to the South through use of the sound film "Mexican Children." The class had already seen the film once without sound at the beginning of the unit. With this as motivation, the children had studied Mexican dress in art class, learned a Mexican song in music study, brought curios to class, and done individual reference reading. The results of this reading they brought with them in the form of notes and marked pages in their books which they used to substantiate facts they contributed to the class activity following the sound showing of the film, when Miss Scherer led them in constructing their own version of the film, adding details from their reading that had not appeared in the film. In the discussion following the demonstration Miss Scherer explained the objectives of showing the film twice: (1) at beginning without sound, to stimulate creative thinking and a spirit of inquiry; (2) at end of unit, with sound, to enrich reading and knowledge gained through books and to furnish basis for original study. Also brought out was the fact that the geographical emphasis in the teaching approach was more suited to the grade level than a socio-economic emphasis.

Social studies also provided the material for the closing session of the elementary school clinic, this time in the intermediate division. The demonstration was ably presented by Miss Mildred C. Letton, and Miss Ida B. DePencier, both teachers in the Laboratory Schools of the University of Chicago.

Secondary Clinic

For its first session the secondary school clinic also turned its attention to a social science demonstration, An American History class acted as "guinea pigs," introduced by Mr. Truman D. Fox, Director of Visual Education, J. Sterling Morton High School, Cicero, Ill. The group selected "The New England" as the climax of a unit on colonial life. The film was also used to bridge between this unit and one following on the development of independence and the westward expansion from the thirteen colonies. Class discussion was led by three "chairmen" who had each seen the film five times and had prepared leading questions based on analysis of the political, economic and social aspects of colonial life as brought out in the film, which was used as a point of departure for a discussion, amazing in its breadth. The adult group centered its discussion on the value of student previews of films, and the number of previews of a single film.

A science demonstration using the film "Properties of Water" featured the second session at the secondary level, presented by a chemistry class of Mr. G. I. Remner from Elgin High School. A lively discussion ended this session, revolving around the relative merits of teaching procedures with science films.

A less usual subject—vocational guidance—provided the material for the final session of the secondary clinic. Mr. Milton E. Hahn, Department of Psychology, University of Minnesota, presented the demonstration in the absence of his co-worker, Dr. E. G. Williamson. After a rapid-fire introduction with blackboard outline, Mr. Hahn showed the film "Attitudes and Occupations" on which he and Dr. Williamson acted as consultants. The film was a graphic presentation of the lecture material, showing actual situations in which were used the specific abilities—mechanical, clerical, social, musical, artistic, scientific, and abstract intelligence. As a guide to vocational placement "profiles" were shown of the varying amounts of these abilities possessed by different individuals. Vocational adjustment was shown to depend on a combination of interests, abil-
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Luncheon

Of special interest to directors of visual education was the opening-day luncheon for them. After luncheon the group divided for two round-table discussions lasting well into the afternoon. The one for public school directors was presided over by Joseph E. Dickman, Director of Visual Education, Chicago Public Schools, while the state directors of visual education met with Mr. J. E. Hansen, Chairman, Bureau of Visual Instruction, University of Wisconsin.

Administrator’s Clinic

The two-day Forum closed with a school administrator’s clinic—a new feature this year—on the use of visual materials in school interpretation. Examples of such materials were presented for appraisal by a panel of administrators under the chairmanship of William J. Hamilton, Superintendent of Schools, Oak Park, Illinois. Members of the panel were: Orville T. Bright, Superintendent of Schools, Flossmoor, Illinois; Nelson B. Henry, University of Chicago; J. Stanley McIntosh, Director of Visual Education, District 76, Evanston, Illinois; E. E. Morley, Principal, Heights High School, Cleveland Heights, Ohio; Claude E. Vick, State Department of Public Instruction, Springfield, Illinois.

The materials presented consisted of: (1) miniature slides prepared and used by Charles Bruner, Superintendent of Schools, Kewanee, Illinois; (2) standard slides by E. E. Morley, portraying an evaluation of the Heights High School, Cleveland Heights, Ohio, on the criteria established by the Cooperative Study of Secondary School Standards; (3) a film by J. E. Pease, Superintendent of Schools, La Grange, Illinois, showing activities of teachers and pupils in the schools of Muskegon, Michigan; (4) a two-reel film on a day in Wilbur Wright High School, Dayton, Ohio; (5) a school-film prepared by Arnold P. Heffin, on a day in Lane Technical High School, Chicago; and (6) a section of a film in color presented by T. R. Foulkes, Superintendent, Maine Township High School, Des Plaines, Illinois.

The following criteria were used by the panel in evaluating the visual materials presented as aids in public relations:

**Mechanical Features**

(a) Photographic effects
(b) Does the photography follow best current practice in photographic technique
(c) What about the sequence of shots
(d) Use of color films
(e) Titles—are they effective
(f) Sound

**Aim and Purpose of the Film**

(a) For what kind of audience is film designed
(b) Are definite public-relations values evident
(c) Is the film too educational
(d) Are entertainment features over-emphasized
(e) Is the film too spectacular

**Evidence of Careful Planning in Film Construction**

(a) What about length of film
(b) Judgment used in the selection of subject matter
(c) Is there evidence of scenario organization

**The Educational Values in the Film**

(a) Does the film leave definite impressions of the organization of the work offered in the schools
(b) Are specific features of the school work shown
(c) Is viewing the film the equivalent of a visit to the schools
(d) Are general educational methods demonstrated
(e) Are specific educational methods demonstrated
(f) Is pupil progress shown
(g) Are extra-curriculum activities shown

**Resulting Impressions**

(1) Does the film “sell” the school to the public
(2) Are educational outcomes defined
(3) Is the film too long to leave definite impressions
(4) Is there a general audience appeal
(5) Does the film “tell the story” or leave confused impressions

The various sessions of the Forum were attended by nearly 500, registering from not only the Middle West but all parts of the country. No small part of the conference was the fine array of exhibits, larger and more extensive than in previous years. These were on display throughout the conference and were assembled under the able chairmanship of Mr. Wesley Greene, College Film Center. At the Executive Committee meeting on Saturday plans were enthusiastically formulated and adopted for the “Fourth Midwestern Forum on Visual Teaching Aids” the coming year.

**Proceedings of the DVI Meeting**

(Concluded from page 161)

(This item below chances to be the last, but by no means the least, of the DVI Proceedings at Atlantic City. The Committee on Field Experiences is a definite affiliate of the Department of Visual Instruction of the NEA. It is shortly to have its own regular Department in the pages of *The Educational Screen* under the editorship of Dr. Verna Carley.—Editor)

**Minutes of the Meeting of the COMMITTEE ON FIELD EXPERIENCES**

**February 26, 1941**

**Atlantic City, New Jersey**

AFTER considerable discussion as to the next stages of the Committee's work it was unanimously agreed that the immediate need is for a manual to help people who are planning field trips and who have not had sufficient experience in this area. A special committee to draft plans for this manual was appointed. The committee consists of Dr. Atyeo, chairman, Mr. Stanforth, Mr. Rothschild, and Mr. Olsen. The committee was given the power to call upon any other people in the field for assistance.

Plans were then discussed for the use of our page in *Educational Screen*. It was agreed that Miss Carley serve as editor and that the preparation of material be considered an all-committee job. The first issue should deal with the philosophy of field trips and there should be a discussion of the Committee and its plans for the June issue. It was suggested that in subsequent issues there be a description of field trips in different subject areas; also that material be included from as many zones as possible.

In explaining the work of the Committee, it was agreed to try to develop some committees within the several zones called for in the zoning plan being developed for the Department of Visual Instruction. Mr. Park and Mr. Wattenberg were asked to take charge of this work.

In our plans for developing coordinating units, it was agreed to concentrate upon Michigan as a demonstration project on the possibility of a statewide co-ordination of field experiences. The committee in charge was to consist of Mr. Park as chairman, Mr. Roberts, and Mr. Wattenberg.

In view of the possibility of the chairman being drafted, Mr. Park was elected vice chairman of the Committee.
Sound Films for Pre-Employment Training in Machine-Shop Practice

REEL I of Eastman's new sound films on elementary shop practice is now ready and being delivered. It covers correct methods for exact alignment of the lathe ... detailed procedures involved in facing, straight turning, and squaring a shoulder ... working accurately to dimensions from a mechanical drawing ... characteristics and selection of the principal cutting tools ... a comprehensive exposition of the use of micrometers in relation to the graduated dials.

Utilizing carefully planned and superbly photographed full-screen close-ups, this film isolates and greatly enlarges the critical action involved in every operation. It not only permits demonstrating to the whole class at once, but enables each student to follow the action even more clearly than would be possible from a position directly at the side of the instructor. Full explanation in sound accompanies each step.

Reel II, covering operations not included in the first film, is being prepared along the same lines. Scheduled for release about May 1, it will complete a pair of sound films of unique importance to all schools undertaking pre-employment machine-shop training for national defense industries. Order Reel I now for immediate delivery—Reel II for shipment when ready. Price per reel (16-millimeter sound), $36. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.
The Literature in Visual Instruction

HISTORY AND PRINCIPLES


A carefully-documented account of the visual techniques used in the Middle Ages before Comenius wrote his picture-book commonly called the beginning of visual aids. The resources of art at that time were devoted to instructional purposes. Sculpture, stained glass windows, even the scheme of gothic architecture were intended to record events and educate. Early printing made use of woodcuts, illustrations to supplement the printed material. Then etchings and engravings were used. By the 17th century when Comenius wrote his Orbis Pictus the use of pictures had already been in common use. There are examples of illustrated books in medicine, diplomacy, history, mathematics, physics and many other subjects.

The article should be read in its entirety for a fascinating account of the part played by pictured materials, maps and the like in the centuries preceding our own. The author concludes, "Indeed visual education today is neither a fad nor a fetish, but the culmination of consistent progress throughout 800 years. Modern inventions and modern techniques have in no way altered its fundamental philosophy. Rather they constantly present an ever-widening opportunity which requires... a thorough investigation on behalf of teachers and students in every field, if we are to be true to our heritage."

ADMINISTRATION

A Director of Visual Instruction—Roy Wenger—Social Studies, 32:81 Feb. 1941

How a director of visual instruction can help a social studies teacher:
1. He collects information as to sources and types of materials available. 2. He helps in securing materials. 3. He helps in getting equipment when needed. 4. He can suggest techniques of using materials. 5. He trains a staff of student assistants. 6. He can stimulate the production and use of school-made materials. 7. His office can serve as a clearing house for information.

Visual Aids for Education—Jewell Ross Davis, Warrensburg, Missouri—School and Community, 27:118 Mar. 1941

The Missouri State Department, in cooperation with the Works Progress Administration is circulating visual aids for use in the schools of that state. There are nine centers.


The school program is centered in a permanent projection room.


Results of a survey in the state of Maine.

UTILIZATION


This article describes one of the most important developments in the use of motion pictures in the United States. The Film Forums is a cooperative project undertaken by the Joint Committee of the American Library Association, the American Association for Applied Psychology, American Association for Adult Education and the American Film Center. During the spring twenty libraries in strategically situated sections of the country are presenting a program for ten weeks on "What We Are Defending," in which adults may discuss our material and human resources in relation to the defense program.

On the basis of the experience gained this spring a more extensive program will be planned for next fall and made available to a much larger group of public libraries. The cost to libraries that have access to a projector and operator is about $5.00 per evening. The American Film Center takes care of booking the films.

The reader is referred to the original article for further help in planning and carrying out intelligent discussions with adults.

The Film in the English Class—Katharine Hefter and Regina Rosiny, Columbus High School, N. Y. C.—English Journal, 30:68 Jan. 1941

The English classes in this school undertook a study of the motion picture as literature and as a means of social expression. A detailed account is given of three of the Human Relations films used in this study. Each film was allotted three class periods—one for preparation, one for showing and discussion of the technical literary elements and on the last day the social and literary objectives were discussed. The study guides prepared by the Commission on Human Relations were used by the teachers. The teachers believe that the 50 classes that used the films benefited greatly from the film study.

Teaching Americanism through the Use of the Filmstrip—Camilla Best, New Orleans—Education, 61:333 Feb. 1941

Successful teaching of citizenship must be a development of the individual through activities as well as the teaching of subject matter. . . By means of a wide variety of subject matter found in the filmstrip, we are able to correlate the teaching of Americanism and the development of good citizenship in the course of study used in almost every school. Careers in the Army and Navy, conservation of our natural resources, American History, subjects on Latin America are examples of filmstrips now available.

A Follow-up Survey through Visual Aids—H. L. Cleland, Director of Guidance, Pittsburgh, Pa.—Occupations, 19:331-4 Feb. 1941

A unique project in determining the kinds of jobs that high school graduates get after they leave school is described in this article. The schools produced a film showing 23 of the 1937 graduates in their present vocations. For each person there is given a general description of the high school he or she attended, how he got the job, what his high school record had been and his present responsibilities and salary. Scenes were shot in the various places of business. The cameramen were three teachers who had had considerable success at amateur photography.


Suggestions to teachers who do not have ready access to a central library of visual aids for securing materials. Classification is made on the basis of (a) those that are historical and static; (b) those that are contemporary and dynamic.

RESEARCH

Sound Films for Reading Programs—H. A. Gray, Erpi—School Executive 60:24 Feb. 1941

A significant summary of research dealing with beginning reading and the influence of aural factors, indicating the value of sound films for primary readers.


This is the best summary of research to appear since Dr. Hoban's critical summary in "Motion Pictures in Education: A Summary of the Literature." Provides excellent background information for students in visual instruction courses and for curriculum workers in other areas.

(Concluded on page 176)
AMERICAN HISTORY ON PARADE

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The educational screen


Teacher education is this neglected factor. The plea is for teacher education institutions to develop a systematic, well-balanced program.

Library and Visual Aids


School Made Visual Aids

Learning Safety through Making Movies—William G. Hart, Ohio State University—Safety Education 20:250 Mar. 1941

An account of a cooperative film project undertaken by a group of schools in connection with the safety program. Each school produced a film which was tailor-made to its local situation. The activity was educative to those who participated in planning and producing the films and it helped to enlist community cooperation.

Better attitudes toward safe conduct are already noted by the teachers. The films are being successfully used in other schools. The most important contribution of the Traffic Safety Film Project, however, is that it demonstrates a way of approaching safety education. The thirteen films enumerated in the article represent a variety of film techniques and topics for audiences from kindergarten to adult.

The Production of School Public Relations Films—Hardy R. Finch and Eleanor D. Child, Greenwich, Conn.—School Management, 10:195 Mar. 1941

An article for administrators which clarifies the values to be expected from school-made films and describes how to go about making films. The need for interpreting the schools to the people is greater now than ever before and motion pictures can be a strong ally.


The Zoo Goes to School—Frank W. Trevor, Millbrook School—Education, 61:369 Feb. 1941

The story of an undertaking that has extended over four years in the building, on the school grounds, of a zoo where animal life can be studied for biology, wildlife conservation and other practical school purposes. Other outcomes from this project have been noted in the language arts, manual activities, community relations and social understanding. Worth reading in the original.
April, 1941
Page 177

RCA Motion Picture Sound Equipment "Stars" for over 6,000 Theatres

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NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

Producers wishing to have their new films reviewed on this page should write Mr. Don White at 233 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, and basis of availability of the films. They will be informed of the first open screening date when the Teacher-Committee can view the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, which must be borne by the producers.

states that bees perform important services by helping to cross-pollinate flowers and by giving us honey.

COMMITTEE OPINION—An excellent film for use in science, nature study, biology and entomology, and agriculture classes at all grade levels. Among the strong points noted were clear closeup photography, effective narration and good organization. The film contains so much information that two or more showings probably will be needed.

Wheels Across India (Dodge) 30 minutes, 16mm sound, "Free." Also available in longer version (70 minutes, 16mm sound) which reputedly contains some advertising.

Highlights from a recent expedition by Armand Denis and his wife, the former Leila Roosevelt, through the jungles of Burma. The film begins with a scene of a peaceful New England home. But on a nearby lake, children are sailing a strange-looking outrigger boat from the South Seas, and their pets are full-grown hunting leopards. An explanation is given when it is revealed that this is the home of the Denis family of world-famous explorers. Preparations are being completed for departure on another expedition, this time through India.

First the explorers go to Rangoon, there to begin their motor trip across Burma. They make their way to a small interior province, where an unusual sight is encountered—gigantic water wheels which are used to irrigate the fields. Interesting shots of the great water wheels appear. Further in the interior, in a dead city, formerly the capital of Burma, is visited. It is now revealed that the purpose of the journey is to locate the cult of the snake-worshippers; an old priest directs the travellers to a little-known corner of the country.

Giraffe-neck women, their heads held up by coils of metal, are next seen. The metal is removed from one woman’s neck to show how it has been stretched. The cars carry the group to the edge of a lake, where the party takes to boats. Each of these is propelled by a large number of oarsmen, who use their legs in paddling. An exciting race culminates in the overturn of one of the boats. The expedition continues up a narrow river on rafts, and then goes through the dense jungles by foot. A sequence upon teak logging appears here, with views of cutting and elephants at work dragging the long logs to stream beds. Care of the elephants, including bathing, also is shown. Leaving a lumber camp, the expedition rides on elephant back to the village of the priestess of the snake. The party climbs a mountain with the priestess and her natives, and the rites of snake-worship are next shown in a thrilling sequence. The priestess calls the king cobra a “god” from his den, expertly dodging the deadly strikes, and performing the required ritual by kissing the top of his ugly head three times. A brief concluding sequence depicts the journey homeward.

COMMITTEE OPINION—A good film for use in geography, literature, economics, and social science classes at the junior and senior high, college and adult levels. The fact that the film takes ample time to show each thing portrayed, instead of skipping hurriedly over a larger number of topics, was especially

The Honey Bee (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher’s guide to be furnished.

In this film unusual closeup photography presents a study of the honey bee. The first sequence begins with scenes of bees in an apple orchard. The three castes of bees—workers, drones and queens—are shown, and their functions in the hive explained. The second sequence shows in detail the metamorphosis of the worker bees, from the time the queen lays eggs in empty cells through the period when the larva are fed by the workers, the spinning of the cocoons, the pupal stage, and finally the adult worker bees. Various phases of their work, including feeding larva, ventilating the nest, and guarding the nest—the latter including scenes of the killing of a bumblebee which has entered accidently—are shown. The next sequence explains the development of new queen bees. The old queen and the field bees leave the nest, and two newly-hatched queens battle for supremacy, one queen stinging her rival to death.

The fourth sequence follows the old queen and the field bees through the processes of swarming, scouting for and locating a new nest, and building a new comb. The last sequence shows the workers gathering nectar from flowers, doing the “honey dance” upon returning to the nest, and depositing the honey in the comb. In this connection the bees are shown gathering pollen for bees’ bread, doing the “pollen jig” upon returning to the nest, and storing the pollen for winter food. As the film concludes with scenes of bees in a field of clover, the narrator

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commenced. The title of the film is not entirely accurate, since it depicts a journey through Burma rather than through all of India. The film contains no advertising, and is excellent in all technical aspects.

The Power Behind the Nation (Norfolk and Western) 39 minutes, 16mm sound. “Free.” Print reviewed was black-and-white, but film also is available in Kodachrome color film.

A detailed presentation of the uses, mining and processing, and railway transportation of bituminous coal in the Appalachian region. The film begins with a sequence which depicts the industrial might of the United States, explaining that bituminous coal furnishes more than 50% of America’s energy. It refers to the chemical processing of coal, showing products and by-products obtained. Next, the film explains the necessity for close interrelation between the coal and railroad industries.

The nature, formation and mining of bituminous coal are shown in the following scenes. A map locates coal deposits in the United States; then the Appalachian coal field is shown, with the lines of the Norfolk and Western Railway superimposed upon it by animation. In one of the hundreds of mines which dot the mountains, details of the work of coal mining are shown, including scenes of the miners riding to work down the shaft, testing the air for gases, undercutting by machine, trimming the face, drilling, blasting, and loading the coal. The cars go up to the surface, then up the tipples, where the coal is dumped. It goes down over sizing screens, to the picking table where slag is removed, and finally through the loading booms into railway cars.

The next sequence shows in detail the method by which coal is handled through the great ocean coaling terminal at Norfolk, Virginia. A freighter is moved up to the pier; coal cars go slowly down an incline, across a scale, through a shoveling shed, onto the elevator, and finally the coal is dumped through a chute into the ship.

As the film concludes, the narrator states that the United States can look with satisfaction upon its stores of coal, and that the Norfolk and Western Railway is proud of its part in supplying this essential material for the life of the nation.

Committee Opinion: A good film for use in courses at the junior high, senior high, and college levels in science, social science, geography, and industrial training. The film’s sequence on mining is worthy of especial mention, but it was suggested that the entire film might have been shortened somewhat without appreciable loss of value. Photography (by Waldo E. Austin) is good; sound is good, and organization is adequate.

Plows, Planes and Peace (USDA) 17 minutes, 16mm sound, “Free.”

Outlines America’s program of national defense, with emphasis upon the contributions of agriculture. As the film begins the narrator reads a part of the Preamble to the Constitution, explaining that it is the American dream for the common man to enjoy the fruits of our country’s resources and production, A (Concluded on page 181)

Producers Named Above:
Dodge, Dodge Division, Chrysler Corporation, 7900 Joseph Campau, Detroit, Michigan. Prints also obtainable through local Dodge dealers.
Erpi, Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y. Prints obtainable on rental basis through most State extension film libraries.
Norfolk & Western, Norfolk & Western Magazine, c/o Norfolk & Western Railway Company, Roanoke, Virginia.
USDA, U. S. Department of Agriculture, Motion Pictures, Washington, D. C. Prints also available through various State extension film libraries which serve as depositories for the Department. 16mm sound prints may be purchased at cost.

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Other outstanding pictures are: **MAD ABOUT MUSIC** with Deanna Durbin, LETTER OF INTRODUCTION with Charlie McCarthy.

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Among the Producers

New Erpi Products
A new series of phonograph recordings on The Growth of Democracy is announced by Erpi Classroom Films Inc., 35-11 Thirty Fifth Avenue, Long Island City, New York. The first of this series, "Magna Carta to the Constitution," is now available. It consists of twenty recordings on the 12-inch double-face records complete with attractive album and study guide. They are specially-designed classroom records presenting authenticated dramatizations of crucial episodes in the struggle for democracy. Not only are the portrayals informative, but they provide suggestive leads into other related aspects of the historical record. The study guide contains detailed suggestions for incorporating the use of the recordings into regular courses of study. The series was produced by William Exto, Jr., in collaboration with Erpi and Harry J. Curnan of Columbia University.

New Filmstrip Subjects
Under the name of Practical Filmstrip Service, Carleton C. Pierce, Jr., who is also Director of Visual Instruction of Arthurdale High School, Arthurdale, West Virginia—has just released his first filmstrip subject "Our Presidents, 1789-1944," with other subjects to follow later in the year. Mr. Pierce also offers consulting services and laboratory facilities to schools and teachers who wish to work out material for presentation in film strip form.

U.S. Specifies Film Conditioning—"Equal to Vaporate"
Specification No. 41 on films for Visual Education in National Defense Training, for the Office of Education of the Federal Security Agency and all other Government Offices desiring prints, reads: "Unless otherwise specified by the ordering office, each print shall be subjected to a permanent conditioning and protective treatment, equal to the 'Vaporate' process, reacting directly on the emulsion itself, the effectiveness and permanence of which are evidenced by a substantial raising of the melting point of the emulsion in water without loss of pliability reserve."
The phrase "reacting directly on the emulsion itself" is particularly interesting. It directly excludes lacquers, waxes, oil, and other surface applications.

Portable Amplifier System
In schools it is often convenient to utilize a portable amplifier system in connection with the showing of educational films, particularly as many of these films have the spoken or musical accompaniment recorded directly on the film. Even where the auditoriums may be equipped with a built-in sound system it is not always convenient to use this for sound-on-film reproduction, especially where it is at times desired to show the film in some other part of the building.

A compact portable amplifier system, designed especially for this use, is the Model 699-T announced by Lafayette Radio Corporation, 100 Sixth Avenue, New York City. The carrying case divides, the two halves serving as baffles for the twin loudspeakers mounted in them. These are equipped with a cable which permits one to be placed 25 feet from the amplifier, the other 50 feet distant.
The 20-30 watt amplifier is designed for use with either 16 or 35 mm. film and is equipped with two 10-foot lengths of photo-cell cable complete with all plugs and connectors. A special equalizer circuit in the amplifier provides accentuation of the higher frequencies necessary to the best reproduction of sound from 16 mm. film. Provision is also made for connecting a microphone for announcements and to permit the system to be used for talks illustrated with silent film. The entire equipment is contained within a gray Spanish leatherette carrying case which is 18 3/4" high, 15" wide and 10 1/2" deep.

History of Typewriter in Film Slides
Visual Sciences, Suffern, New York, report an addition to their growing library of film slides, namely The History of the Typewriter. This roll, consisting of thirty-four frames including forty-two different models, clearly depicts the evolution of the machine, beginning with the earliest known attempt of an English inventor, who during Queen Anne's time applied for a patent. Most of the early attempts were directed toward perfecting a machine for writing raised letters to aid the blind. The typewriter of today is the result of efforts over 225 years.
New Films of the Month
(Concluded from page 179)

brief sequence on industrial production for defense follows. Then it is explained that under the nation's farm program the farmers themselves have been allowed to plan for adjusted production to provide plenty without waste.

A contrast is drawn between rich soil and an eroded hillsides as the narrator says that food cannot be produced from ditches and gullies; thus, terracing the soil is one of our means of defense. The contribution of the Ever-Normal Granary is explained. What the farm program means to America's food consumers is outlined in the following sequence, as bakery and packing plant scenes reveal some of the processes in baking bread and preparing meat for retail markets. There is an effective contrast here between Europe's ration cards and America's food stamps.

The last part of the film begins by explaining that America has created an army of temporary soldiers to serve the common defense. For this army, the farms supply cotton for tires, uniforms and tents; hides for boots and saddles; and food in abundance. The film concludes with the thought that America's farmers have learned new ways to insure defense against waste and hunger, and that America's seven million farms are working to build defense for the nation.

COMMITTEE OPINION—A good film to outline the importance of the farm and the national farm program in national defense. It was felt that the film's propaganda is entirely acceptable because of the present stress on defense. It should serve as good introductory, inspirational or summarizing material for classes in agriculture, economics, civics and other social sciences. Photography, sound and organization are good.

Chemistry and a Changing World (Epilogue) 11 minutes, 16mm sound, sale price $50.00. Teacher's guide to be furnished.

In this film the planning and execution of one new chemical manufacturing process forms the basis for a rather brief explanation of the role of chemistry in modern life. As the film opens, general scenes suggest our dependence upon chemistry for manufactured products. The work of the research chemist is represented as a group of research chemists meet to map plans for a new chemical manufacturing process for their company. The problem is to work out a process to produce highly concentrated phosphoric acid from electric furnace phosphorus. After months of research, the research men turn over their data to a chemical engineer, whose job it is to devise means of commercial production. He designs and builds a miniature "pilot plant," and, finally, his craftsmen plan the new commercial plant.

The plant's operating processes are shown in considerable detail; from the complicated processes emerge the final product, by-products and waste product. The work of the plant's analytical chemists is explained, and the sequence on the plant ends by showing how the liquid phosphorus which it produces is run into tank cars for solidification under water, prior to shipment. Further processing of the phosphorus to form concentrated phosphoric acid takes place in another plant. The uses of this product, in making things essential in our daily lives, form the closing scenes as the narrator emphasizes the contributions of research chemists and chemical engineers in creating and making available new products.

COMMITTEE OPINION—A good film for use in chemistry, general science, and in vocational guidance, from the junior high level through college. It was felt that the title might have been differently worded in order to indicate more accurately the content of the film. With appropriate supplementary discussion, the film should prove effective. Photography and sound are good; organization is fair.

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WALTER O. GUTLOHN, INC., 35 West 45th Street, New York City, announces the release of a series of 16mm silent motion pictures on Central America, entitled:

Way of Life—eight pictures—one reel each. Titles are: Zapotecan Potters, Coffee Democracy, Boys of Atitlan, Mayanland Today, Net Fishers of Patsuwar, City of Living Ruins, Silver Mountain Country, and Honduras.

These pictures give valuable information on the customs, government, educational standards, industries and habits of the people—taking us into their homes where the typical family life may be observed. Among the countries pictured are Mexico, Costa Rica, Honduras, Guatemala.

HARMON FOUNDATION, INC., 140 Nassau Street, New York City, is distributing two new 16mm 2-reel silent motion pictures on art technique, planned and photographed by two artists, Mr. and Mrs. Simon Moselsio, of the Art Division at Bennington College, Bennington, Vermont.

Modeling a Portrait presents all of the steps taken in building up a portrait in clay, as the basic work in sculpture. Mr. Moselsio does the modeling, and Mrs. Moselsio the camera work. The various tools are demonstrated in use as under the artist's skillful hands the completed portrait takes form. Characteristics of various materials are considered as the sculptor decides upon the medium into which the clay will be translated for permanence.

How a Plaster of Paris Cast Is Made shows the complete technique of making a plaster of Paris cast from a clay portrait. The first reel covers the making of the cast itself. Reel two shows how the cast is separated, the clay model destroyed, and the two halves of the mold cleaned. They are then tied together and the plaster of Paris poured in for the cast. Hardening takes place and the chipping is begun to remove the plaster mold.

DUNCAN MACD. LITTLE, 33 West 67th Street, New York, a foremost documentary film-maker, pictures the story of the pulpwood industry in the Province of Quebec, in his new production:

With Lumber-Jack and River-Driver (A film of the Haute Mauricie)—1500 feet, 40 min., running time. The four chapters of the film disclose the various details of all the forest operations—building of the dams in summer, felling, cutting and branding of the trees in autumn, transporting logs by sled to frozen lake in winter, carrying to the mills in spring, there to be "cooked" into pulp and fashioned into newsprint. The life, work, and hazards which surround the workers are sympathetically depicted, making the film an absorbing human as well as industrial record.

Garrison Films, 1600 Broadway, New York City, has issued a timely selection of motion pictures for school and community programs use in a new catalog, Films for Democracy. Films available in 16mm silent and sound, covering important phases of adult and school-level programs of education for democracy, are described in the catalog, classified under the following subjects: "Our Cultural Heritage," "Our Natural Resources," "Our Industrial and Agricultural Resources," "Community Problems," "Labor and Management," "Housing," "Health," "Pan-Americanism."

Garrison Films also announces the completion of arrangements to produce a series of twelve short films dealing with the background and nature of American Folk Songs, covering Regional, Spiritual, Cowboy, Ballads, and Work Songs.

NU-ART FILMS, INC., 145 West 45th Street, New York City, is releasing the film Abraham Lincoln, produced by D. W. Griffith and starring Walter Huston in four versions:

The Entire Life and Career of Abraham Lincoln—running time approximately one and one-half hours.

The Private Life and Public Life of Abraham Lincoln—approximately one hour.

The Public Life of Abraham Lincoln—approximately one-half hour.

Highlights of Lincoln's Career—approximately eleven minutes.

A study guide prepared by Frederick Houk Law, Ph.D., Chairman of the Department of English, Stuyvesant High School, New York City, can be obtained which covers all four versions. This picture is recommended by the Department of Secondary Teachers of the National Education Association.

William H. Wells Productions is the name of a new organization formed by Julian Roffman, William H. Wells and David H. Lion, with offices at 545 Fifth Avenue, New York City. The new firm will specialize in the production of educational and social welfare films.

Al O. Bondy, 630 Ninth Avenue, New York City, is handling distribution for the film recently for the New York City Civil Service Commission by Leo Seltzer and Elaine Basil, under the title:

Merit System Advancing—3 reels, 10mm and 35mm sound. It shows the type of job that comes under municipal civil service, how civil service job appointments operate as against the spoils system, and the advantages of the merit system. Information on the various activities in New York City, it was made with an eye to general distribution and consequently shows typical activities.

AMERICAN LEAGUE OF PROFESSIONAL BASEBALL CLUBS, 310 S. Michigan Building, Chicago, have ready for free distribution the following new baseball movie:

Batting Around the American League—4 reels, 16mm and 35mm sound—written and directed by Lew Fonseca, Director of Promotion. The purpose of this picture is to teach youngsters baseball, and to give the fans a better knowledge of the many inside plays of the game. Besides explaining fundamentals of play in normal and slow motion, highlights of the past baseball season are covered.


The series is in 15mm sound, each film telling the story of an episode in the life of Christ. The first four of the series now available for showing are: Child of Bethlehem, The Certain Nobleman, TheProdigal Son, and Jesus and Zaccheus.

Representatives of all denominations have previewed the pictures and have approved the careful and authentic presentation of the new testament stories. The series is produced under the direction of Reverend James K. Friedrich, Hollywood motion picture consultant on religion.

RUTGERS FILMS, New Brunswick, New Jersey, has completed production on a new subject in their zoology series, entitled:

Mollusca, Reel II—1 reel, 16mm silent and color—presenting the mussels found along the northern shores. Strikingly shown in color against naturalistic settings are Aequi, Elysia, Natica, Purpura, Aporhais, Bucinum, and Mya.

French and Spanish Editions of Castle Films

Of interest to teachers and students of Foreign Languages is the news that Castle Films is releasing French and Spanish editions of its travel, news and other educational 16mm sound films. A list of the subjects now available with French and Spanish commentary can be obtained by writing direct to Castle Films, 30 Rockefeller Plaza, New York City.

San Francisco Branch for Filmsound Library

The Bell and Howell Company, Chicago, has opened a San Francisco Branch of its 16 mm Filmsound Library at Photo and Sound, San Francisco, who will handle the film distribution and rental for northern California, making it possible for 16mm projection owners in that area to receive one day service on rentals. Bell and Howell now has three West Coast branches—Hollywood, San Francisco and Seattle.
At many points in the educational program, motion pictures with sound possess definite proven advantages over other types of visual aids. With the many improvements in sound-on-film projectors — and the new lower price levels — all educators should once more check into the possibilities of utilizing fully this latest aid to effective teaching. Today, every school, regardless of size, location limitation of physical environment or finances, may now provide equal learning opportunities with the aid of Amprosound 16 mm. motion picture projectors. In collaboration with educational film libraries, a program may be planned which will make an outstanding contribution to any school and community. Ampro Educational Dealers are trained especially to provide service and information on all phases of Visual Education.

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Bailey Film Service (3, 4) 1651 Cosmo St., Hollywood, Cal.
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago (See advertisement on page 105)
Castle Films (3) R. C. A. Bldg., New York City (See advertisement on page 141)
College Film Center (3, 5) 59 E. Van Buren St., Chicago.
DeVry School Films (3, 4) 1111 Armitage Ave., Chicago
Dudley Visual Education Service (1) 736 S. Wabash Ave., Chicago 4th Fl., Coughlan Bldg., Mankato, Minn.
Eastman Kodak Co. (1) Teaching Films Division, Rochester, N. Y. (See advertisement on page 173)
Eastman Kodak Stores, Inc. (3) Kodakoscope Libraries 356 Madison Ave., New York City
Edited Pictures System, Inc. (3) 330 W. 42nd St., New York City
Erpi Classroom Films, Inc. (2, 5) 35-11 35th Ave., Long Island City, N. Y.
Films, Inc. (3) 330 W. 42nd St., New York City 64 E. Lake St., Chicago 314 S. W. Ninth Ave., Portland, Ore. (See advertisement on page 161)
Garrision Films (3, 6) 1600 Broadway, New York City (See advertisement on page 166)
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask. 156 King St. W., Toronto
Walter O. Gutlohn, Inc. (3) 35 W. 44th St., New York City (See advertisement on page 179)
Harvard Film Service (3, 6) Biological Laboratories, Harvard University, Cambridge, Mass.
Health Film Service (3) First Nat'l Bank Bldg., Salem, Ore. (See advertisement on page 169)
Hofbarg Productions, Inc. (2, 5) 1500 Broadway, New York City
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago, Ill. (See advertisement on page 181)
International Film Bureau (3, 5) 59 E. Van Buren St., Chicago
Lewis Film Service (3) 216 E. 1st St., Wichita, Kan. (See advertisement on page 170)
Post Pictures Corp. (3) 723 Seventh Ave., New York City
Douglas D. Rothacker 729 Seventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.

Universal Pictures Co., Inc. (5) Rockefeller Center, New York City (See advertisement on page 167)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Vocational Guidance Films, Inc. (2) Old Colony Bldg., Des Moines, lA.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.
Y. M. C. A. Motion Picture Bureau (3) 347 Madison Ave., New York City 19 S. LaSalle St., Chicago 351 Turk St., San Francisco, Cal.

MOTION PICTURE MACHINES AND SUPPLIES

The Ampro Corporation (3) 2839 N. Western Ave., Chicago (See advertisement on page 183)
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago (See advertisement on page 165)
DeVry Corporation (3, 6) 1111 Armitage St., Chicago (See advertisement on inside front cover)
Eastman Kodak Stores, Inc. (3) Kodakoscope Libraries 356 Madison Ave., New York City
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask. 156 King St. W., Toronto
Hirsch & Kaye (3) 239 Grant Ave., San Francisco, Calif.
Holmes Projector Co. (3, 6) 1813 Orchard St., Chicago (See advertisement on page 178)
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago (See advertisement on page 181)
Jarrell-Asch Co. (3) 165 Newbury St., Boston, Mass.
RCA Manufacturing Co., Inc. (2) Camden, N. J. (See advertisement on page 177)
S. O. S. Cinema Supply Corp. (3, 6) 636 Eleventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.
Victor Animatograph Corp. (3) Davenport, Iowa (See advertisement on page 171)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

PICTURES

Informative Classroom Pictures 44 N. Division Ave., Grand Rapids, Mich. (See advertisement on page 179)

SCREENS

Da Lite Screen Co. (3) 2717 N. Crawford Ave., Chicago (See advertisement on page 163)
Society for Visual Education, Inc. (3) 100 E. Ohio St., Chicago, Ill. (See advertisement on outside back cover)
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILM SLIDES

Eastman Educational Slides 303 Greenleaf Ave., Wilmette, Ill.
Edited Pictures System, Inc. 330 W. 42nd St., New York City
Ideal Pictures Corp. 28 E. Eighth St., Chicago, Ill. (See advertisement on page 161)
Keystone View Co. 1819 Broadway, New York City (See advertisement on page 161)
Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill. (See advertisement on outside back cover)
Spindler & Sauppe, Inc. 86 Third St., San Francisco (See advertisement on page 159)
Visual Education Service 131 Clarendon St., Boston, Mass.
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Hirsch & Kaye 239 Grant Ave., San Francisco, Calif.
Jarrell-Asch Co. 165 Newbury St., Boston, Mass.
RCA Manufacturing Co., Inc. 2 Camden, N. J. (See advertisement on page 177)
S. O. S. Cinema Supply Corp. (3, 6) 636 Eleventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.
Victor Animatograph Corp. (3) Davenport, Iowa (See advertisement on page 171)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) indicates 35mm sound and silent.

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Making Pictures Teach

A live discussion of the psychology, not the mechanics, of visual instruction—the "Why, When, What, and How?" of pictures in teaching.

CLARENCE D. JAYNE
Central State Teachers College, Stevens Point, Wisconsin

There are two rather distinct aspects to teaching with visual aids. The first is mechanical; the second is psychological. The first deals with the selection, and use, and upkeep of equipment, but I am here concerned with the second aspect of teaching with visual aids—the psychological or pedagogical.

It seems to be frequently assumed that if the teacher can operate a projector she is prepared to launch into teaching with visual aids in a big way. Nothing is further from the truth. Probably the most discouraging experience an enthusiastic advocate of visual education could have, would be a glimpse into classrooms all over the country at the pedagogical sins committed in the name of visual education. In my own limited experience I have seen enough to convince me that visual education is too often placed in the hands of enthusiastic mechanics, and showmen, and photographic technicians, and too seldom in the hands of well balanced educators. It is my own feeling that problems of teaching technique, rather than merely the mechanical technique, need to be stressed far more in training teachers and in our research literature.

For the purpose of this discussion I would propose the following four questions: First, Why use pictures in teaching? Second, When use pictures in teaching? Third, What pictures should be used? Fourth, How should pictures be used?

Why Use Pictures in Teaching?

The answer lies in the psychology of learning. We learn through sensory experience, and in no other way. Destroy its capacity to receive stimuli from its environment and you have destroyed the capacity of an organism to learn. Sensory experience may be roughly classified into three types. First, sensory experience with reality; second, sensory experience with representations of reality, such as models and pictures; and third, sensory experience with language symbols which stand for reality. Since all sensory experience may be classified under one of these headings, and since we learn only through sensory experience, it follows that all of our teaching must be based on providing pupils with experience of one or more of the types mentioned above.

As a matter of fact our formal teaching procedure is almost universally based upon the third type of experience—that with language symbols. From the early grades of the elementary school to the graduate school of the university, most of the formal learning experiences of pupils consist of (1) reading from text or reference books or, (2) listening to what the teacher or someone else has to present about a topic or, (3) to a much smaller extent, the presentation of ideas to others. Reading and listening have been traditionally, and still are today, the basic educational activities assigned pupils in our public schools. This is just another way of saying that teachers teach, almost exclusively in many cases, through the use of language symbols.

The use of language symbols in teaching has many advantages. Language symbols free the teacher of time and space limitations in presenting ideas. It is as easy to talk of prehistoric times or of the Amazon jungles as it is to discuss the school heating plant. Language symbols can present in a moment's time generalizations which if built out of actual first hand experience might require a tremendous amount of time and effort. Language symbols made it possible to bring into the school room the noblest products of the world's greatest minds. Language symbols provide the easiest, the most pleasant, and most convenient method for the exchange of ideas. Language symbols have been and will continue to be man's primary learning and teaching tool.

Teachers need to realize, however, that language symbols as teaching tools do have certain definite limitations. While it is true, as suggested above, that language is not bound by space or time, it must be emphasized that it is definitely experience-bound. That is to say, language symbols become meaningful only as experience is acquired with the reality, or with repre-
sentations of the reality, for which the symbol stands. Thus the symbol "dog" could never produce anything but the most vague impression, the most shadowy and inaccurate mental image, in the mind of a child who had never had sensory contact with a dog or any representation of a dog. Sensory contact with a dog, or some good representation of a dog, is the only way the verbal symbol can be made vividly meaningful.

Thus teachers need to be constantly alert to the fact that pupils may read words and listen to words, and on demand may be able to use words glibly from the text or from the teacher, and still have no true understanding. Word learning is not enough—teachers must provide the background of sensory experience so that words used are meaningful. Advocates of visual education are not antagonistic to the use of books and oral discussion in teaching; rather they would improve the ability of the child to read books and to take part in discussions intelligently by making certain that experience had made meaningful the vocabulary used.

Experiences with reality have many advantages. Ordinarily no representation can compare with the real thing in the amount of interest created and in the vividness of the impression produced. Experience with reality, particularly under school conditions, however, has many limitations. Even an ambitious program of field trips and school journeys can bring to the child first hand contact with only a small fraction of the concepts included in his course of study. From the practical standpoint, ordinarily the best way in which teachers can bring sensory experience to pupils is through an intelligent use of representations in reality. Of these representations, pictures are the most readily available, are the cheapest to produce, and are the most convenient to use in the classroom. In order to provide the background of sensory experience which can alone develop vivid and accurate concepts every teacher should learn to make intelligent use of the many kinds of picture material now available.

When Should Pictures Be Used?

The answer to this second question was really indicated by our discussion of the first. Language symbols which are entirely clear and meaningful form the most convenient teaching tool. In general it may be said that the more immature the child, the smaller his meaningful vocabulary, and the greater the need for providing numerous experiences with pictures or other representations of reality. It should be pointed out, however, that as the child progresses from grade to grade he is continually brought into contact with new fields of knowledge for the interpretation of which his previous background of sensory experience is entirely inadequate. Thus the initial approach to most new fields of study on any grade level will ordinarily be made more meaningful and vivid if opportunity for actual sensory experience is provided.

In other words, pictures should probably be used most in the elementary grades, but there is no work so advanced but that pictures have their place.

What Pictures Should Be Used?

This raises two types of problems: First, what are the characteristics of a good teaching picture? Second, what form of pictures, that is lantern slide, motion picture, stereograph, etc., should be used?

Let us consider for a moment the characteristics of a good teaching picture. It would seem off-hand that it should be rather simple to select good teaching pictures, but such is not the case. I recently asked about thirty teachers to evaluate five pictures on a ten point scale and the results show conclusively that this group, which I think is quite typical, did not agree at all as to what a good teaching picture was. For instance, on three out of the five pictures the rating was spread over the entire ten points of the scale—that is, some of the group gave a rating of 1, which was the lowest possible to each of these pictures, and some gave a rating of ten, which was the highest possible to the
Sound Recordings for School Use

FOR many years the use of "phonograph records" in the fields of music and foreign languages has been an accepted practice in American schools, but only recently has any great effort been made to adapt this flexible instrument to general employment in all fields of teaching. There is good evidence, however, that the "phonograph record," in its modern form of electrical recordings, may furnish the school of tomorrow with curricular materials which will be invaluable.

As the use of radio broadcasts in the classroom has become more and more widely demonstrated as a successful teaching innovation, the evidence has accumulated that sound transcriptions may form a vital part in the optimum use of sound by schools. In fact, it might be said that a record puts radio broadcasting on top, to be used by the teacher at the exact time it is needed, and to be repeated as often as desirable.

The chief advantages possessed by sound recordings might be listed as follows:

1. Extreme flexibility, both in adaptation to the needs of children and in the occasions for use.
2. The decidedly low financial outlay necessary to provide adequate equipment.
3. The particular adaptability to rural situations.
4. The large potential market for records, which should lead to the development by private enterprise of truly outstanding sound recordings.

After a very limited experience with the use of records and also with their production, it seems to us that the chief use to which records may be put is to inject "punch" into curricular materials. It would be easy to make a long list of other possible uses of records, but very few of the items would differ greatly from the uses to which other audio-visual aids are put, and repetition is not necessary here.

Some three years ago the Committee on Scientific Aids to Learning of the American Council on Education began an investigation of the possibilities possessed by sound recordings for school use. Several interesting experimentation were conducted, and significant findings made. One of the more salient findings was that the whole problem of the use of "phonograph records" in schools revolved around the records themselves. That is, the quality, the method of presentation, the subject-matter contained, and the educational reliability of the record itself seemed to be the vital factors determining the value of the sound recording as an aid to teaching. In short, good records seem pretty likely to get good results and to be accorded wide use.

One year ago a representative of the Committee on Scientific Aids to Learning met with a group of Georgia school people, and proposed a state-wide undertaking to produce records dealing with Georgia problems, to have copies of these records made, and to furnish practically every school system in the state with the set of records free of charge.

Describing a significant experiment in educational sound recordings on a state-wide scale in Georgia.

L. D. HaskeW
Sup’t of Schools, Monroe, Georgia

It is easy to see the significant aspects of this undertaking. The recordings produced would be closely allied with our own school problems. They would be widely used. If successful, they would create a demand for records which private enterprise would hasten to supply. A fairly large allotment of funds was available for the production and printing of the records, so naturally the Georgia people welcomed the opportunity and accepted the proposal.

Dr. H. B. Richie of the College of Education of the University of Georgia was appointed Director of the Project, and a state-wide Steering Committee was set up to promote the work. In a year's time considerable progress has been made, but many problems yet remain to be solved. Briefly, we would like to tell you where we stand today.

After a long and arduous process of careful study, we have evolved a tentative list of topics for some fifty records, and the achievements of this goal in itself is an accomplishment of which we are proud. These topics have been arrived at in conjunction with the principles and procedure of the Georgia Program for the Improvement of Instruction. Our biggest problem has been to secure adequate scripts for the production of the recordings. The amateur field was canvassed first, but we have had to turn to professional script writers who are guided and advised by educators.

As now set up, the program calls for a four-step program in the production of recordings. First, a committee of teachers makes our abstract of information available for use on a particular topic. Second, this abstract is then turned over to a professional script writer. Third, this script is carefully reviewed by a committee to check accuracy, teaching devices, etc. A fourth committee then examines the script from a technical standpoint, and it is ready to go into production.

Production is carried on by the facilities of WSB, and only the interest and wise counsel of Mr. Lambdin Kay of WSB has kept this project from going on the rocks several times. We have actually produced already some four records, which were try-outs only. From them we have learned how to avoid certain errors and are now ready to try our first batch of recordings for permanent use.

We hope to have available for distribution, early in 1941, a group of ten records. These will be sent into practically every county in the state and used by the schools. The topics dealt with range from "Malaria" to "How to Get a Job", and each record is intended to have a distinctly Georgia flavor.

So far as we know now, our appropriation expires when we have made the records and put them into the schools, but we do plan to furnish teachers with a few printed suggestions for advantageous use of the records. We believe that the records will prove to be immensely valuable aids to modern teaching.

* An address delivered November 16, 1940, at the Fourth Annual Southern Conference on Audio-Visual Education, Atlanta, Georgia.
A summary of many steps in visual instruction progress at a well known educational institution.

MARTHA MOGAN
National Park College, Forest Glen, Maryland

A new quirk in the use of motion pictures for visual education is presented by National Park College, a junior college for women, with an enrollment of 350 students. With a student population drawn from over forty states and several foreign countries, the school has the immediate problem of homesickness to deal with, once the students arrive on the campus. Consequently, it puts visual education materials to work at once. Molded into the orientation program, which includes tests and analyses for guidance purposes, are programs of entertainment including silent and sound movies of college life. The new college student views in her first week of school, motion pictures of life in other colleges and a Kodachrome movie of life at National Park College—a film in which the student may see her own friends appear, and one which is renewed each year.

The National Park College audio-visual education program is growing this year into a well organized plan. For perhaps five years the administration has been interested in the progress of audio-visual aids, but has been confronted by many problems in carrying out the program. Largest of the problems is cost of materials. A small college, it does not have a budget which will allow expenditure of an exceedingly large sum for initial materials.

As a result, the committee on audio-visual education has determined upon a policy of rental of films rather than outright purchase. In the long run, this procedure is less economical than complete ownership of films, since the latter course would afford a film library. But the committee realizes that often approximately fifteen films may be rented for the price of one in outright purchase, and the immediate need takes precedence over a policy of building up a library gradually, only to find it out of date by the time it is enlarged to standard capacity.

During the first semester of the present school year, thirty sound films had been shown already, covering the fields of art, interior decoration, home economics, social sciences, history, economics, sociology, psychology, and music. Films are shown in a specially designed room, located in the center of the area of recitation rooms, either by a trained operator or the teacher. In-Service training in the operation of the sound projector is recommended by the committee in order (1) to help the teacher fulfill the requirement of a preview of the film before the showing before the class, (2) to enable her to stop the film for explanation wherever she wishes to do so, and (3) to allow her to put across what she thinks most important.

The problems of selection and evaluation are outstanding here as they are in any school system which is attempting visual education. The administrative committee, composed of a member of the administrative staff, the director of guidance, and representatives of the speech, dramatics, and science departments, keeps on file catalogs of the various film companies,
and informational listings and reviews from many sources. It recommends to teachers new films and follows their suggestions if they become aware of a new film on the market through some other source. A main problem is the lack of previews on films which are rented. Rental usually is for one day or week, and not on approval.

Teachers are the main evaluators of films shown at the college. After the showing of a movie, the teacher records her impression of it, and the class' reaction. The American Council on Education, which developed the Association of School Film Libraries to facilitate distribution of school films, is active in evaluating educational films. Its findings are published in the association's catalogue and in other free pamphlets which are distributed to educators.

A less expensive method of teaching through vision, has found approval in the college this year. It is the use of film slides, which are inexpensive to purchase, and even less expensive to make. With the use of an adapter, even very small film slides may be projected on the slide machines.

One of the newest parts of the visual education program at the college is the introduction of photography classes. Students, working under the direction of a staff photographer in a fully equipped college darkroom, learn the elementary principles of photography, obtain a knowledge of cameras, and correlate their work with simple chemical reactions with other scientific subjects of the curriculum. The aid of students is invaluable in the preparation of film slides for use in the program.

This year National Park College has installed radio recording equipment in specially constructed sound proof rooms. A full time trained operator supervises the use of recording machine and microphone, which is made available not only to classes in speech, music, dramatics, but also to the community. Both students and members of the community are allowed to make recordings for their own personal use at cost. Classes in microphone technique are conducted under the supervision of the dramatics department. The radio work is used as a method of self criticism in speech classes, recordings being made at frequent intervals. Cooperating with the dramatics department is the English department through which radio scripts are obtained for practice in the work.

With an expenditure of approximately $800 this year for the radio equipment and records, the college has on file recordings which may be used for music, language, and history classes. The equipment can be used for taking radio programs off the air, thus solving another problem of radio education, by making the program available to classes which would otherwise not be able to hear it. Dramatics students, too, enjoy the use of the recording system for records of sound effects for plays.

The growth of the school in the past three years has encouraged the promotion of a program of audiovisual education, related rather closely to the guidance program which is receiving new emphasis. Dr. Roy Tasco Davis, president of the college, plans an even greater enlargement of the program in the future, following the policy already established of using to advantage the college's location, in suburban Washington, D. C.
Technical Films in the Camp Program

A WILLING receiver of visual education is the summer camp. There is hardly a camp for children or adults that does not rely on the motion picture for part of its entertainment and even instruction program. Mechanical servant, versatile and delighting, the motion picture endears itself to the younger with its succession of anthropomorphic images, its new places and new fields for mental experiment and adventure.

On the whole, the camp needs this form of visual entertainment as a very definite medium for relaxation, this for adult staffs as well as play-tired children. The film activity is restful and especially functional when it weaves its way into the whole camp pattern that is predominatingly active. This familiar type of pastime, this stimulating device for youth education, is becoming a much respected institution in the summer camp. Rare is the camp that weekly does not in some way devote its energies to contemplating its respective screens.

Whether used outdoors or in, on pleasant evenings or poor ones, the motion picture's position in the camp, for the most part, is one of general interest. The film subjects used have general appeal. The usual camp film evening does not cater to a specialized few; the films are such that the greatest number of people at one sitting can have their requirements satisfied. Animated cartoons, adventure films, human interest stories, old run professional shorts and abbreviated longs, make up the typical camp film program.

One cannot suggest that these types of motion pictures are not desirable or effective, for they do serve a very definite purpose. They are genuine entertainment and accepted as such. Even the educational films drifting into the typical camp film repertoire are accepted as entertainment rather than education, and few of us would deny the child the opportunity of being entertained while learning. Yet it does seem that the educational film has greater implications for the summer camp (and similar organizations) than have been generally conceded or recognized to date.

Many camps have found a certain callousness developing on the part of the camper toward the usual film library exhibited during the summer. Sometimes by the third night of movies the child expresses a dissatisfaction with the quality and choice of films. Whether this is due to the film program worked out by the camp management or the intrinsic nature and value of the films, is immaterial. What is significant is that children can rebel against celluloid magnetism.

The one point that most summer film programs ignore is the element of camper participation. Camp children rarely are content to just sit and watch. Unless they can engage in some sort of work in connection

Some suggestions for enlarging the function of motion pictures as they are used in camp life.

HERBERT BEARL
Brooklyn, New York

A small group of boys in a summer camp museum of natural history studying a special film on science.
with the film, gain some means for self-expression from a film showing, he will not find the screen performance wholly satisfying. The immediate question is what can give the child a chance to be more active as a result of the motion picture? One thing is certain, just sitting through a showing is often annoying to children. Why prejudice these youngsters against this vital form of communication?

Some camps promote film-making themselves. They grind out their own stories and project them for a night’s entertainment. The child who finds himself thus engaged, either in production, acting, or presentation, prides himself on his intimate share in the entire program. He looks on the motion picture as a useful art, as a new device for youth experimentation. The possible artistic shortcomings of this type of film, even to a very sophisticated audience, quickly fade with the recognition of familiar faces and places. Only a din of acclamation greets this home-made movie. The camper likes to see himself and his associates in another medium.

But the camp not willing to adopt such an ambitious program as film production, has to find films with worthwhile values in our rural havens for youth. Many believe that the general movie evening is adequate, yet are disturbed by the contempt expressed for the film in camp. They have sought a sounder basis for film use. They envisage the motion picture as a supplementary aid in the function of special camp activities.

Film subject matter is necessarily limited, in this connection, to the documentary film, and those of a technical and specialized character. It will indeed be gratifying for those responsible for film activities in camps to know that even the very technical motion picture may be effectively used in training youth in many well liked camp activities. Examples and films for the purpose are plentiful.

An athletically minded child can spend many pleasant hours studying films dealing with the playing-form in various sports. Golf, tennis, basketball, handball, baseball, and other games have all been recorded on film and serve as good guides to this athletic type youngster. That camps cannot have experts in all these fields is obvious. A film is better than no champion instructor, in fact it is a very patient teacher willing to repeat its moves indefinitely.

Then there is the scientifically minded child, who in camp spends all his time on a summer nature program. He can gain much from the specialized films on the hundreds of phases of science which acetate can supply. Private and government agencies are willing to supply such scientific reels.

The child with a yen for art has a host of art films and handicraft processes waiting to be methodically unrolled. Pottery, sculpture, wood carving, landscape painting, portraiture, and basketry can spell their tales on silver screens. Graphic arts, poster making, rug weaving, metal craft, wood working, and plastic crafts can all be taught the child with the aid of the turning cameras and their projectors.

Scoutercraft, swimming and diving instruction, canoeing, seamanship, mining, mountain climbing, fishing, forestry, and even horseback riding are other activities that campers find of interest. This type of visual education can open up not only new fields for interest but new interest in traditional camp activities.

It must be pointed out however, that these films cannot be used to good advantage by large groups of boys and girls who do not have concentrated interest in the specific subject in question. The child must have

(Concluded on page 219)
**Novel Pictures Not For Theatres**

By ARTHUR EDWIN KROWS

One of the earliest guides, and one which educational and motion picture pioneers would recall with gratitude for its serviceability at the time, was an eighteen-page bulletin, *Motion Pictures and Motion Picture Equipment*, issued in 1919 by the U. S. Bureau of Education. Its authors were F. W. Reynolds and Carl Anderson. Another pamphlet on the subject, six pages thicker, entitled *Organization for Visual Instruction*, was distributed by the same agency in 1923, authorship here belonging to William H. Dudley of Wisconsin. In 1922 was published *Motion Pictures for Community Needs*, by Gladys and Henry Ballman, probably the first of the full-sized books devoted to the particular problem. The useful *Motion Pictures in Education*, by Don Carlos Ellis and Laura Thornborough, appeared a year later. The year after that came *Visual Education*, the Freeman effort for the Commonwealth Fund. But we are thinking now of the advice available on the sheery mechanical handling of films rather than recommendations for experimental research.

An editor of the *Scientific American*, Austin C. Leesobnurs, who had published his *The Camera Handbook* in 1921, helped the beginners materially with a series of articles called "The Mechanics of Visualization" in *Moving Picture Age* during 1922. From 1923 to 1925, in the same magazine, Dudley G. Hays wrote informingly about film methods current in the Chicago public schools; A. G. Balcom told, via *Educational Screen*, of what he was doing in Newark with motion pictures; H. S. Upjohn explained his Los Angeles school procedure; Joseph J. Weber described work at the University of Arkansas; Anna V. Dorris discussed her visual education setup at Berkeley; Charles Roach at the Iowa State College; J. H. Wilson and Bernadette Coté theirs at Detroit; R. S. Corwin, visual education activities at the Milwaukee Public Museum; E. L. Cran dall advised variously from the standpoint of his experience in the city of New York; and A. W. Abrams from his with the Visual Instruction Division of New York State. This represents a mere cross section of the available information. There was much more for those who would take a few extra pages to look for it.

The cry had been raised, more insistently than usual, in the nineteen twenties, for formal teacher training in visual education. Loudest among the voices in favor were probably those of W. M. Gregory, A. G. Balcom and F. D. McQuitty. However, the work had already begun. Probably the first course of the kind granting credits was offered in 1918 by the School of Education of the University of Minnesota, and, in the next half-dozen years, similar courses were either contemplated or were actually made available in most of the important institutions of higher learning in America. Crossing a friendly frontier one may mention, too, the Visual Instruction Service instituted at the Canadian University of Alberta early in 1925.

As the regional centers of non-theatrical distribution found it necessary to issue catalogues of their available reels, they included in their pages practical instructions on the care and handling of films. The projector manufacturers added generously to those printed fact and advice, as far as the De Vry Company, of Chicago. In 1925, from July 27 to 31, inclusive, this concern began the first of a series of free summer schools for accredited workers in visual education.

While most of the other pioneers were theorizing on school uses of films, Andrew Phillip Hollis specialized in meeting practical needs.

That opening session, which so admirably set the pace for those in later years,—and, indeed, presented sufficient example for the constructive discussion of film applications at many teachers' conventions elsewhere—took place at the De Vry factory. Twenty-five persons, more or less well known in the work, enrolled as students, the most traveled being those from New York, Pennsylvania and West Virginia. Herman De Vry, A. E. Gundelach, his vice-president; G. K. Weis, his factory manager, and others on his staff were present to demonstrate equipment and to answer possible questions about projection problems; but the conduit of classes was left to the capable administration of Andrew P. Holle, formerly in charge of visual extension work at North Dakota Agricultural College, later a member of Frank Freeman's research committee, and, later still, managing editor of *Educational Screen*.

Educational reels of several different types were projected for the guests each day; there were stimulating daily roundtable discussions, a leisurely and thorough tour of the factory, a visit to the studio and laboratories of the Rothecker Film Manufacturing Company, and demonstrations by Dudley Grant Hays, Nelson L. Greene, F. S. Wythe, F. Dean McClusky (then just made director of research at Purdue University), and C. E. Egeler, who told about industrial films as represented in his work at the Nela Park Division of the General Electric Company.

The 1926 session was received with augmented enthusiasm by more than twice the original number in attendance, some coming from as far down south as Texas and Georgia, and as far west as Nebraska. A. P. Hollis, now film editor of the De Vry Company, charged with preparing school programs to be used principally with company projectors, appeared this time as author of a new and useful book, *Motion Pictures for Instruction*. The last week in June, 1927, was occupied by the third session, and the program for that, announced in the spring before the close of the school year, was a source of much pleasurable anticipation in those who wished guidance in using visual aids in classrooms, churches, clubs and all other non-theatrical exhibition centers, for all were to be touched upon constructively.

There was presently to be a gap in the correspondence courses otherwise, an upheaval in the affairs of Herman De Vry. The disturbance was most unintentionally caused by a remarkable salesman named Thomas Fletcher. His story was somewhat complicated. Years before, this human dynamo had built up a large and successful organization to sell music boxes under the "Regina" trade mark. Soon afterward the new century swept in, scattering its prodigal inventions, and the automatic piano became popular instead. Fletcher's sales organization could no longer hope to sell music boxes, so he replaced that line with player-piano music rolls standardized at eighty-eight notes. Barely had he become established there when the improved phonograph supplanted the player-piano as an active market item. Still undismayed, Fletcher turned to a portable phonograph with a battery-driven motor. Then the radio spoiled that. Even then undiscouraged, he turned his organization to selling low-priced radio tubes; but in this case he was sued for patent infringement by the Radio Corporation of America, which brought out his claims on his agreement to desist in that competition.

Motion pictures for amateurs now attracted him, and he acquired for his preliminary stock in trade a combined camera and projector. The name under which he began selling it was not intended
to identify this article particularly, for there was no telling, after the harsh experience he had been through, when he might have to abandon it and take on another. When he looked for a name, someone seems to have suggested “the X-Y-Z Corporation.” But X-Y-Z had become too well known by many others, as any convenient telephone book will show. Nevertheless, the idea seems to have appealed to Pletcher, and he took three other letters—his concern became the “Q-R-S Corporation.”

The motion picture experiment indicated a worthwhile, enduring market at last, so Pletcher decided to enter the field on a really considerable scale. Determining that the motion picture equipment he wished to sell was De Vry’s, he bought out De Vry for half a million dollars in cash and a million dollars in stock. The organization name became the QRS-De Vry Corporation. De Vry, enthusiastic over Pletcher and his project, turned his cash into the business and became a vice-president. Improved machinery, an expensive and expensive cameras were prepared to manufacture them in the large quantities required for mass selling. With a bright future elaborate promotional plans were laid.

But, with resources now invested more in product than in sales organization, Pletcher could not hope to show his customary agility in the face of storm. The great Depression and a combination of lesser adverse circumstances suddenly ran the shares of stock down in value before the marketing stage could be reached. QRS went under and very little was recovered. Pletcher stood by as long as he was able and then, in his declining years, was obliged to face the bitter prospect of starting over again from the bottom. De Vry himself was never wiped out, however, when the inevitable auction took place. De Vry canvassed his friends and raised enough to buy in the factory and the equipment, including the new dies. Putting it all to work, as he very well knew how to do, he soon cleared his indebtedness and the QRS-De Vry Corporation resumed from where it had been interrupted.

As it happened, even had De Vry been unable to repurchase the factory, he would not have been as completely without resources as his friend Pletcher, all because of a project into which he had gone tentatively about 1928. At that time a Mr. Carpenter had approached him with an idea for selling stocks of short films and cheap projectors to students studying electricity, just as phonograph records and portable machines have long been sold to home students of languages. That unpretentious business was organized first as the National School of Visual Education and, shortly after, as the De Forest Training Corporation. The De Forest Training Corporation, a close friend of De Vry, who took a direct interest in the undertaking and, to promote it, lent his name so celebrated in the electrical realm. At the start it had not gone especially well, but De Vry’s head bookkeeper, Theodore Lefebre had asked and obtained permission to see what he could do to improve the situation. Under Lefebre the project attained a profit of approximately $30,000 in the year 1935, and it has been climbing steadily ever since. The actual programs were worked out and assembled by F. S. Wythe, who was then engaged in the regular films for the De Vry Library.

So it is not surprising that the continuity of the De Vry Summer School was temporarily broken. But it is not surprising, either, that a service so definitely helpful was thereafter resumed. The new name minimized the De Vry connection, probably because some over-zealous critics objected to gifts from commercial interests; and it was then known as the National Conference on Visual Education and Film Exhibition by the De Vry Foundation—the last words presented as the modest philanthropist preferred, in small letters. I say “preferred,” the past tense, because the admirable, dynamic, lovable Herman A. De Vry died suddenly on March 23, 1941, at Chicago.

June 22 to 25, 1936, was designated as the “sixth” session, and the place was not the factory but the Francis W. Parker School in Chicago. A. P. Hollis was then listed as “Educational Director.” The advance in his status was nominal; his duties, so admirably performed on the first occasion, remained substantially the same—a tribute to the soundness with which they had been conceived originally. With the ninth session, June 19 to 22, 1939, having fulfilled its pioneer usefulness, this De Vry Summer School was discontinued.

Chapter VIII—The Customer Does It

NOT only the teacher was persuaded that he knew his own requirements better than any mere film producer could hope to do, but the feeling was shared generally by the picture man’s other clients in industry and social service. In the client’s first production experience the alleged film expert was permitted to have his way, but, when his work fell short of the client’s expectations, it seemed that one man’s judgment on what it ought to be was as good as another’s.

The trouble may have been that there was non-theatrically no satisfactory system of distribution, such as theatrical producers had, to prove the values of the given work by measuring mass audience reactions; until any picture could have that thorough test of service, what a non-theatrical film should be necessarily remained a matter of opinion. Besides, as the American “merchant prince,” Marshall Field, said, “the customer is always right. (Of course, non-theatrical producers have grown out of this. In December, 1913, for instance, a dental firm in Detroit was taken to court for refusal to pay for a film which had been produced for it.) That ‘might makes right’ was not, however, the customer’s full justification for his belief that, having seen one of his pictures made, he could do a better job than the seemingly eccentric fellow who had hired and commanded the crew before. Nor was the customer justified by the prospect of saving money by doing it himself, for economy, in this line, is mainly in informed, skilled management. Nevertheless, this money fallacy was frequently the precipitating factor—if one discounts the common side determinant, that the customer’s man, with his employer’s (not his own) investment at stake, thrusts to the prospect of being, himself, a D. W. Griffith or a Cecil B. De Mille, telling players what to do and cameramen where to aim. I have heard it said by professional non-theatrical producers that the best to be hoped for in patronage was an order to produce every other picture for a customer; the in-between subjects he usually “produced” himself, returning for professional help when he had found how little he really knew about the process.

But it was more than a coincidence that, in the half-dozen years directly following the Armistice and Peace, so many customers in America decided to produce their own films—or, what it amounted to, to write their own scenarios and cut and title what the cameramen employed brought in. They called that “production.” Why should the decision have been so general, and why should it have been just then? One may only guess why, but whatever the reason was, I suspect that it was complex, composed of many contributory causes. Among these, no doubt, were the flood of publicity in newspapers and “film” magazines, telling how everything in the way of film trickery was done, and the extravagant advertising of manufacturers of cheap camera equipment declaring that motion picture production was now so simple that it was really a layman’s pleasure.

There were profounder moving causes which would also have been great economic and social changes. Of these the mere need of volume in non-theatrical production was one. A half-dozen pictures a year were enough to warrant the appointment of an employee to see that they were properly made, to care for the prints and to make distribution, such as it was. But that the pictures should be made was undeniable. Motion pictures by now were universally recognized for their power to spread ideas, to influence human action, and there were certain reasonable ways and fitting places in which they might be shown.

National magazines brought attention to the extraordinary manner in which American photoplay was unintentional opening markets for American Repro Regent of American films. Recalled from my files are reports that was done by R. Freeman in the Post of-January, American branch seen in the atm-9826, $3,829 at Burton as a result of the stupendous a half a potania; how a show was at
Railway; how a similar hint from the screen replaced human labor to load coffee in Brazil with a Yankee conveyor; how even our "Wild West" films helped to modernize cattle-handling in the Argentine; how a glimpse of a modern dredge in a Rocky Mountain drama improved irrigation in India. Another article with the same purport was Frank Tichenor's "Motion Pictures as Trade Getters" in the November, 1926, issue of the National Journal of Agricultural Political and Social Science. Still another was "When the Movies Go Abroad," by Charles Merz, in Harper's Magazine for January, 1926. There were numerous published articles written in the same strain by Dr. Julius Klein, who in that period was actively connected with the U. S. Department of Commerce.

Nor were the other nations unmindful of the situation. In 1925 Germany had imposed so many restrictions upon these "silent Yankee salesmen" that protests were made by the United States embassy at Berlin. And, as for England, to the globe-trotting, observant Edward, Earl of Wessex, the present Duke of Windsor, was attributed that much-quoted remark, "trade follows the film."

As the nationwide organization of Big Business was an outstanding phenomenon of American life at "the turn of the century," so the rise of the unprecedented demands of the First World War, and as the expansion of markets was a chief desideratum there, one may look to Big Business for initial proofs of the customer's direct interest in film production. It came principally in the lines where correspondence and consumer products were reached directly by manufacturers who had no previously existing or previously efficient sales machinery, where profits depended upon large numbers of individual sales, where visual demonstrations of product were especially important, and where corporate organization had ended the era of the individualist in industry.

Institutional Departments

Yet it was one of the most downright individualists in recent American history who established possibly the first, and surely one of the earliest, customer's own departments of film production. This was John H. Patterson, founder and head of the National Cash Register Company at Dayton. About 1894 some $50,000 worth of his cash registers was returned to the factory as defective. He started a rigid investigation, moved his desk out on the factory floor to find the trouble, and apparently disinterested it in the unhappy condition of his workers. He at once started improving that condition, and made the section where the plant was situated—now known as South Park but then contemptuously called "Slidertown"—one of the finest industrial places in the area. Assembled there obviously had not been of the best—else those defective machines would not have been returned to him—he resorted to crudely credited lantern slides and a stereopticon of Edach his workers their mistakes, rentnessota; ; nearby synagogue as a place of similar use.

Results were so gratifyingly that in 1896 he instituted a department in the plant to produce photographic lantern slides, placing Otto Nelson, 29-year-old enthusiast, from the advertising department, in charge of it. Nelson had plenty to do there, first because the stereopticon was used not only in vocational guidance but in promotion of employee welfare in general, and then because Patterson's revolutionary methods likewise were not disdained. Indeed, and the last thing he gave illustrated lectures in many distant cities to explain his gospel, needing, of course, plenty of illustrative material. In addition, a plan was presently inaugurated to present lectures on the improved working conditions to the hundreds of visitors who came to Dayton to see the "first model daylight factory."

In 1901 Patterson observed that the rapidly improving cinematograph offered wider possibilities, so he summoned a cameraman with his equipment from the Edison Company in New York to photograph some test scenes in the factory. This venture also proved successful. Accordingly, motion pictures thenceforth became regular attractions along with the stereopticon slides. The Edison work was followed by service more conveniently obtained from the Essanay Company in Chicago, and Essanay therefore produced a film for Patterson in 1904. About 1907 Nelson left the N.C.R. organization to join Essanay. He spent a year there, another with Bell & Howell, a third back with Essanay, and finally returned to Patterson's employ.

In October, 1917, the company showed, for the first time publicly, to the public, produced by Essanay, "The Troubles of a Merchant and How to Stop Them" and "The Function of a Cash Register." The first received especial attention from the atirical producers because it was said to have cost $10,000, a large sum for an industrial in those days. There also had been, the reader will remember, a $30,000 contract with Kinemacolor. Prints of "The Troubles of a Merchant," supplemented with those of another called "Getting the Most Out of Retailing," were taken to department stores, who presented them in the next few years before many leading chambers of commerce and other organized retail groups throughout Canada and the United States.

In later years productions were made for Patterson by Rothacker, including, among others, sold to retail toy dealers, and "How to Beautify Your Company." (2), which presented the story of the regeneration of the National Cash Register Company from the days of Slide-town. In 1926 it was said that the company had in its vaults approximately 250 reels of motion picture negatives on travel, manufacturing processes and other educational subjects, together with 100,000 stereopticon slides. The film service lends reels to local schools and churches which are unable to afford material offered by the regular rental agencies.

In the events leading to the disastrous financial crash, the leading American business leaders were giving serious thought and effort to industrial reorganization, and to an extent were recognizing the standards of employee welfare set so remarkably by Patterson. The J. Pierpoint Morgan associates especially recognized the immense financial possibilities for large scale financing of protected investments, and, in their ensuing work to suppress ruinous and needless duplications of service, organized such celebrated "communities of interest" as United States Steel Corporation and the International Harvester.

The factors constituting International Harvester were especially turbulent, emerging, as they did, from a history in which competition for sales was just short of cutthroat, although it marked also the first considerable introduction of the installment purchase idea in America. It is said that the great American harvester companies, which arose on Cyrus McCormick's invention of 1831, were so fiercely antagonistic that when George W. Perkins of the Morgan firm tried to bring them together, he was able to treat with them only after he had installed them in separate rooms and his office suite. Taken together, the cordiality of their public relations had been badly impaired in clashes with farmer organizations, and there was an enormous internal diplomatic job to be done, after the industry had been reformed, to produce a better understanding of it by persons outside.

The officers of International Harvester, at their headquarters in Chicago where Cyrus McCormick had planted his original factory, are loath to remind a quiescent public of those fighting days; but they recall presently (possibly, that, "years ago, when the making of motion pictures was still in its infancy, the International Harvester Company of America was one of the first to adopt the plan." One film, entitled "Back to the Barn," with the then celebrated theatrical star Beverly Bayne in the (Continued on page 223)
Films for North Dakota Schools

HELEN WALSETH
Film Librarian
North Dakota Agricultural College
Fargo, North Dakota

The need for a film library for North Dakota schools has long been felt by leading educators in the state. In the fall of 1940, Mr. T. W. Thorardason, State Director of Correspondence Study, believing in the educational film as a potent device in teaching, and recognizing its correlation with the enrichment plan to broaden the methods of organized teaching, took definite steps to develop such a center. He had, during the previous year, offered to his state a film service through an arrangement with the University of Minnesota film library. But North Dakota schools, their interest quickened in the use of visual aids in teaching, projection equipment increasing, needed their own center.

At the start, a selection of sound films was purchased. Factors considered in the selection of the films were: 1) content; 2) date of production; 3) sight and sound quality; 4) interest and use to schools of this state. Although the fourth factor was not easy to determine in a first selection, it is an important one. This year’s circulation records (with a careful check on which films and topics are of particular use in North Dakota) will serve as a basis for future selections for purchase.

Since this Department is particularly interested in the advancement of vocational education, even to the extent of establishing a testing and guidance department and an extensive occupational information library, much emphasis was put on films which might be used in such a program. There are many films on the market which may easily be adapted for this purpose. If they provide an insight into the problems of the occupation, and show activities in representative situations, they may successfully be shown by the teacher who has a planned guidance program in view.

This Department emphasizes particularly the importance of the planned program, whatever the film may treat. As our films have been selected for use in the classroom rather than as an entertainment feature, their worth to the class depends almost entirely on the teacher. To aid her, we send a study guide of the film a day in advance of the film itself. In every case possible, films are sent to arrive in ample time for the teacher’s preview. With this preparation she can properly correlate the film material with the text.

As schools learn to make complete use of the film in teaching, the demand should increase proportionately. We have set rentals low—$1.00 per reel for sound films, and generous club plan offers. North Dakota and those adjoining states which do not have film centers are responding well; schools seem, to quote, “very glad to get your announcement.” Some even state that they have put off purchasing projectors because it has not been easy for them to rent films when wanted.

Now, in contrast to the “vicious circle in visual education” (as illustrated by Burton R. Barnes in Educational Screen September 1926 and November 1940), let us think of visual aid in terms of a vital circle. This is positive thinking which will lead schools to set aside a budget for this important aid in education, and create a demand for teachers who are prepared to use such an aid effectively. The North Dakota plan is to build a vital circle that embodies meaningful use of visual education. The requisites for attaining that end include:

1) Film service
2) Projectors in every school
3) Teacher training
   A) Correlation of the film to the whole curriculum and finally
   B) A curriculum fitted to the needs of the students.

Visual Education in Rural Schools

Children in 112 rural schools of Berrien County, Michigan, are having an opportunity to witness six programs of educational moving pictures during the present school year, according to Edward L. Murdock, commissioner of schools in that county. Two sound motion picture projectors have been purchased by the Berrien County Board of Supervisors for the rural schools and each school participating has contributed toward the purchase of films.

Programs of educational motion pictures were first brought to the children in the rural schools of Berrien County during the school year of 1939-40, following purchase of a sound movie projector by the board of supervisors. With but one machine available for the 112 schools, it was necessary to set up a schedule so that two schools might use the machine each day. The schedule was arranged so that movies were shown in each of the schools on two occasions during the year.

Purchase of an additional projector has made it possible to increase this schedule to six programs for each school during the year. From six to eight reels of film accompany each projector—Michigan Education Journal.

Hennepin County, Minnesota, is attempting to develop a definite visual program for the ungraded elementary schools. Robert E. Scott, county superintendent, has purchased a sound moving picture projector which is available for use by any school, graded or ungraded, in the county at a very nominal fee. Educational films are rented from a film company for a month’s program. The program is presented at noon, after school, or in the evening once each month to those schools which contract for it. At present twenty-eight schools enjoy these monthly programs. The county office also has two still-film projectors and two cases of educational still-film strips. These go from school to school for one or two weeks’ use. In 1939-40, 46 rural schools enjoyed this service. Several schools have now purchased a projector and film strips of their own.—Minnesota Journal of Education.

Summer Workshop in Radio

The Radio Council of the Chicago Public Schools is sponsoring a “Comprehensive Workshop in Radio” from June 30 to August 6—3 hours daily, major credit of 4 semester hours certified by the Chicago Teachers College, with whom the Radio Council is cooperating. Harold W. Kent heads the staff as Director. Meetings will be held in the Radio Council’s headquarters at 228 N. LaSalle Street, Chicago.
The Literature in Visual Instruction
A Monthly Digest

Conducted by ETTA SCHNEIDER

STATUS AND TRENDS IN AUDIO-VISUAL EDUCATION


Persons active in the field of audio-visual education do not realize how much progress is being made until someone sums it up for them. Trends in the use of audio-visual aids must closely parallel the development of our educational objectives. In the field of motion pictures, trends are as follows: a) 16mm. has replaced 35mm.; b) sound films are being preferred to silent; c) school-made films for public relations with student assistance are increasing; d) cooperative film libraries are growing.

As for radio: a) the growth in the number of centralized sound systems, especially in new buildings with increased interest in radio by school people; b) no great progress in educational broadcasting, except for public relations; c) the increased number of recordings available.

Other signs of progress in audio-visual education are the growth of interest in 2"x2" lantern slides, especially in color; the increased use of school journeys and what is most important, a greater awareness of the need for improved ways and means of using these aids. More courses are available to teachers, and many administrators are providing for special teachers to take care of distribution and ordering.

It seems safe to predict that so long as we continue our present emphasis upon realism and objectivity in our instructional program, so long will audio-visual aids in their various forms continue to play a major role in education.


This article is an excerpt from a longer one prepared for the forthcoming yearbook of the Michigan Department of Elementary Principals on "Educational Implications of Motion Pictures." Teacher education in the selection and use of films is one of the problems to be solved. New developments will be determined by participation on the part of the motion picture industry, equipment manufacturers, schools and the community.

ADMINISTRATION


The film program for this high school is in charge of a "co-ordinator" who makes plans on the basis of individual teachers' requests. Twice weekly the films are shown in connection with regular classroom instruction. Previews are attended by teachers and a few students. Student operators are used.

This school has found that films should be shown at least twice for satisfactory use. With an eye to public relations, the school offers any of its films for showing before the local Rotary or Kiwanis which meet on the same days as the film schedules.

Projecting Motion Pictures in the Classroom—Francis W. Noel, Santa Barbara, Calif.—American Council on Education, Motion Pictures in Education Series, vol. IV, no. 5 53pp. 1940 50c

A practical guide for teachers and directors of visual education who are interested in overcoming the practical problems involved in projection. The economy which this study can bring about in time and money more than justifies its purchase by every school that owns a motion picture machine. It is obvious throughout the book that the author had in mind the inexperienced projectionist with a very small budget and seemingly insurmountable problems.

A desirable place for showing films is acknowledged to be the classroom. In order to darken the average classroom for projection, proposals are made to meet varying types of conditions. Roller shades, Venetian blinds and curtains are discussed, as are screens, ventilation and acoustics. Plans for building a table on which the projector may be transported from room to room are reproduced in the book. An excellent summary is then given of standards for selecting a projector.

The author appears to favor the use of well-trained student operators as well as teacher operators. A checklist is given of the basic skills needed in operating a motion picture projector. An account of the projection facilities and the student operator system used at Santa Barbara follows to illustrate the effectiveness of the advice given earlier in the chapter.


In line with the proposal made by the Washington State Planning Council that the schools make wider and more efficient use of school journeys and other audio-visual aids, the authors recommend a regional organization that will serve the five areas of the state. Each audio-visual center would be at a state teachers college.

The Museum of Natural History and the Public Schools—Charles Russell, Curator of Education—The Principal, 20-no. 2 223 Mar. 1941

The American Museum of Natural History provides valuable help to the schools of New York City. There are museum visits in the care of trained docents, trips to the Hayden Planetarium, courses for teachers, classes for handicapped children and the like in the museum buildings. A loan service to the schools is carried on through five trucks, one operating in each of the boroughs. Dioramas, collections, specimens of natural history materials are circulated weekly. Slides, motion pictures and photographs are also distributed each week.

The provision of free transportation to and from the Museum through the municipal subway system has been a great factor in increasing museum visits. However, there are still some unsolved problems to be dealt with in the relations between the Museum and the schools. The Museum must make every effort to know what the needs of the various groups in the schools are. Similarly, the teachers must bring the children to the Museum with definite problems in mind and adequate preparation so that the visit is meaningful.


Schools make a grave error when they spend money on projection equipment, films, slides, pictures and rentals but do not find funds for a qualified person to direct the use and maintenance of the equipment.

UTILIZATION

Toward an Enlightened Patriotism—Edgar Dale—The News Letter, 6: March, 1941

A statement of six important ideals in the democratic patterns, for which film titles are recommended. 1. There can be no lasting democracy in America unless we respect the dignity and worth of all citizens. 2. A dynamic democracy conserves and develops its personnel and material resources. 3. A dynamic democracy helps its people learn. 4. People must have big jobs that they are doing together. 5. People in a democracy need economic and job security. 6. America needs to be far more sensitive to its role in world affairs. The article shows how motion pictures can be used to achieve democratic goals. To these must be added the resources in radio and recordings, and other visual materials such as filmstrips, sound slides and photographs. We must make swift and effective use of the time that is left, not only to defend democracy but also to extend it.

The various types of visual aids, including the school journey, museum materials, pictorial materials and the like, are mentioned with special application to the field of science. For example, school journeys would be made to the local ice plant, the telegraph office, the Weather Bureau station, the furnace room, etc. Museum materials would include specimens of animals, leaves, plants, models of houses, trains, airplanes. The use of visual science materials in elementary science classes creates interest. However, much depends on the teacher and the presentation of materials.

SCHOOL JOURNEY


The first article of a series. Describes how the curriculum bureau may suggest trips to various places in the community, that bear upon the school program. A very helpful guide to curriculum makers.

SOURCES OF INFORMATION


This compilation of evaluated films on a crucial modern problem was formerly distributed in mimeographed form. The first section of the book reviews the factual information dealing with the current war and its origin. Woven through the context are references to specific films. The major portion of the book, however, is the critical analysis of each of the films mentioned. This volume is a vital aid to high school teachers of social studies.


An annotated bibliography that should be on every teacher's desk. Forty odd publications of sources of teaching aids are listed, with brief description of the contents of each. The collection will give teachers a good idea of the mass of material available to them at low cost.


A wealth of supplementary material with sources for the teaching of General Science and High School and Junior College Biology—charts, exhibits, films, pictures, slides, and publications—also a large amount of which is new or inexpensive. The material is classified, first, into three large groups—Biology, Botany and Zoology—then further under specific subject-headings in each of these groups. An index provides quick reference.

BOOK REVIEWS


This book presents over 500 cartoons setting forth outstanding developments in American History, together with an explanation of the theory and practice in using them. Included also is a list of possible subjects for original cartoons. The cartoons in the book are used for direct teaching and to this end are especially designed for tracing on handmade slide materials.

The book also provides a basis from which pupils are encouraged to develop their own cartoons, the best of which should be rewarded with positive academic credit and projection on the screen. The point is not expression of artistic ability but the clear presentation of an important idea. The compelling attraction of this new system is so great that pupils willingly do supplementary reading to gain a background for their own original cartoons. In searching for a background for cartooning their chosen themes, they learn to read with a definite purpose and plan.

America At the Movies—Margaret Farrand Thorp—Yale University Press, New Haven, Conn. 1939 315p. $2.75.

This book has now reached its second printing. It is in the heartening to the future of photoplay appreciation and to the future of better films that Mrs. Thorp's book was well received. The best piece of literature in the world is worthless if it has no readers. If there are 85 million paid admissions representing about 40 million movie-goers, there ought to be that many readers for this book.

It is apparent that Mrs. Thorp regards the motion picture industry as a social force and not as a glamorous factory for feeding escapist to worried or inhibited people. Her perspective is that of the enlightened individual who wants to get more for her movie money. We are shown how our choice of films, for example, depends very slightly on our own independent standards but rather on the publicity campaigns waged by the producers.

The chapter on "The Vampire Art" is very provocative because it reveals the constructive contribution of the motion picture in the fields of literature, picturing, music and related arts.

The movies are furnishing the nation with a common body of knowledge. What the classics are not, in that respect, what the Bible once was, the cinema has become for the average man. Here are stories, names, phrases, points of view which are common national property.... The movies span geographic frontiers; they give the old something to talk about with the young; they crumble the barriers between people of different educations and different economic backgrounds. there is no question of the richness and pervasiveness of our common knowledge and there is no reason why its quality should not improve with age.

The book gives the "inside story" of glamour at the movies, describes the influence of Hollywood films on fashions throughout the world, gives the details of the production and distribution problems of the industry and describes efforts of various religious and lay groups to improve movie themes. The final chapter is very timely and refers to an unending problem, "The Lure of Propaganda." It is the aspect of motion pictures most worth pondering. Thus we are stimulated to further activity and challenged to examine points of view depicted in "harmless films for entertainment."

The Use of Visual Aids in Teaching, by Ella Callista Clark, State Teachers College, Winona, Minn. 24 pages, 25 cents.

Inasmuch as the above booklet is now available from the Educational Screen, we reprint our review which appeared in a previous issue:

A concise and highly informative little pamphlet, ably written and attractively printed, that packs in small compass a deal of scholarly discussion and helpful directions for the sound use of visual materials. After a compact introduction of a page or two on visual aids, what they are, why use them and how not to use them, the author discusses in detail the Excursion, the Still Picture, the Stereograph, the Lantern Slide, the Film Slide, and the Motion Picture. The booklet is rich in suggestions for a wider range of uses for familiar materials and equipment, every page giving hints for procedures that will be novel to many who have long used visual aids.

There is no hesitancy or utterance here, no wasted words, no padding. It is sane, direct, stimulating. It has all evolved from Miss Clark's ripe experience in the classroom, in preparing teachers in visual instruction, and in serving as a leading influence in the notable developments and expanding interest in visual instruction becoming so apparent in the Minnesota area. Local demands for this pamphlet required reprinting soon after its first appearance, but its value will be the same for teachers anywhere who are interested in improving their use of visual materials, N. L. G.
Among Ourselves

Department of Visual Instruction of the National Education Association.

Notes from and by the

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

C. A. Lindstrom, W. T. Powell, Alvin B. Roberts—has refined the plans for zonal organization, and these plans will be presented for final action at the 1941 June meeting in Boston.

The Zonal plan, as outlined, will multiply ten-fold the working power of D V I. It does this by dividing the country into ten Zones, each administered by ten officers bearing the same titles as the offices of the National Administration (President, First Vice-President, Second Vice-President, Secretary-Treasurer, and Executive Committee of six members.) The ten Zonal Presidents will be regular ex-officio members of the national Executive Committee, bringing its membership total to sixteen instead of six.

An interesting phase of the organization is the way in which the Zones are determined. Each Zone is comprised of from three to seven states and is based upon radial travel distances rather than population. This has been done in order that teachers may reach their annual Zone D V I meeting with some degree of ease. A membership quota has been set for each zone, figured as to population and travel distance.

A new plan of financing had to be set up with the organization of the Zones. The same $2.00 membership fee will be charged, but it will be divided as follows: The Zone retains 75c and sends $1.25 to the National organization; of this amount the D V I keeps 50c and sends 75c to the Educational Screen. In addition, any memberships received by mail, obtained through summer schools and the like, will be credited to the Zone in which the member resides.

The Zonal organization, if carried through, should give a new lease on life to the D V I and its activities. In the first place, membership, the Department’s primary need, should multiply greatly with the Zonal campaigns. Secondly, each Zone will hold at least one official meeting each year and as many more as deemed necessary by its members. This will enable countless teachers to attend an official meeting of the D V I who heretofore have been unable to come because of the time or money involved. This, in itself, should give the Department new virility.

A third important effect of the Zonal organization should be upon the literature of the field. The constant interchange of ideas and the much larger amount of material presented at the Zone meetings will provide ample copy for the Editorial Committee of the D V I to work with. By sifting the material gathered it will be possible for the committee to find excellent articles to submit to many educational periodicals, to the Educational Screen, or to multigraph and distribute to members of the Department.

Lastly, research in audio-visual instruction should be vastly improved by the Zonal organization. Impor-
Question: The text at the start of the page mentions the actions taken by the Department of Education. What specific action is being referred to?

Answer: The page mentions that the Department of Education has conducted a survey and the results will be compiled into a report. This action is referred to as the survey being conducted and its results being compiled into a complete and reliable finding.
Notes from the Field
Indiana

The Bureau of Visual Instruction of Indiana University announces that the Bureau is to cooperate with the National Film Evaluation Project of The Educational Screen.

For years teachers using the service have been asked to supply postal card reports. Recently the Bureau has printed two new cards patterned after the film evaluation card of the National Project. These new cards will be used from now on for teacher reports. After the Bureau has tabulated the information from the cards for its own files, the cards will be forwarded to The Educational Screen for entrance in the National Project.

In addition to evaluation of films, a separate card is supplied to be used in evaluating film strips, lantern slides, recordings, etc.

New England

"Exploring the Educational Opportunities of the Community" and "How Teachers Use Teaching Aids Efficiently" were the dual themes of a meeting held Saturday, March 29, at the School of Education, Boston University, by the New England section.

In addition to the conference sessions, continuous exhibits were available for the teachers throughout the day. An attractive printed program made a special plea for membership for the New England section.

Wisconsin

Mr. Harold Stamm, West Allis High School, was recently relieved of his afternoon classes so that he might go to the elementary schools of West Allis to aid them in the development of their visual aids program. It is Stamm’s particular job to see that the best visual aid is chosen for a particular need, and properly used. Stamma has long been active in the field of visual aids.

Making Pictures Teach

(Continued from page 192)

same picture. When a random sampling of teachers disagree so drastically it probably means that few if any of them had any definite standards to go by, and that the whole evaluation was little more than guess work.

There has lately been developed a score card for evaluating pictures by Miss Trolinger of the University of Colorado. The score card represents a pooling of the ideas of a number of leaders in the field of visual education. The original article describing the score card and its formulation appeared in the March-April-May 1939 issues of the Educational Screen. This score card shows that there are two major sets of criteria which need to be considered in connection with a teaching picture. The first has to with the technical quality and the second with instructional quality. The pooled opinion of the experts indicated that about forty points should be allotted to technical qualities and about sixty to instructional qualities. In the space I have I can merely enumerate the qualities and points allotted for each. TECHNICAL QUALITIES—artistic (11), clear and definite (11), practical size (7), properly colored (6), free from blemishes (5). INSTRUCTIONAL QUALITIES—truthful (15), relevant (11), stimulative (11), significant (9), authentic (8), suggestive of size (6).

Truthfulness in pictures needs more careful consideration than is generally given it. Too often it is assumed that any photograph is truthful since it is an objective reproduction of an actual situation. We need to realize that photographic representations may be, and frequently are, as misleading and untruthful as any printed material may be. This grows out of two situations. First, some pictures are downright dishonest pictures and are planned to produce a wrong impression. We are all familiar with trick pictures of one sort or another which distort reality. Second, and still more common, are pictures which are honest in the sense that they accurately reproduce reality, but untruthful in that they produce wrong impressions in the mind of the person seeing the picture. This is possible through the selection of scenes which are unusual and out of the ordinary but which the observer will accept as typical. Thus I have seen pictures taken by two travelers to Russia. The one picture collection showed scene after scene of poverty and backwardness, and filled one with the conviction that conditions in Russia were distressing and that the economic system was on the verge of collapse. The second set of pictures showed people happily at work on collective farms, with modern machines, and bountiful harvests, and left the distinct impression that all was well in Russia. Either set of pictures alone would create a wrong impression.

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59 East Van Buren Street Chicago, Ill.

because each set presented but one side of the case. Another example: Most school children, and I think most adults too, think of the Sahara Desert as a great expanse of drifting sand dunes. This impression can be traced directly to the fact that practically all pictures of the Sahara desert show this type of topography because the drifting sand dunes are near the edge of the desert, easily accessible to cameras and very picturesque. Actually, drifting dunes make up only a small per cent of the total area, the remainder being bare rocky wastes.

To say that a picture must be "relevant" is merely to say that no picture should be used unless it integrates with the best of the curriculum materials. The qualities of being "stimulative" and "significant" are largely self-explanatory, but two sorts of pictures very commonly used in teaching fall short on these points. The first is the type of picture showing street scenes taken in modern cities the world around. Ordinarily they are neither significant nor stimulating. The second type is that of historical monuments, statues, etc., which may be of interest to the professional historian or student of art, but are certainly not to the ordinary public school student.

The quality of being authentic is one to which special attention needs to be given in this period when propagandists of all sorts seek to influence opinion by visual as well as verbal appeal. The classroom teacher has not the background or training nor the experience necessary to evaluate all the pictures available for teaching as to their essential truthfulness. Teachers need to become familiar with the sources of the pictures which they use and of the purposes back of their production and distribution. There are certain commercial concerns whose chief function is the production of visual materials for school use. These often exercise much care to be certain that the pictures they produce are educationally sound. Certain magazines have developed a well deserved reputation for the high quality and worthwhileness of their picture material. On the other hand some agencies of foreign governments, travel agencies, industrial concerns and other

A Workshop on the Production of Visual Aids

On June 16-20 a Film Production Workshop will be held on the campus of the Ohio State University. Emphasis will be placed on the production of motion pictures, film strips, and 2 x 2 slides. Special attention will be given to problems in the field of traffic safety. Activities will consist of lectures, demonstrations, discussions, and first-hand experience in all phases of the production of films, film strips and 2 x 2 slides. A scenario will be filmed. Participants will write scenarios around their own local problems. Numerous safety films will be screened for critical analysis of film production techniques. Camera techniques will be demonstrated and put into practice. Indoor filming will be carried on with typical lighting equipment. Titting and editing will be done. Sound and color photography will receive consideration.

The Workshop will be designed to answer such typical questions of the producer of visual materials as these: How does one go about planning a safety film? What should go into a scenario? Shall we show accidents or merely suggest them? What kind of films are being turned out in the field of safety? What part should students have in such a project? To what extent can the community itself become a part of the program? How much film shall we use? What about costs? Where should titles be used? How much editing is necessary? What outcomes, in terms of changes in attitude and behavior, can be reasonably expected from a film project?

The fee for the course will be five dollars. There will be no laboratory fee. The course will carry no credit. Enrollment will be limited and preference will be given those with some previous experience in film production.

The Workshop is sponsored by the Bureau of Educational Research and the Department of Photography of the Ohio State University and the Highway Education Board of Washington, D. C. Instructors will be Edgar Dale, Lloyd Reber, William G. Hart, and Roy Wenger—all of Ohio State University.

groups interested in selling either a point of view or material goods, produce pictures ranging from those completely honest and worthwhile to others that are completely misleading and vicious. Materials from such sources need to be used with extreme care.

The quality of being "suggestive of size" means merely that there be some familiar object in a picture which may be used as a yardstick for estimating the size of other less familiar objects. I once asked a group of teachers to collect and evaluate a set of pictures. One teacher handed in a picture of a penguin with no other object in the picture but a waste of Antarctic snow and ice. I was amused to find this statement in her evaluation of the picture, "I used this picture in an opaque projector with my fourth grade children. They were much interested and were surprised at the huge size of the penguin." Evidently, since there was no measuring unit in the picture by which to judge the size of the bird, the children jumped to the conclusion that the penguin was actually as large as the screen image.

(To be concluded in June)
"ELEMENTARY OPERATIONS ON THE ENGINE LATHE"

New Sound Films invaluable to schools in the training of mechanics for NATIONAL DEFENSE

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Price per reel (16-millimeter sound), $36; immediate delivery. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.
SCHOOL MADE MOTION PICTURES

By HARDY R. FINCH

Head of the English Department
Greenwich High School, Greenwich, Conn.
Member of the Committee on Standards for Motion Pictures of the National Council of Teachers of English

(One of the interesting parts of school film making is the writing of the scenario or shooting script. It is the script that gives students and their teachers experience in planning their production and helps them to eliminate unnecessary motions.

Following are the scripts which were used in the making of GOLD! GOLD! GOLD!, a 375-foot film produced by students of the University Elementary School, University of Kentucky, Lexington, Kentucky. The film was made by students in Miss Jeanette Molloy's fifth grade under the sponsorship of Mrs. May K. Duncan. Miss Lilian McNulty was director and photographer of the project. In explaining the film, Miss McNulty writes: "The picture was an outgrowth of the students' interest in the study of pioneers and the hardships of the trek westward in '49. GOLD! GOLD! GOLD!" was their interpretation of this phase of history. When we began to plan the making of the film, we had no intention of setting up an imitation Hollywood and showing DeMille how history should be handled. We knew that the audience appeal of the finished product would be limited to our own community."

Part I—Preparation for the Adventure to California
Scenes
(Medium Shot) Flag of U. S.—1849 (30 states) Kansas City, Missouri, 1849. Men, in a business-like manner, clean guns, assemble supplies, and load wagons. (Medium Shot) Women, very serious, check over things and pack. (Medium Shot) Children—not realizing the seriousness of the expedition—play "ring-around-a-rosy." (Close-Up) Cradle filled with rag dolls waiting to be loaded in wagon. (Long Shot) All the above activities in same scene.

Location
Play lot
Behind new tennis courts
Same
Same
Same
Same
Same
Same
Same
Same
Same
Same
Same
Same
Same
Same

Part II—The Indian Attack in the Colorado Country
Scenes
(Long Shot) Two months later. All the pioneers are gathered around the camp fire. Men fix their guns; children watch. (Medium Shot) A lone Indian Scout, on horseback, comes over brow of hill. (Close-Up) Indian Scout. (Medium Shot) Group of Indians view the valley, where the pioneers are resting, from a rocky ledge. (Long Shot) Same as first scene—Indians creep down the rocky ledge and swoop in from all directions. (Long Shot) Indian fight. Men stand their ground, women and children run for cover. (Close-Up) Faces of women showing fright and horror. (2) Scenes (Close-Up) Upturned cradle, broken spinning wheel—rag doll—sunbonnet—tomahawk all scattered over ground. These to suggest the ferocious fighting.

Part III—The Great Death Valley
Scene
(Long Shot) Five months later. "Desert" curtain showing some cacti. Pioneers struggling against the wind—having lost their way. (Medium Shot) Feet plodding through sand—stumbling. Men—one drops gun on sand; women—one drops sunbonnet on sand; children—one drops rag doll on sand. (Close-Up) Bleached bones on sand. (Close-Up) Face of woman showing thirst—suffering. (Close-Up) Face of child crying. (Medium Shot) Group finding their way out of desert.

Part IV—Months Later—On the Other Side of the Mountains (Sierra Nevada)
Scenes
(Medium Shot) Group of pioneer men—look discouraged—one is working on a broken wagon wheel, drops tools and puts head in hands. Women, listless and discouraged. Two children asleep on ground. (Medium Shot) One man stares over the hill. Suddenly he sees a flag waving in the distance. (Close-Up) Flag of California, 1849.
(Long Shot) Pioneers going over the brow of the hill, outlined against the sky.
(Close Up) Pioneers marching on.
(Long Shot) Flag of California outlined against clouds.

—Fade Out—

Part V—Some Time Later—Away Back in the California Hills

Scenes

Location

(Part 1) Whole line of men pan gold along a rocky creek bed.
(Close Up) Pan dripping water through mud and rock.
(Part 1) One man finds a nugget, shouts, and waves to the men to come. Some leave their panning and gather round, throw hats in the air, show great excitement. Others hurry back to their pans and start panning with vigor.
(Part 1) One pioneer family—Cave Hill Farm outlined against the sky. Fade into clouds.

The End

After a hand-lettered opening title, two credit titles, and two location titles, we have the following titles occurring through the film:

Dedicated to the courageous Pioneers who braved the unknown Western Wilderness and at last reached California.

There was much excitement and busy preparation as the pioneers made ready to depart.

The unconquered Indians of the Western Country looked with fear upon the coming of the white men.

The hot sands and high winds of Great Death Valley did not daunt their courage.

Weary months, filled with grief and hardships, passed. Many had returned home.

At the end of the trail lay peace, sunshine, and sometimes GOLD!

Music Script

Introduction "King Cotton" 19095-B No. 1
(Corporation)

Part I "Quadrille Figures" 20638-B No. 2
(Oh Susanna) (Victor)
(Oh Susanna) (Victor)

Part II "War Dance" 22144-A No. 3
(Cherokee) (Victor)

Part III "William Tell II" 68474-D No. 4
(Storm) (Columbia)

Part IV "Peer Gynt II" 1134-B No. 5
(Ase Death) (Victor)

Part V "Black Keys Study" 19213-B No. 7
(Through panning of gold) (Brunswick)

"Carmela" 195-B No. 8
(Through to the end) (Victor)

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Chile (Erpi) 11 minutes, 16mm sound, sale price $30.00.
Teacher's guide to be furnished.

Subtitled "People of the Country Estates." Orient the observer to the country of Chile, and reveals life on an estate in the pastoral setting of the Central Valley. As the film opens, the location of Chile—between the Andes and the sea, stretching from the northern boundary within the tropical zone to the barren land of glaciers 2700 miles to the south—is explained. Nitrates and copper are shown as chief mineral products. The role of the ports on the western coast, such as Valparaiso, is explained also.

One region is dominant in Chile. It is the central valley, an agricultural and grazing region, a land of great estates where the bulk of the population is to be found. One such estate is that of the McKennas. On one of its roads, we are introduced to Senor McKenna, his wife and daughter, and Senor Velasco, a guest. Their conversations, heard in Spanish, are translated by the narrator. It is evident that their life is one of leisure; but for the laborers on their plantation, life holds little time for other than work. The laborers are shown picking fruit, cultivating the fields, and herding sheep. The Government schools which provide an elementary education for the workers' children are shown.

From the varied produce of the estate, the McKenna kitchen provides attractive fare as the family assembles for a final dinner with the guest on the eve of the return to Santiago.

Conversations in Spanish are again heard. Now the scene changes to a large university in Santiago, where Jose, Senor McKenna's son, is seen at his studies in the medical school. He talks cordially with one of his friends, an American exchange student.

On the following day the McKennas and their guest leave their Santiago town house for a tour of the city. Streets, parks, and the business section are visited, and the film concludes with a view of the city from the lofty promontory of San Cristobal.

COMMITTEE OPINION—A good film for use in social science and geography, economics, and for motivating Spanish classes. The film transmits an excellent understanding of Chilean culture. The film concentrates rather closely around one class of the Chilean people; it was agreed that it would have been more effective if wider in its viewpoint of Chilean life, and that it could have been improved from the standpoints of unity and organization. Photography and sound are excellent.

"Fluffy" the Kitten (June) 15 minutes, 16mm silent, sale price $25.00. Produced by Grayce and Kenneth F. Space.

In this elementary-grade film, a three-month-old Persian kitten tells, through titles, of his experiences, and suggests the best ways to care for cats. After an appropriate introduction, Fluffy appears in characteristic activities. He chews shoestrings, stares out of a window, looks at the goldfish, and plays with a pencil. He explains that he likes to look in dark places and under things, and he is shown as he looks for a mouse. Several views of the kitten asleep appear as he says that he can sleep anywhere as long as he is not bothered.

Kitten's-eye views reveal how big and tall the household furniture appears to a little kitten. Fluffy explains that he is usually hungry. When he was smaller he ate five times a day, mostly milk and bread, but now he has meat and vegetables with his milk, three times a day. He doesn't like baths, but he keeps himself neat and clean. His sanitary facilities consist of a pan and a newspaper. He says that it hurts when he is picked up by the nape of the neck; his mistress demonstrates the proper way of holding him.

Views of his paws and claws accompany an explanation that he needs a log to scratch, instead of the furniture. He says that he won't scratch when you play with him, unless you play roughly. To demonstrate this, he very gently bites his mistress' hand. When he gets into intentional mischief, he is spanked. There are more kitten's-eye views. He explains that he doesn't care about toys, that he likes simple things such as a ball on a string. He exhibits his training by jumping over his mistress' outstretched hand, and then he sleeps in a box. In conclusion, he shows how he looks when normal, curious, angry, hungry, and sleepy, and then he appears prettily dressed in his best ribbon to say "Good-bye."

COMMITTEE OPINION—An excellent film for use in kindergarten through third grade in general elementary studies, including reading and animal life. Accurate information concerning kittens and their care is provided in the film, and the vocabulary is correctly graded. Photography and titles are good; organization is satisfactory.

Goodyear Shoulders Arms (Goodyear) 1½ reels, 16mm sound, "Free." Produced by the Commercial Department of Pathé News; narrated by Edwin C. Hill.

In this film newsreel scenes outline the background of the present conflict, America's part as the stronghold of liberty is emphasized, and the place of the Goodyear company in production is shown. The film begins with the year 1936 when Europe was at peace. The Spanish war provided a testing-ground for new weapons and methods of warfare. Then came the European War. Its progress is shown in exciting newsreel scenes. Germany's war machine appears in action; it is explained that back of this
there has been oppression of peoples and a breakdown of culture, and that now Liberty dares not show its light in Europe. Views of the Statue of Liberty appear as the narrator states that here we proclaim liberty and freedom to the world. He compares our way of life to that under the dictators, stating that we are hated because of the advantages which we have—and which we must defend.

Scenes of the first peace-time draft begin the next sequence, which deals with National Defense. It is stated that industry has volunteered to perform the tremendous task of providing weapons for the defense program. And a vital sinew in nearly every one of these weapons is rubber. A brief sequence shows the source of our rubber supply and the methods of processing it. Research and progress in the making of synthetic rubber are explained. Then Goodyear products in actual use by the armed forces are shown, including blimps for patrol duty, barrage balloons, special airplane tires, airplane parts, special inner-tubes for motorized equipment, tank treads, and gas masks. A closing sequence states that these are Goodyear's tasks and her pride; that we are building not for destruction, but for the defense of the American way of life.

COMMITTEE OPINION—A fair film for use at the senior high level and above in current events or modern history classes. The film contains good historical material, but one or two statements were questioned upon grounds of accuracy. Photography is largely newsreel footage and is of average quality; organization and sound are good.

The Monroe Doctrine (TFC) 2 reels, Technicolor, 16mm sound. Apply to distributor for rental sources and prices. Produced by Warner Bros. Pictures. Dramatizes the events leading up to the proclamation of the Monroe Doctrine. The film begins by saying that in 1775 our forefathers learned about oppression and rebelled against it, winning freedom after a five-year struggle. Later, the Latin-American countries followed; but in 1823 Spain was laying plans to regain these lost colonies with the help of the Holy Alliance. The scene opens upon a meeting of Monroe's cabinet in 1823, where the question of American resistance to Spain's plans is being discussed. Monroe will not commit himself to any course of action, refusing to answer the cabinet's questions about his plans. In Spain, King Ferdinand VII holds an audience. The ministers of Austria, Prussia, and Russia promise to help him but refuse to promise to fight the United States. This scene closes with a question by Ferdinand as to what the United States will do.

The next scene is the U.S. House of Representatives. Henry Clay makes a very speech, challenging Europe. Daniel Webster speaks in the same vein. Next is shown a secret meeting of the ministers of Spain and the other countries. A brief love-story element is introduced when it is revealed that John Sturgis, a clerk, is in love with Rosita, daughter of the Spanish Ambassador. They marry secretly and then reveal their marriage to him.

President Monroe and Secretary of State John Quincy Adams prepare a proclamation. Monroe reads some of its passages while Adams comments upon them. On December 24, 1823, this message is read to Congress; parts of the reading and the enthusiastic reception are shown. Next comes a review of the outstanding incidents in which the Monroe Doctrine has been invoked: California, 1825; Cuba, 1852; Mexico, 1866, to defeat Louis Napoleon's plans; and Venezuela, 1895. The film closes with a speech by Theodore Roosevelt pleading for adequate armament, in which he used the famous phrase, "Speak softly, but carry a big stick."

COMMITTEE OPINION—An excellent film for use in American and European history classes at the junior high, senior high, college and adult levels. Should be valuable also for civics classes, and the costumes may be of interest to art classes. The film is technically excellent in every way.

Producers Named:

Erpi, Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.
Goodyear, Motion Picture Department, Goodyear Tire & Rubber Co., Akron, Ohio.
June, Mr. Chas. D. June, Box 78, Rutgers University, New Brunswick, N. J.
TFC. Teaching Film Custodians, Inc., 25 West 43rd St,
Summer Courses in Visual and Audio-Visual Instruction, 1941

Compiled in Co-operation with The Society for Visual Education

(This list supplements that which appeared in the April issue)

Arkansas
Arkansas A. & M. College, Monticello
Audio-Visual Education (2) June 23-July 11 R. B. Brinser

California
Claremont College, Claremont
Problems of Reading—
Ed. 19A (Visual Studies) June 25-Aug. 5 Clark & Spencer
Ed. 19B (Audio-Visual) June 25-Aug. 5 Spencer & Genug
San Jose State College, San Jose
Audio-Visual Aids (2) June 16-Aug. 25 DeVerl Willey
University of California, Berkeley
Visual Education 107 (2) June 30-Aug. 8 Gardner L. Hart
University of Southern California, Los Angeles
Fundamentals of the Cinema (2) Warren Scott
Social Implications of the Cinema (2) Warren Scott
Film Technique (2) Jack McClelland
Screenwriting I (2) June 28-Aug. 7 Warren Scott
Cinematography I (2) Jack McClelland

Colorado
University of Denver, Denver
Visual and Audio Aids in Instruction (25%) June 16-July 18 E. H. Herrington

Illinois
Wheaton College, Wheaton
Visual Aids 377S (2) June 28-July 25 Robert L. Cooke

Indiana
Ball State Teachers College, Muncie
Visual Aids in the High School Library (2) Evelyn Hoke
Notre Dame University, Notre Dame
Materials and Methods in Audio-Visual Education—Undergraduate (2) Merlin G. Richard
Administration of the Visual Education Program—Graduate (2)

Iowa
Iowa State College, Ames
Visual Methods in Education (3) July 22-Aug. 28 Kooser & Twogood

Kansas
Kansas State Teachers College, Emporia
Visual Education (2) June 9-Aug. 6 S. W. Cram

Louisiana
La. State Normal College, Natchitoches
Visual Education 304 (2) June 9-Aug. 9 J. S. Kyser
Loyola University, New Orleans
Visual and Audio Aids in Education (3) Lucile Bostick

Maryland
Western Maryland College, Westminster
Auditory and Visual Education (3) June 26-Aug. 1 Milson Raver

Minnesota
State Teachers College, St. Cloud
Ed. 368 Visual Education (4) June 9-July 21 R. M. Torgerson

Mississippi
State Teachers College, Hattiesburg

Missouri
Teachers College, Kansas City
Audio-Visual Education (2) June 9-July 18 James Evans

Nebraska
State Teachers College, Wayne
Visual-Auditory Education (2) June 9-Aug. 8 Harold D. Griffin

New Hampshire
Keene Teachers College, Keene
Visual Ed. and Field Trips (2) July 7-Aug. 15 Elizabeth Gregory

Nevada
School of Ed. & State Normal School, Reno
Audio-Visual Aids in Education (2) June 16-July 25 Paul Thurston

New York
Chautauqua Summer School, Chautauqua
Laboratory Course in Visual Aids (2) G. R. O'Donnell
(New York University Graduate Credit Course)

Columbia University, Teachers College
Illustrative Lessons in History and the Social Studies (2) July 7-Aug. 15 W. H. Harley

State Normal College, Plattsburg
Audio and Visual Aids in Ed. (2 or 3) June 30-Aug. 9 A. C. Peterson

North Carolina
Appalachian State Teachers College, Boone
Visual Education (2) June 10-July 16; July 22-Aug. 29 Orby Southard
Normal & Teachers College, Asheville
Visual Aids to Instruction (2) June 9-July 18 Emil Windle
Workshop-Visual Aids (4) July 17-Aug. 23 Emile Windle

East Carolina Teachers College, Greenville
(Ed. 320) Visual Aids in Education (4) Annie C. Newell
(Ed. 420) Audio-Visual Aids (4) Annie C. Newell

Western Carolina Teachers College, Cullowhee
Audio-Visual Workshop (2) E. E. Sechrist

Ohio
University of Toledo, Toledo
Audio-Visual Education (3) June 20-Aug. 1 J. W. Wilson

Oklahoma
Oklahoma A. & M. College, Stillwater
Introduction to Visual Education (2) June 6-Aug. 2 Haskell Pruett
Production and Administration of Visual Education Materials (2) Haskell Pruett
Audio-Visual Education (2) J. C. Muernan

Southeastern State College, Durant
Visual Education (2) R. J. Shaw

Oregon
Portland Summer Session (Oregon State System of Higher Education), Portland
June 26-July 25 Laboratory in Audio-Visual Aids (1) H. A. Gray
Audio-Visual Aids in Education (3) H. A. Gray
Organization and Supension of Visual Instruction (3) H. A. Gray

The American Film and Its Relation to American Education (3) Mrs. R. B. Ray

Pennsylvania
Geneva College, Beaver Falls
Visual Education (3) July 16-Aug. 15 John S. McIsaac

Pennsylvania State College, State College
Laboratory in Visual and Sensory Aids (1) Fred E. Kelly
Visual and Other Sensory Aids in Ed. (2) Fred E. Kelly
Organization and Administration of Sensory Aids Program (1-3) M. E. Truax

State Teachers College, Bloomsburg
Visual Education (1) June 23-Aug. 3 H. H. Russell

State Teachers College, Edinboro
Audio-Visual Aids to Instruction (2) F. S. Fenneman

State Teachers College, Shippensburg
Visual Education (1) July 16-Aug. 25 L. C. Krebs

University of Pittsburgh, Pittsburgh
Ed. 141 Visual Education (2) Oliver & Faby

South Carolina
University of South Carolina, Columbia
Audio-Visual Education (3) June 10-Aug. 2 W. H. Ward

Tennessee
Peabody College for Teachers, Nashville
Use of Audio-Visual Aids (4) June 10-Aug. 22 M. L. Shae

Texas
Southwest Texas State College, San Marcos
Audio-Visual Education (3) July 14-Aug. 22 J. M. Rodey

Southwestern State Teachers College, Alpine
Audio Visual Education (3) June 4-July 16 Leon Wilber

Texas State College for Women, Denton
Audio-Visual Aids in Instruction (3) W. F. Archibald Seminar and Workshop in Visual Aids (3) W. F. Archibald

Correction: The summer term at the University of Tennessee begins on June 9, instead of July 9th, as stated in the April issue. Instructor in "Audio-Visual Aids to Education" will be Oscar E. Sams, not Paul M. Pitts.
| University of Houston, Houston                          | June 9-July 11;   
|                                                       | July 14-Aug. 22,  |
| Methods of Using Audio-Visual Aids (3)                | Paul F. McRoy     |
| Production of Teacher-Made Audio-Visual Aids (3)     |                  |
| University of Texas, Austin                          | June 5-Aug. 30   
| Visual Aids in Elem. Teaching (2)                    | B. F. Holland     |
| Research in Visual Education (2)                     | B. F. Holland     |
| Visual Aids in Secondary Teaching (2)                | M. M. Watson      |
| Laboratory Work in Visual Education (2)              | M. M. Watson      |
| West Texas State Teachers College, Canyon            | June 4-July 9    
| Audio-Visual Education (3)                           | Don G. Williams   |
| Washington                                           |                  |
| College of Puget Sound, Tacoma                       | June 9-July 9;    
|                                                       | July 10-Aug. 8,   |
| Selection and Use of Audio-Visual Aids (2)            | F. F. Gorow       |
| Production of Audio-Visual Aids (2)                  | F. F. Gorow       |
| Pacific Lutheran College, Parkland                   | June 9-July 9;    
|                                                       | July 10-Aug. 8,   |
| Visual Education (2)                                 | D. L. Kruzer      |
| University of Washington, Seattle                    | June 18-Aug. 20,  
| Auditory and Visual Aids to Teaching (2½)            | Hogan & Hayden    |
| Western Washington College of Education, Bellingham  |                  |
| Visual Education (1½)                                | June 23-Aug. 22,  
|                                                       | W. L. Brewer      |
| Wisconsin                                            |                  |
| Marquette University, Milwaukee                      | June 23-Aug. 1,   
| Principles of Visual Education (2)                   | G. E. Vanderberg  |
| State Teachers College, River Falls                  | June 11-July 23,  
| Visual Instruction (2)                              | Ella C. Clark     |
| Wyoming                                              |                  |
| University of Wyoming, Laramie                       | June 16-July 18,  
| Visual Aids in Education (3)                         | Harold A. Engel   |

**FIELD TRIPS AND COURSES**

Again this summer teachers, students, social workers and others are being offered a chance to see what life is like in some of the most interesting parts of America. A series of field studies is being arranged by The Open Road, a non-profit organization which has as its object the promotion of international and inter-regional understanding. Each field trip is sponsored by an educational institution. Academic credit is available to those who want it. The courses generally run five to six weeks.

- **Southern Conditions**, sponsored by Teachers College, Columbia University. An intensive study of a southern county which is partly industrial, partly agricultural.
- **Minority Cultures of Colorado and New Mexico**, sponsored by the University of Denver. A study of the values and customs of groups which have conserved their identity, their relations to the dominant American culture.
- **Planned Regional Development as Exemplified by the T.V.A.**, sponsored by the University of Tennessee and Northwestern University with the cooperation of the T.V.A. A study of the tremendous T.V.A. development and its effect on the lives of the Valley people.

Particulars regarding these and other field courses may be obtained from The Open Road, 8 West 40th Street, New York.
In and for the Classroom

VISUAL AIDS AND BIRD STUDY
HARRIET KIMMEL
Reeb Avenue School, Columbus, Ohio

It is unfortunate that the average teacher upon hearing the term “visual aids” thinks at once of motion pictures. Indeed many teachers who make extensive use of excursions, maps, models, graphs, charts, and mounted pictures will tell you that they don’t use any “visual aids”—meaning no movies. Furthermore, emphasis upon motion pictures has tended to decrease discussion on many types of visual aids which are easily used and obtained by the classroom teacher.

Certainly, I have found this to be true in my own work. This article discusses one phase of that work, namely the use of still photographs in the study of birds. This study was used as a unit in a science program but could be used as a separate unit of work, as a supplement to reading program, etc. The purpose of the study was:

a. To create in the children an interest in our feathered neighbors.

b. To guide the children’s observation to notice shape of wings, tail, bills, and body as means of identifying the bird, of determining its food and manner of procuring it.

c. To give the children a basis for grouping the birds with similar habits.

Sample Teacher Questions

LOGGERHEAD SHRIKE
(National Association of Audubon Societies Photo)

This shrike is about the size of a robin.

1. Would you group this bird with owls, robins, cardinals, hawks, or herons? Give reasons for your answer.

2. This bird is sometimes called “the butcher bird.” How did it get this name?

3. Considering the food habits of this bird would you consider the shrike a useful or harmful bird? What would farmers think? Give reasons for your answer.

Conducted by WILBER EMMERT
State Teachers College, Indiana, Pa.

d. To help the children gain an appreciation of the usefulness of various types of birds in controlling insects and weeds, acting as scavengers, etc.

e. To help the children understand the need for laws which protect song birds, limit the hunting season of game birds.

f. To develop a need for the children to build bird houses and feeding stations, to protect birds, from cats, to discourage boys from killing birds or using sling shots, etc.

How to achieve these objectives was the next problem which I faced. Why not take bird trips? This was done and is useful. But it must also be remembered that since birds are not only extremely active and seasonal, they are hard for children to study. Therefore, good pictures or mounted birds become very useful visual aids. A collection of mounted birds is hard to store in a school and is better studied in a museum.

where they would be arranged against a setting which showed their natural habitat. The writer has been quite successful in using a collection of good bird pictures as a means of stimulating interest in birds, as source of information and as reference material. These pictures were selected if they complied with this criteria:

a. Accuracy of shape of the bird
b. Accurate coloring
c. Relative size indicated

(Continued on page 218)
With a Spencer VA Delineascope, pupils can see dramatic magnification of prints, photos, pages from books and periodicals, maps and lantern slides. It is easy to bring the advantages of the right picture at the right time to your classes. Work is easier and more efficient. Better teaching prevents many failures. This means a great saving for the school and community and an even greater benefit to the pupils themselves.
Many pictures can be secured from the National Audubon Society, National Geographic Magazine, and from some school supply houses. Those pictures found in some of the cheap bird books do not comply with the above criteria.

When you give children a group of pictures to study without any other direction, you often cause the children to become confused. They look aimlessly at one picture, put it down, and look at another. To prevent this the author typed a list of questions for each picture and mounted them below the picture. For example, on the picture of the Cardinal, which is found throughout most of Ohio, you could use such statements:  

a. Notice the short thick bill. What kind of food would this bird eat?  
b. How does the bird use its bill?  
c. What other birds have the same type of bill?  
d. Study the shape of the bird's feet. In what way does the cardinal use its feet?  

The questions were formulated in such a way that they were thought-provoking, required not only careful observation comparison of pictures but also recall of material formerly read, or stimulated research. The children then handled the cards and studied them. If it were necessary to call the attention of the entire class to a picture, this picture could be projected in a machine which could be used with opaque pictures. Types of bills and claws could be drawn on glass by the pupils and used for general class discussions. There are many educational films available which show birds in action, such as, humming birds, birds of prey, wading birds, etc. Visual aids need to be used to supplement science and nature study books and field and museum trips. There are many attractive children's books which can be used with the pupils, even primary children. One such book is "The Restless Robin" by Marjorie Flack (Houghton Mifflin Company).

The author selected a green cardboard with a dull finish as mounts for these pictures. Finger prints were less evident on dull finished paper. The edges of the pictures were covered with paper cement and then placed on the cardboard. This paper cement was clean and easy to apply and had great adhesive power. One disadvantage in using it was that it adhered so quickly that you did not have an opportunity to change the position of a picture after it was placed on the cardboard. The questions were mounted in the same way. Although the pictures received hard usage they remained securely fastened to the cardboard.

The birds selected for this study were the ones most often seen in Ohio, especially central Ohio. This assortment included those birds found in the cities and open country. Warblers were omitted because they stop here just to feed and then migrate further north. These birds are difficult to observe without field glasses. Even though the whippoorwills are not common to this region they were included in the selection because children find many references to them in songs and literature.

What were the results of this study? The entire class became more observant, not only of the birds, but of all nature. On Monday morning most of the pupils could hardly wait for a chance to tell the group about the birds they had seen over the week-end. Usually they were able to call the bird by name and
if they couldn't they described it. As the season advanced their descriptions became more accurate as to relative size, coloring, shape of bills, bird's actions, etc. The children became more efficient in using reference books. The children put up a feeding station in the yard next to the school and observed the birds which came to feed. They had to know what different birds ate and put out the right kind of food to attract these birds. Many of the boys built bird houses and placed them in their yards. The parents became more interested and observant. The interest in birds spread to other rooms.

Technical Films in the Camp Program

(Concluded from page 197)

some preference for the skill or activity to be shown.

For example, a film on safety at the water front or certain swimming techniques could supplement instruction and increase interest in this popular camp pastime. Adding to the significance of mountain climbing, a film on that subject can encourage new enthusiasm for scaling local bluffs and even stimulate interest in wild life, and out-of-door living. In the camp studio or shop films can be run off for small groups on the art of casting or weaving. These all have a very refreshing influence over the subsequent creations. Films of masters at work provoke a will to do.

Again, small groups, unified in purpose, can truly find new cause to revere the film. It is highly desirable that a camp be prepared and persuaded to equip itself for simultaneous projection. Films should be shown often in different places at the same time. The different kinds of programs will attract their own particular audiences. The resulting interest and seriousness with which motion pictures are regarded will convince the camp management of the desirability of investing for specialized film performances. It is this type of movie that encourages individual initiative, it is this type of movie that inspires youth to thoughtful action.

A film program coordinated with camp programs may even cause the reorganization and re-evaluation of camp policy; for the films can demonstrate the desire on youth's part to learn rather than constantly seek pointless entertainment. Boys will always be willing to cheer for a thrilling western reel, to be sure, girls will rarely wish to forego a romantic adventure movie, but both will and do demand something more serious than incessant amusement.

The specialized film shown to small groups can reawaken interest in many camp activities. It is a new and tested device for educational motivation. It does not displace the entertainment programs conducted with motion pictures, but it does supplement and enrich other camp activities. It establishes the film as a means for promoting youth productiveness. Specialized films are active not passive. They deserve serious consideration. The camp has in this form of visual education an added and faithful aid.
Current Film News

Eastman Kodak Stores, Inc., Kodascope Libraries Division, 356 Madison Avenue, New York City, makes the important announcement that a selected group of fifty-nine Eastman Classroom Film units, now available for rental from their library. These subjects are listed in the new eighth edition of the company's 16mm silent rental film catalog, as follows:

**Agriculture:** Potato Enemies,

**Games:** Modern Basketball Fundamentals, Modern Football Fundamentals.

**Health:** Home Nursing (3 subjects), Keeping Hair Clean, Mold and Yeast.


Bill & Howell Company, 1801 Larchmont Avenue, Chicago, is distributing the first Filmosound Library supplement of the current year, listing educational films that have been added to the library's resources since the educational catalog's printing in December. Because of the current need for social study films, particularly those pertaining to evolution, functioning and defense of democracy, new accessions in this field are featured. Among the outstanding new films on Democracy are Constitutional Government, The Pilgrim Fathers, Our Declaration of Independence, Seed of the Constitution, Our Bill of Rights and Our Constitution.

Sky Defenders—45 min., sound, black and white and color—now being distributed by Bill & Howell, features Canfield Cook, aviation authority and one of the youngest pilots in World War II, describing the training of U. S. Army Air Cadets. It was made in cooperation with the U. S. Air Corps and shows many spectacular flying scenes, including a simulated bombing flight in close formation by up-to-the-minute fighting planes.

**Garrison Films,** 1600 Broadway, New York City, has ready for release the second in a series of five subjects on Pan-American relations and the Spanish language, produced by Thomas J. Brandon:

*Pan-American*—as it is titled—is a 1 reel 16mm sound film narrated in English and is available for rental and sale. It was directed by Arthur Browning and supervised by William Wachs, author of "Spanish for the Good Neighbor." The film portrays the trade relations and means of communication within the Western Hemisphere, and also stresses the elementary rules of pronunciation of the Spanish language.

The first in the series is *This Spanish Speaking World,* which is an introductory study of the Spanish language and the peoples who speak it. A Study Guide for this production has been prepared for issuance to schools and adult education groups. It gives a synopsis of the film's contents—historical background of Spain and its language, various types of Spaniards, their habits, influence of old Spain on Western Hemisphere, scenes in Spanish America, Cuba, widespread variety of people whose native language is Spanish. The Guide also includes a complete transcription of the spoken English commentary, questions on history and geography suggested by the film, topics for composition and research units. It is designed to familiarize the teacher with the culture of the people that the film has sought to suggest some ways and means of vitalizing the curriculum.

**Forum Films, Inc.,** 8913 Sunset Blvd., Los Angeles, Cali., announces the availability of the first three subjects in their series of twenty-six films on Vocational Guidance, two reels in length and can be obtained in both 16mm and 35mm sound. It is planned to release two films a month.

*I Want a Job*, the first release, is designed to aid the job applicant by showing the right and wrong way of approach. Different types of boys and girls are interviewed by an employment manager in a large company.

Minutes are Pennies stresses the importance of cooperation and coordination in a business office, showing how inefficiency and laxity on the part of employees affects the welfare of a sales organization. It is designed to correct and efficient office procedure.

**Courtey Comes to Town** is the most recently completed film in this series of character moulding subjects. Following films deal with other qualities, such as: sincerity, poise, responsibility, honesty, speed, self-confidence, tact, incentive, etc. Six additional scripts are now in preparation, all written by recognized screen playwrights. According to Mr. Burkett, president of Forum, before each script is placed in production it must have the approval of a jury of at least eight educators.

**Castle Films, Inc.,** 30 Rockefeller Plaza, New York City, has just issued a leaflet that describes thirteen of its releases, covering the world's wars from Japan's invasion of China and Spain's revolution down to the African and Greek campaigns of today. Trends, causes, strategies and crises are traced throughout out the uninterrupted sequence of this series. The leaflet stresses how possession of this set of films serves today, and will serve in the years to come, as an unexcelled supplement to text-book presentation of history. Never before in the life of man have motion pictures of a major war been available for teaching purposes.

These thirteen Castle films, in order, cover the following subjects: War in China; Rome-Berlin-Axis pact—Spain-China; Schnoching—Germany invades Ethiopia; and Alhmia invades Tunisia—Munich pact—Benes' rejection of Nasi terms—Sudetenland occupied; Ger- many's invasion of Poland—English-French declarations of war; French Magnin Line—Allied navies act—British land to fight on French soil again; Ger- man pocket battleship " Graf " scuttled; Finland's staltaw stand against Russian invasion; Nazis invade Denmark, Norway, Luxemburg, Holland—sea battle at Narvik; and Leopold's surrender and the epic of Dunkerque—battle for France—Paris bombed before surrender; half of operation for Stalingrad blasted by British untiy at Oarin, Algera; England's brave stand against air bombings—London burning—convos attacked in Channel—Hitler signs French armistice in historic railroad car at Compiegne—Pétain premier; rise and fall of Fascist dream of African empire—Mussolini takes Ethiopia; and Italian driven to Adriatic by Greeks—Wavell's armies out of Musollini from Egypt, Ethiopia, Somaliland, Eritrea—desert warfare at Sidi Barrani, Port Capuzzo, Bardia, Tobru—Italian pris- oners.

The Castle leaflet about its war films may be secured at photographic dealers where the films also are available in 16mm silent and sound, and 8mm silent, at prices less than the cost of unexposed movie film.

**Hoffberg Productions, Inc.,** 1600 Broadway, New York City, is offering Spanish language versions of many of its films as an aid to students of Spanish. Classified as "Spanish Learning" in their leaflet, the following one reel sound subjects are available for rental or sale, in 16mm or 35mm:

Ampro Sound Projectors

...A Real Aid To Teaching!

It was not until the invention of the sound motion picture that Equal Educational Opportunities could be provided in such a dynamic manner throughout the schools of America. Every school, regardless of size, location, limitation of physical environment or finances, may now provide learning opportunities with the aid of Amprosound 16 mm. motion picture projectors. In collaboration with educational film libraries, a program may be planned which will make an outstanding contribution to a school and community. Ampro Educational Dealers are trained especially to provide service and information on all phases of Visual Education.

Some Large Users of Ampro Projectors


Send for Ampro Catalog

Being the complete line of Ampro 16 mm. sound-on-film, silent, and convertible to sound projectors. Thousands of Ampro precision projectors rendering splendid service in schools all over the U. S. Find out what they can do for you.

AMPRO CORPORATION, 2839 N. Western Ave., Chicago, Ill.

Please send me new Ampro Catalog. I am particularly interested in:

☐ Ampro 16mm. Silent and Convertible to Sound Projectors
☐ New Amprosound 16mm. Projectors.

Name:

Address:

City: State:

Thousands of schools, colleges, universities and libraries are using Ampro silent and sound projectors.
The Educational Screen

64 East Lake Street
Chicago, Illinois

tricks analyzed), and three films on Mexico.

Poxanas y Canciones de Andalucía — songs and dances in typical Andalusian style—is a 2-reel subject. Five features, comedies and a few more one-reelers complete the list.

■ Crane Company, 836 South Michigan Avenue, Chicago, has released recently a new picture, available free from the Advertising and Sales Promotion Department:

The Making of American Homes—16mm sound, 30 min. running time—Illustrating the importance of modern plumbing in various American homes. The making of fixtures from vitreous china and porcelain enamel on cast iron is covered from raw materials to finished product.

■ Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago, is producing a series of sound and color motion pictures for the Gisholt Machine Company, Madison, Wisconsin. The films will be used to train turret lathe operators for the national defense program. Distribution will also be handled by Burton Holmes Films.

■ College Film Center, 59 E. Van Buren Street, Chicago, has obtained for distribution the Canadian film:

Front of Steel—1 reel, 16 mm sound—available for sale or rent. Explains through the use of film footage seized by the British from the Germans on the high seas, the reasons behind the present speed-up on Canada’s steel front. Includes material shown to the Norwegians by the Germans on the eve of the invasion of Norway, and depicts the rise of Nazism in Germany from 1933 to the present.

■ Cosmopolitan Film Libraries, Inc., 3248 Gratiot Avenue, Detroit, Michigan, has recently added many films to its library of rental subjects. Specializing in services to schools, this firm offers a large variety of subject matter for educational and recreational programs. Geography, History, Literature, Natural Science, Health, Sports and Travel films are included, as well as some of the latest and best feature pictures, such as The Count of Monte Cristo, The Last of the Mohicans and many others of recognized merit. Complete descriptive catalog of these 16mm sound films can be had on request.

■ British Library of Information, 620 Fifth Avenue, New York City, announces the release of several new films showing life in wartime Britain, sponsored by the British Government. All are sound, available in 16mm and 35mm for non-theatrical showing in the United States. Among them are the following one-reel subjects:

Tomorrow Is Theirs—how schools in British towns carry on; air raid shelters for schools.

Neighbors Under Fire—actual scenes in London’s dockland district the morning after a heavy raid, showing how the Voluntary Services look after the homeless.

Goofer Trouble—a plea to the public not to stare into the sky during aerial “dog-fights”; how such people can hinder work of pilots.

Air Communique—how the R.A.F. calculates the figures of enemy planes brought down; traces the procedure from reports of pilots to world’s press and radio.

These films are distributed by College Film Center, 59 E. Van Buren Street, Chicago, and Non-Theatrical Pictures Corporation, 165 West 46th Street, New York City.

■ Walter O. Gutlohn, Inc., 35 West 46th Street, New York City, reports the release in 16mm sound of:

Breaking the Ice—8 reels—starring Bobby Breen, supporting cast including Charlie Ruggles, Dolores Costello, and the world’s youngest ice-skating skater, Irene Dare. Bobby’s singing and the comedy antics of Charles Ruggles are the highlights of the story, which centers around the love of Bobby for his widowed mother and his efforts to raise sufficient money with which to send her to the man she wants to marry. A spectacular ice fantasy is an impressive feature of the film.

Bertram Willoughby Pictures, Inc. Opens New York Office

Under the above name, Bertram Willoughby, President of Ideal Pictures Corporation, has just opened a New York office at 1600 Broadway. The new company, announced as an affiliate of Ideal Pictures Corporation, has absorbed Arrow Film Service which has been located at the Broadway address, and Mr. James Weiss, formerly with the latter company, is manager of the new office. Ideal now offers services from three offices—Chicago, Los Angeles and New York City. Its extensive library includes 16mm sound and silent films, and 8mm films.

Lewis to Larger Quarters

Due to increasing demands for its services and the consequent necessity for adding to its retail stock and enlarging its facilities generally, the Lewis Film Service of Wichita, Kansas, has moved to larger quarters. The new address is 216 East First Street, Wichita.
New Recording Firm in Educational Field

Recorded Lectures, Inc., 737 N. Michigan Avenue, Chicago, is one of the latest arrivals in the field of production of supplementary aids to teaching. It is a departmental organization for "audible publishing." It will supply to the school field select teaching material in the form of electrical transcriptions of the highest quality in all branches of the curriculum. President of the new company is Gerald T. Stanley. "Recorded Lectures" offer the most practical and economical means for exchange of ideas, for personal communication of thoughts, and theories by our great teachers. Leading authorities in all subjects may be heard in every classroom in the land through the simple medium of the rotating disc.

As the work progresses, it will be possible for all institutions of learning, large or small, to develop their own libraries of recordings perfectly selected to meet their own specific needs. Such collections will constitute a wealth of unique reference material, instantly accessible, usable at the exact moment desired, and permitting unlimited repetition as may be needed. The values derivable from such materials will increase indefinitely with growth of the school's collection in an ever-widening range of subject matter.

"Recorded Lectures" constitute a supplementary aid to teaching that is most perfectly under the teacher's control and at an absolute minimum of time and effort. No audio-visual aid can be more readily accessible than an indexed file of transcription discs; no setting up of equipment can be so simple as the mere placing of a disc on the turntable. As for means of sound reproduction, the problem is extremely simple. Many schools are already equipped with phonographs or a combination radio-phonograph. For schools not so equipped, it is a very easy matter to secure, through Recorded Lectures, Inc. or on the open market, an inexpensive piece of equipment, with a good reproducing head and arm and a two-speed turntable, which is capable of playing electrical transcriptions at 33-1/3 revolutions per minute or ordinary phonograph records at 78 revolutions per minute.

Such equipment can find wide use in schools and colleges. It can serve music appreciation groups with Victor and Columbia records, or other recordings from any source. Dramatic classes may hear and study masters of the stage from Maurice Evans to Orson Welles. Other departments may have their own appropriate material, from outstanding sources of authority, and with endlessly repeated renditions from day to day and year to year. The master utterances of our greatest scholars can still be listened to in classrooms after their voices are stilled forever.

"Recorded Lectures, Inc." does not propose to choose its own subjects for production. The fullest cooperation from the entire teaching field is cordially invited. All comments and suggestions will be welcome, as to what topics should be treated, what problems argued, what controversial matters should be presented from both sides, and what outstanding American scholars should be called upon for discussions within their special fields.

Da-Lite Announces Lower Screen Prices

Da-Lite Screen Company announces important reductions in the prices of many sizes of Da-Lite Screens. Greatly increased demand in the past year has resulted in economies in the manufacture of many of the sizes and has made possible the lower prices. This constitutes their third price reduction in the past five years.

Da-Lite's popular hanging screen which consists of a glass beaded fabric, spring-roller-mounted in a metal case, is largely used in classroom and lecture rooms in schools, universities and clubs. All sizes of this Model B Screen have been reduced in price. The 39" x 52" size, for example, is now only $11.50. The 22" x 32" is now $6.00; the 30" x 40", $7.50; the 40" x 50", $9.00; the 52" x 52", $13.50. All prices are slightly higher on Pacific Coast. These are only a few of the typical values among the many sizes of the Model B Screen. A new size 84" x 84" has also been added.

Da-Lite's convenient tripod screen, consisting of glass beaded surface, spring-roller-mounted in a metal case to which a tripod is pivotally and permanently attached, also will have reduced prices on 7 of its 12 sizes. The popular 39" x 52" size is now only $20.00. Veteran movie makers may recall that this is the price at which the 30" x 40" Challenger used to sell back in 1932.

Owners of still cameras who enjoy projecting Kodachrome slides will be glad to know that all of the source literature of Da-Lite Challengers have been reduced in price. The 40" x 40" is now only $16.50. The 12 sizes of the Challenger ranging from 30" x 40" up to and including 70" x 94", from $12.50 up, meet most classroom needs where portability is a factor.

Owners of still cameras who enjoy projecting Kodachrome slides will be glad to know that all of the source literature of Da-Lite Challengers have been reduced in price. The 40" x 40" is now only $16.50. The 12 sizes of the Challenger ranging from 30" x 40" up to and including 70" x 94", from $12.50 up, meet most classroom needs where portability is a factor.

Da-Lite Screens have been famous for their fine picture quality, convenience and durability for 32 years. New literature containing all of the new low prices will be sent upon request. Write Da-Lite Screen Company, Inc., 2723 N. Crawford Avenue, Chicago, Illinois.

Presto Turntable

To meet the demand on sound equipment distributors for a higher quality recording and record playing turntable, Presto Recording Corporation, 242 West 55th Street, New York City, has just released as a separate unit the dual-speed 12" turntable formerly sold only as part of their model K commercial recorder. The new Presto 11-A employs a cast aluminum turntable precision machined to dynamic balance. The table revolves on a single ball bearing as the base of a bronze shaft well. A heavy, live rubber tire is fitted to the rim of the table. A metal pulley on the motor shaft drives directly against the tire, eliminating idler wheels, rubber-tired pulleys and other parts which wear rapidly. A slip-over pulley is removed to change speed from 78 to 33 1/3 RPM. The motor and turntable are mounted on a steel base ready for installation in portable or console phonograph record and 16" transcription players.

The 11-A is recommended for use in school reproducing systems, sound effects equipment used in radio stations, recording and motion picture studios and for high quality home recording and recording playing combinations.

Motion Pictures—Not for Theatres

(Continued from page 280)
HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bailey Film Service (3, 4)
1651 Cosmo St., Hollywood, Cal.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 207)

Castle Films (3)
RCA Bldg., New York City
(See advertisement on page 185)

College Film Center (3, 5)
59 E. Van Buren St., Chicago.
(See advertisement on page 208)

Cosmopolitan Film Libraries, Inc. (2)
3248 Gratiot Ave., Detroit, Mich.
(See advertisement on page 211)

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago

Dudley Visual Education Service (1)
736 S. Wabash Ave., Chicago
4th Fl., Coughlin Bldg.
Mankato, Minn.

Eastman Kodak Co. (1)
Teaching Films Division, Rochester, N. Y.
(See advertisement on page 219)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City, N. Y.

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.
(See advertisement on page 213)

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Guthlohn, Inc. (3)
35 W. 45th St., New York City
(See advertisement on page 212)

Harvard Film Service (3, 6)
Biological Laboratories, Harvard University, Cambridge, Mass.

Hoffberg Productions, Inc. (2, 5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 218)

International Film Bureau (3, 5)
59 E. Van Buren St., Chicago

Lewis Film Service (3)
216 E. 1st St., Wichita, Kan.
(See advertisement on page 215)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Douglas D. Rothacker
729 Seventh Ave., New York City

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 206)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, la.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y. M. C. A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 221)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 207)

DeVry Corporation (3, 6)
1111 Armitage St., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave, New York City

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye
239 Grant Ave., San Francisco, Cal.

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 213)

Ideal Pictures Corp. (3)
28 E. Eighth St., Chicago
(See advertisement on page 218)

Jarrell-Ash Company
165 Newbury St., Boston, Mass.

RCA Manufacturing Co., Inc. (2)
Camen, N. J.
(See advertisement on page 190)

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp.
Davenport, Iowa

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

RECORDINGS

Recorded Lectures, Inc.
737 N. Michigan Ave., Chicago
(See advertisement on page 215)

SCREENS

Da Lite Screen Co. (3)
2717 N. Crawford Ave., Chicago
(See advertisement on page 199)

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILM SLIDES

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 219)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 188)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 218)

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spindler & Saupe, Inc.
86 Third St., San Francisco
(See advertisement on page 219)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 219)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

DeVry Corporation
1111 Armitage Ave., Chicago

Eastman Kodak Stores, Inc.
Kodascope Libraries
356 Madison Ave, New York City

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films, Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye
239 Grant Ave., San Francisco, Cal.

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165 Newbury St., Boston, Mass.

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Davenport, Iowa

Visual Education Service (3)
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Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) indicates 35mm sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 75c each.
1ST Choice!

DEVRY SOUND FILM PROJECTORS
ENJOY WORLD WIDE ACCEPTANCE
GET ALL THE FACTS BEFORE YOU BUY
AND YOUR FIRST CHOICE
WILL BE A DE VRY

Just as its serves schools, colleges, churches, civic organizations and leading users of commercial films, so DeVry theatrical sound quality and screen brilliance can serve you in making your audio-visual education program most effective. For almost three decades DeVry projection has been the preferred choice of those who learn all the facts. Get this story in person — arrange for a demonstration.

FREE FILMS SOURCE BOOK... containing over 1300 sound and silent films available for FREE screenings in schools, clubs, churches, etc. PRICE WITH ORDER ONLY 50c.

CORRECTION!

Obviously, the statement "17,000,000 feet of film" in our ad in the May issue of EDUCATIONAL SCREEN was in error. A mixup in decimals was responsible. Mr. Baumgardner's letter intended to state "We ran 170,000 feet of film through our DeVry machines last year without any trouble." DeVry believes in the high ethics of truthful advertising and would not deliberately use misleading figures or statements in presenting its story to the public.

10 16MM. SOUND PICTURES
THAT SHOULD BE IN YOUR VISUAL EDUCATION PROGRAM NEXT FALL

Lesson Plans With Each Film
MAKE YOUR RESERVATIONS NOW!

□ THE STORY OF OUR FLAG
One Reel—Rental $1.50—1 or 2 Days
An excellent historical picture of the growth of the United States and how the flag developed with it. A must on your film list.

□ SOUTH AMERICA
One Reel—Rental $1.50—1 or 2 Days
Over the towering Andes to Argentina and Buenos Aires, then on to Rio and Brazilian charm. Excellent sound and photography.

□ THE WORLD ON WHEELS
Two Reels—Rental $3.00—1 or 2 Days
Depicts the historical development of the wheel and its influence on mankind. Wagons, carts, early trains, modern streamliners, etc.

□ MEN OF THE NORTH
One Reel—Rental $1.50—1 or 2 Days
A trip into Eskimo land and a study of these people and their means of making a living.

□ PLANT BIOLOGY
One Reel—Rental $1.50—1 or 2 Days
Includes seed dispersal, life functions, reproduction, etc. Illustrated by a study of the corn plant. Excellent for Agriculture, Nature Study, Biology.

□ THE EARTH WORM
One Reel—Rental $1.50—1 or 2 Days
Life cycle of earthworm. Animated studies of different bodily functions. For Biology, Zoology, Entomology, Nature Study classes.

□ SAILS AND STEAM
Two Reels—Rental $3.00—1 or 2 Days
The story of the development of water transportation. Canoes, row boats, early sailing vessels, modern ocean liners. Excellent photography and sound.

□ CLOUDS
One Reel—Rental $1.50—1 or 2 Days
An excellent portrayal of how clouds aid man on land and sea. Weather cycle and weather forecasting.

□ ADAPTATION
One Reel—Rental $1.50—1 or 2 Days
Depicts the adaption of animals to the favorable and unfavorable earthy conditions. Excellent throughout.

□ CHINOOK'S CHILDREN
One Reel—Rental $1.50—1 or 2 Days
A vivid portrayal of the raising and training of huskies sired by Admiral Byrd's Polar lead dog. Dog races, breath-taking winter scenes.

Send for Free Film Catalog
DEVRY FILMS and LABORATORIES
1111 Armitage Avenue
Chicago, Illinois
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This BOOKLET Tells How

Those five vital aspects of the fully developed school motion picture program are the subjects of a new book, Filmo on the Faculty, which has helped thousands of educators and which we'll gladly send to you upon request. The methods it recommends were developed, tested, and found successful by leading educators. Send the coupon today for your free copy.

FILMOSOUND "UTILITY"
All-purpose School 16mm. Sound Film Projector, Now Only $339

The popularity of this versatile Bell & Howell model has led to production economies which are passed on to schools in a new, low price. Filmosound "Utility" has ample capacity for the school auditorium, yet it is easily portable for classroom use. It reproduces silent as well as sound films. Has clutch for still projection, reverse for running film backward, and provisions for using public address microphone, phonograph turntable, and disc recorder.

This is but one of the complete B&H line of projectors. There's a B&H model for every school need.

Order Now to Assure September Delivery

If you intend to get new motion picture projectors for the autumn term, your order should be placed now. Because of abnormal and apparently increasing demands for raw materials, coupled with the ever-growing number of Filmosounds wanted by schools, we cannot promise that late summer and autumn orders can be filled promptly. Order now to avoid delayed delivery!


A B&H Visual Education Specialist Is Near You!

Bell & Howell maintains a staff of fully informed, capable, factory-trained Visual Education Specialists to help you solve any school motion picture problem, both before and after purchase. This staff is but one expression of Bell & Howell's complete service to schools, which also includes renting and selling films and supplying cameras and accessories as well as projectors.

BELL & HOWELL COMPANY
1617 Larchmont Ave., Chicago, Ill. 

Please send: ( ) Free book, Filmo on the Faculty; ( ) Literature on Filmosounds; ( ) My check for $3.00, to cover the cost of material you request.

Name
School
Address
City
State
Zip

PRECISION-MADE BY

BELL & HOWELL
At the meeting of the American Medical Association in Cleveland in June, 1941, 209 speakers made use of a projection lantern and lantern slides.

—THE PROBLEM THESE SPEAKERS FACED WAS THE SAME AS THAT FACED DAILY BY EARNEST TEACHERS—

The Keystone Projection Lantern Being Used with the Keystone Flashmeter

The STANDARD LANTERN-SLIDE PROJECTOR is the best projection equipment in which a school or teacher can invest, because it CAN BE USED—

(1) In the classroom or in the auditorium.
(2) In a darkened room or in a lighted room.
(3) To project many carefully selected and edited units of photographic lantern slides.
(4) To project handmade lantern slides, which cannot be made on any smaller scale.
(5) With a microprojection attachment, which has many practical uses.
(6) With the Keystone Flashmeter, which has been shown to have many diagnostic and developmental possibilities in the teaching of spelling and reading.

The Keystone Projection Lantern and Keystone Lantern Slides are effective visual aids in group instruction.

Keystone View Company
MEADVILLE, PENNA.
Diversitorials

The Boston Business Meeting

PROBABLY no annual business meeting of the national visual instruction organization—going back to the first N A V I session at Madison, Wisconsin, in 1919—has even approached in importance the forthcoming meeting in Boston on July 1st next. Its potential outcomes for the Department's future are literally portentous. Only the maximum possible attendance by members can do justice to the occasion. At least three major matters of moment will demand careful consideration, discussion and decision.

First—the supremely important problem of a closer and firmer cooperation between the Department of Visual Instruction and its parent National Education Association. This matter has been on the fire for years, with little progress made toward any substantial solution. Prospects are now bright for a satisfactory and meaningful collaboration through mutual understandings and procedures. President Reed discusses the "proposal" in illuminating detail in the department "Among Ourselves" in this issue.

Second—changes in organization and function (involved under "First" above and under "Third" below) require modifications in the Constitution and By-Laws. In part these modifications, approved at Milwaukee last year, are ready for final action now; in part they may call for approval now and final action next year. The full draft with proposed changes will be submitted to the membership at Boston.

Third—the Zonal Plan, approved at Milwaukee, will receive final discussion and decision. The "Working Plan", drawn up by the Zonal Committee of the D V IJ, was admirably summarized by James D. Finn in our May issue. At Boston, every member present will have in hand a complete mimeographed copy of this "Working Plan" together with a list, already nearly complete, of nominees for the 100 offices (10 in each of the 10 Zones, selected by the appointive Zone Presidents) as basis for his decision on the Zonal Plan.

Three "New" Departments

Two new departments will appear in our pages next fall. One will be "Educational Field Experiences" to be edited by Dr. Verna Carley of Stanford University, for the national committee on Field Experiences, an affiliate of the Department of Visual Instruction. Therein will be presented a wide range of informational and editorial matter on the rapidly expanding uses and developments of the school journey or field trip in education. An introductory article by Edward G. Olsen, and a statement by William W. Wattenberg, Chairman of the Committee, appear on page 244 of this issue.

The second new department, under the heading of "Experimental Research in Audio-Visual Education", will be conducted by David Goodman of New York University and will aim to keep our readers closely in touch with what is being done in all corners of the country by way of research in the visual field. It will supply in reference form detailed information on experiments and investigations as planned, conducted and concluded; on published works of research; on theses written in various centers of learning; and thus constitute, in course of time, a source of complete bibliographical reference on the entire field of research in visual instruction. On page 255 of this issue David Goodman presents an introduction to his own department.

The third "new" department is now a year old! "New Films of the Month—As They Look to a Teacher Committee" has proved itself to be a feature of exceptional interest and value to readers and film-producers alike. It is the creation of Don White and his devoted committee of teachers, all of whom have given a shining example of genuine cooperation for the good of a cause. And now, after a short year of such service by him and his loyal committee, the omnivorous "draft" seems likely to prevent continuance of the excellent work. Read Don White's editorial on page 262 of this issue—and then, if you have suggestions to shed, prepare to shed them now.

Summer Courses in Visual Instruction

THE tempo of progress in the visual field has been enormously stepped up in recent years. We are outgrowing our snail-paced babyhood. The threat of perennial infancy which hung over us so long is becoming pretty thoroughly dissipated. The increasing rate of production and use of visual aids throughout the country is compelling evidence that, at long last, visual instruction is coming into its own.

There is a further bit of evidence pointing in the same direction to be found in our last three issues—the fast-growing number of summer courses for teachers. In April we listed 120 courses; in May, 75 more; and in this issue a final supplement of 8 more courses brings the total to 212 for the coming summer. Admittedly these courses vary greatly in content, character, quality and importance. But growing attendance at all of them each year means that even the more elementary offerings are serving to supply that "initial impulse" so essential for all save the self-starters in the educational profession.

We began these listings in 1935 with 80 courses. In 1938 the Society for Visual Education began its invaluable cooperation in gathering the data. The lists have lengthened steadily, but note the accelerated pace of the last two years! From 1935 to 1939 the rise from 80 to 125 courses represented a percentile increase of 56% in four years, or 14% a year. From 1939 to 1941 the rise from 125 to 212 courses shows a 68% increase in two years, or 34% a year! Teacher training seems to be on the move.

Nelson L. Greene
Democracy at Work Through Visual Education

Kathleen L. Lee
Director of Visual Instruction
Dallas County Schools, Texas

The Dallas County Schools, as their part of the nation's defense program, began a unit that had for its primary purpose a closer understanding of all of the countries of the Western hemisphere. The children, studying international friendships, feel that we should stretch our hand to Canada and say, "Hello, Canada! We are glad that you are our neighbor", then joyously sing "There'll always be an England!" The unit narrowed to Texas' closest neighbor—and with their other hand to Mexico they say "Howdy! we want to better understand you for it is only through understanding that good will and lasting friendship can be attained."

Some 7500 students participated in this study and the unit was as varied in each of the 47 schools as were the children’s interest, but in every school customs, habits, occupations, geography, government and the history of Mexico were studied. A visit to any school would have told the visitors that the color and the charm of Mexico had left its spell upon the children. They loved to paint, even the smallest of them, the gray burdened burro, the elaborate sombrero, the dull green magney plant, the low-roofed hacienda, and gay colored fiesta. Murals depicting the mountainous countryside, the farm, the markets and the crafts of Mexico were eagerly done by the children.

Visual aids effectively working for the "good neighbor" policy along our southern borders.

In a unit of work we employ the use of all visual sensory aids for it is through the wide use of visual materials that the project gains momentum. Photography has brought visual aids into the classroom and the value of flat pictures is highly recognized by our teachers. Dozens of pictures were mounted and placed on the library tables where the students might enjoy them at any free period. How many words or how many printed pages would be needed to give the impression of Xochimilco and the lovely gardens that one colored print conveys? And we must remember that words, whether written or oral, cannot give the accurate or permanent impression that photography does.

Stereoscopes and stereographs were also on the reading tables. The stereograph is a third dimension picture and students gain much from the stereoscopic view seen through the stereoscope, which gives the looker the same idea of depth and space that he gets from the use of two normal eyes looking at actual objects. We like life-like pictures and the strong impression of reality that one gets from the stereoscopic pictures and the strong impression of reality that one gets from the stereoptic view puts the individual in a learning frame of mind. Then, too, the information on the back of the card is most beneficial.

Wanda Hawkins and Charles Canfield are weaving a Mexican rug. Some of the young-sters know two hundred words in Spanish.
The school rooms were saturated, so to speak, with objects, models and specimens from Mexico. Sombreros and serapes were in evidence. Matatees and manos were in each school and always a clay figure of a Mexican woman on her knees before the matatee patiently grinding corn for tortillas. Clay burros and straw dolls were fashioned by students and vividly colored maps hung from the classroom walls.

Film strips and glass slides are excellent devices for the classroom. They are inexpensive and are valuable aids in speeding up the educational process. Many film strips are available on Mexico. The titles of those in the Dallas County library are “In and Around the City of Mexico,” “Mexico and Its People,” “Vera Cruz to the City of Mexico.” Brilliantly colored glass slides on Mexico were used in group study. These were procured from the office of the Mexican Consul in Dallas and others from the National Railways of Mexico, San Antonio, Texas.

Sound motion pictures on the country, the people and arts and crafts of Mexico were shown. There are many valuable films on the country, but those in the Dallas County Schools were “The People of Mexico,” “Mexican Children,” “Arts and Crafts of Mexico,” “Workshops of Mexico,” “Through the Ages,” and “Rolling Down to Mexico.”

Through the use of these devices the students’ sense of neighborliness definitely increased. The school journey is one of the most effective of all teaching tools, if properly applied. The excursion should be well planned. Why going? What to see? There must be discussions at the places of interest. Dallas’ own “Little Mexico” was swamped. This was not a vicarious experience but an actual one. Mexican dinners and luncheons were served in the cafes where enchiladas, tortillas, tacos and chili-cor-carme, were enjoyed to the tunes of Mexican orchestras.

One class visited an underprivileged Mexican school and “adopted” a little boy, outfitted him with new clothes, and thus awoke to one of the joint problems of Texas and Mexico. How best to care for the Mexican laborer who, drawn to Texas by higher wage levels, has been caught by the higher cost of living and finds himself in an almost helpless economic position.

The Mexican consul, Luis Perez Abreu, was invaluable to the success of the unit. He, as representative of the Mexican government, visited the schools and thrilled the students with his sense of justice and human kindness. He talked to the children, their teachers and parents, both formally and informally. He graciously gave some sixty books on Mexico to the libraries of the county schools. It is hoped that international correspondence may be carried on with Mexico through his efforts.

The communities were delighted with this study and turned out en masse to attend the programs which marked the culmination of the project. They shared their Mexican treasures for the displays of Mexican handwork which were featured in every school. The accomplishments of this unit are innumerable. The attainments in formal education, the factual knowledge, can be ascertained, but the spirit of the program cannot be measured. We have every reason to believe it will be interpreted always in a warmer feeling of friendship between these children and the boys and girls of Mexico, whether it is on the playground of the school, or in later years as grown people across a business table or in a council room.

One of the most lasting interests of the outcome of this program is in the language. Texas children know many Spanish words and this project simply fanned the fire of their interest in the Spanish tongue, and they soon learned the names of the common objects in their school room and around their home. Dr. Joe P. Harris, superintendent of the Dallas county schools, noting this interest, and believing firmly that Spanish should be the foreign tongue most widely stressed in the United States and also believing that instruction in a foreign language should not be confined to high schools, but should be offered in elementary grades, designated one of the schools as a laboratory in which the experiment of teaching Spanish to younger children should be inaugurated. This experiment is proving most satisfactory.

A bill was recently introduced in the Texas Legislature providing for compulsory teaching of Spanish in schools as a part of the “good neighbor” relationships sought with the Latin-American nations. Dallas County is probably the first in the nation to break away from traditions and start teaching Spanish in the elementary grades of the public schools, and is the first county in the state of Texas to have a visual education program. It is believed that through language and visual aids friendlier relationships may be brought about.

We must think of ourselves as true Americans; as citizens of the Western hemisphere; as members of continents welded in knowledge and understanding in language and in spirit. Uncle Sam may well say “My Good Neighbor across the Rio Grande.”
Making Pictures Teach

WHAT kind of pictures should we use, then? First, pictures good photographically and mechanically. Second, pictures good instructionally in that they are truthful, relevant, stimulative, significant, authentic, and suggestive of size. Such pictures are not so plentiful and teachers must select carefully to get them.

Having considered the characteristics of a good teaching picture, let us now consider in what form pictures should be presented to pupils. Should we use lantern slides, or motion pictures, flat pictures or stereographs?

A number of years ago a whole series of experimental studies were carried on under the general direction of Frank N. Freeman of the University of Chicago to compare the relative effectiveness of various types of visual aids. The conclusion of the group conducting the investigation was, and I quote: "Each of the common forms of instruction which employ visual aids has some advantages and there are circumstances under which it is the best form to use."

I have frequently wished that more teachers and administrators were familiar with the results of these investigations. So many seem to take the attitude that the sound motion picture is synonymous with real visual education and that if they cannot afford a projector costing several hundred dollars there is no use of their considering a visual education program. I know of schools where stereographs and lantern slides have been collecting dust for years but the Principal hopes that soon the P. T. A. can buy a motion picture projector so they can really make some use of visual materials. If such people could only be made to realize! I quote from the report of the investigation once more: "The comparison of the motion picture film with other visual aids—slides, stereographs, still pictures—as means of informational instruction, indicates that the motion picture is superior within a restricted range of subjects, and that outside this range of subjects the older devices are as effective or more effective than motion pictures."

The restricted range of subjects in which the motion picture is superior was reported by the investigators to be as follows. First, those concepts which can be grasped better by a view of objects in motion than by seeing them at rest. This would include such teaching areas as the movements in an act of skill, the movements of complex machines or organisms, dramatic scenes historical or otherwise, the growth and development of plants, and animated pictures showing the movements of interior hidden parts of organisms or machines. Second, it seems that as a rule, and I quote Freeman again, "Motion makes objects attractive and as a consequence attracts close attention and prompts to better learning, even though it is not necessary to an understanding of the subject." Freeman further points out that this second type of advantage must be weighed in comparison with the advantages of still pictures.

On the other hand still pictures have certain very definite advantages. Perhaps the greatest of these is the fact that still pictures permit of much more thorough analysis than motion pictures. The pupil does not feel hurried. If properly used, still pictures provide a few clear vivid impressions whereas the ordinary motion picture has a large number of scenes following

A class in Natural Science being taught with the aid of filmstrips.

(Courtesy Society for Visual Education)
one after the other without pause. Thus, for close study and analysis, for the searching out of relationships and for the making of contrasts and comparisons, the still picture is to be preferred unless motion is an important element in the object studied. In the second place, Freeman points out, the still picture gives greater opportunity for the teacher to exert a personal influence and to stimulate the class to active thought.

Thus, motion pictures and still pictures each have their place in the modern school room. This statement does not entirely answer our question as to the kinds of pictures to use, however, as still pictures are of several kinds. Should one use stereographs, or lantern slides, or flat mounted pictures?

Here again the answer will depend primarily on the situation. Each type has its advantages and can be used best for certain purposes. Stereographs are the most real and vivid of the still pictures since they give the impression of a third dimension. The child viewing a stereograph shuts himself off from his immediate environment and loses himself in the scene portrayed. The feeling of actually seeing the thing itself is so strong that children are stimulated to close study and analysis, and the impression made is vivid and lasting. The lantern slide, or the film strip, provide the best sort of still picture for class discussion. The entire group can be stimulated by seeing and discussing the same picture at the same time. Flat pictures are cheap, easily obtained, and easily filed, so that an alert teacher can soon build up a collection of such pictures that will meet the needs of her own teaching situation.

In discussing, “What form of pictures should be used in teaching?” we have made these points. First, motion pictures are most effective where motion is an important factor in developing understanding. Second, still pictures are to be preferred where close analysis is required and where motion is not an important element; Third, of the still pictures the stereograph is best adapted to give a vivid impression to individual pupils; Fourth, the lantern slide or other still projected picture is best adapted to class discussion; and Fifth, flat pictures are the cheapest and most easily obtained form of picture, and teachers can make frequent use of them.

Now to pass to the last question raised, “How should pictures be used?” It seems that a principle of correct usage which needs much emphasis, partly because of its fundamental importance and partly because of its constant violation, is that whatever pictures are used should be integrated with the rest of the teacher’s procedures. Pictures should be used as aids to enrich and make meaningful the units of the curriculum. If they are to fulfill this function, pictures must be booked which really fit the curriculum and they must be used at exactly the right time. In 1936 I conducted a study of the integrated versus the non-integrated use of motion pictures which was published in the September issue of the Journal of Experimental Education. This study showed that films used as an integral part of a teaching unit were much more effective than the same films used two weeks before the start of the unit to which they pertained.

A review of the literature dealing with the methods of using visual aids in the classroom shows that some writers emphasize the need of the teacher previewing the film before presenting it to the class in order to assure proper integration with her work. The need of adequate teacher manuals is often mentioned. One writer argues that teachers should not necessarily use an entire reel of motion pictures but should show only those parts that fit the unit being taught. Another opposes the circuit system of circulating films because it makes proper integration impossible. In spite of almost unanimous opinion of experts on this matter of integration I feel it is one of the most common weaknesses in the use of materials. Too many principals book films by methods which make it impossible for teachers to select the films or the dates when particular pictures are to be available. Too often, six or eight reels of film are booked without regard to whether they fit any unit of work then being taught. These films arrive at a school one morning and have to be used the same day or at best the following day. In such cases the films
are seldom reviewed, the pupils from several grades are often called together and are shown one picture after another for a period or two. They then go back to their regular classes and because the teacher has already lost time from her regular work she seldom takes time to discuss any of the pictures seen. From talking with many teachers I know that this sort of procedure is all too common and I am convinced that experience with visual education of this sort has turned many teachers against the whole program. Another place where teachers are often tempted away from this principle of integration is when free films are available. If a film can be had for nothing it is often used whether it has anything to contribute to the curriculum or not. This does not mean that free films should never be used; only that they should never be used just because they are free.

A point stressed by many writers is that the use of pictures should be followed by pupil activities such as class discussion, the making of drawings or diagrams, etc. In reality, this is a further emphasis upon the integration of visual aids with other teaching procedures. Another point often mentioned is that teachers should plan a careful verbal introduction before showing a film. The purpose of this introduction should be to stimulate interest and to raise problems which the viewing of the film should help to solve. One writer suggests that lantern slides, maps, etc., are often of value in preparing the class to see the film.

There are many questions teachers ask about the best way to use motion pictures in teaching which cannot be answered without knowledge of the particular teaching situation. Teachers often ask, "Should pictures be used at the beginning or the end of a unit? Should a picture be projected more than once? Should the projector be stopped for discussion during the showing of a picture?"

In general it may be said that motion pictures may be of value in any part of a unit of work. The nature of the film, the background of the class, and the teacher’s objectives, will determine when the film can be used to greatest advantage. It is often found worthwhile to use a film a second or even a third time during the teaching of a unit. Each showing should have a definite purpose. Ordinarily the first showing of a film should be without interruption from the teacher, and without stopping the projector for discussion. A film is ordinarily a carefully prepared unit and the first viewing should not destroy the unity of the presentation. In subsequent showings it may be desirable to stop the film frequently for discussions, a still picture may be shown for more careful analysis, or the projector may be reversed so that a particular scene may be presented again. There is no one "best" technique for the use of motion pictures just as there is no one "best" technique for the use of a textbook. The skillful teacher will constantly vary her procedure to meet the needs of the class.

In the use of still pictures there are just two suggestions I would make. First, avoid using too many pictures at one time. Two or three lantern slides properly studied and discussed will ordinarily be of more value than fifteen or twenty hastily flashed on the screen. Two or three stereographs on the work table at a time, but changed frequently, will be more effective than twenty left there for a month. A few good pictures on the bulletin board, changed frequently, will produce better results than a mass of pictures left undisturbed for weeks.

Second, in teaching with still pictures place the emphasis upon interpretation of things seen in the picture rather than upon mere enumeration. Discuss "why" people work and dress as they do, compare cultural differences, bring out geographic relationships. If this is done, a really meaningful experience for the child will result.

In conclusion, it should be emphasized that the use of pictures in teaching is not a mere fad—it has a sound psychological basis. The use of motion pictures and other projected pictures is not a "lazy man’s" method of teaching. The proper use of visual aids requires a large expenditure of time in the selection of materials and in planning their effective integration with other teaching procedures. Pictures properly used, however, will not only provide a vivid visual impression, but will put meaning into language symbols which will make subsequent reading and discussion activities of much greater value. Pictures properly used are teaching tools of great importance; improperly used they represent a waste of time and money. Teachers

![A teaching picture which reconstructs the past.](image)

From the picture unit "Life in Colonial America." Actual size 8½" x 11". (Courtesy Informative Classroom Pictures Publishers)

need to give more attention to the effective use of these teaching aids.
Student Operation of Visual Education Equipment

This article concerns the operation of visual and audio equipment in a high school by regular student operators. The operation of the equipment is divided into three divisions which are: showing of silent and sound movie films; controlling the public address equipment; and the showing of slides, strip film, book and magazine pictures. The equipment that we have consists of a movie machine for silent and sound pictures, a high impedance microphone, a baloptican, and a low power public address amplifier.

The movie machine is used to show silent and sound moving pictures of educational value that are selected by the teachers for use in conjunction with the regular classroom subjects. This same movie machine plus the microphone is used by public speaking and dramatics classes to enable students to secure practice in speaking before a microphone; it is also used in the auditorium for assemblies when a public address system is needed. The low power address amplifier is used by the public speaking and dramatic classes when the amplifier in the movie machine is not available. The baloptican is used to show standard glass slides, 35 mm strip film, and pictures or graphs out of books or magazines that the teacher has available. The schedules of visual and audio aids are booked through the office of Mr. George Martin, Vice-Principal. A large regular school activities type calendar is used for booking records of films, slides, public address equipment and the like throughout the year. The name of the film, slides, or other apparatus, and the teacher’s name requesting it are listed on the calendar on the date to be used.

The following graph gives the picture of how efficient control over the operation of equipment is maintained:

Requests for the use of visual or audio equipment

<table>
<thead>
<tr>
<th>Mr. George Martin</th>
<th>Mr. H. W. Malstrom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection and booking of films or slides</td>
<td>Operation of the equipment</td>
</tr>
<tr>
<td>Activities calendar</td>
<td>Chief operator</td>
</tr>
<tr>
<td><strong>Regular operators</strong></td>
<td><strong>Trainees</strong></td>
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</tbody>
</table>

Presenting a systematic and proven plan for efficient training and organization of student operators for the school’s visual program.

**H. W. Malstrom**
Bremerton, Washington, High School

The chief operator is selected from the regular operators of the previous school year. He operates only in case of emergencies. His duties are the following:

1. See that equipment and supplies are properly stored away when not in use.
2. Check the operator’s record sheets and turn them in to the office at the end of the day.
3. Contact the teachers for previews and information concerning what periods the equipment will be used.
4. Do minor maintenance work such as oiling the machine and splicing film.
5. See that the film is properly rewound and packed for shipment after being used.
6. Keep check on operator’s schedule to see that an operator is available for all booked requests of equipment.

The regular operator runs any of the equipment. He has previously been a trainee and has satisfactorily passed the written examination. His duties are:

1. Set up the equipment for use.
2. Check on condition of equipment, films, slides and the like before using and during the show.
3. Take care of lighting and ventilation for the show.
4. Rewind film and prepare equipment for the next operator.
5. Fill out and signs the operator’s check sheet. Has the instructor in charge sign it.
6. Help trainees to become accustomed to operation of the equipment.

The trainee starts by helping the regular operators set the equipment up and works along with the operator during the show. He studies the standard instruction procedure for using the movie machine. After having worked with the regular operators until he is familiar with the equipment, he is allowed to set up and operate the baloptican for showing slides, etc. In general the trainee must help the operators for three months and pass the written examination before he is qualified to become a regular operator.

All operators have one school per day in their school schedule for operation of the visual and audio equipment. Subject schedules of these students are so arranged that one operator and a trainee are available for each school period of the day. The chief operator and the regular operators have permanent passes that allow them to be in the halls during class sessions when they are setting equipment up or doing other necessary work pertaining to their duties as operators.

**The Movie Club**
A movie club is organized for operators only. All
operators, including the trainees, are required to be present at the meetings. The club meets each week on Tuesday morning before school for one-half hour to discuss problems, films, and related information to their jobs as operators. Operators may earn emblems to put on their sweaters. Points toward an emblem are granted for each half-hour of operating experience while in charge of the equipment. The chief operator has a special emblem earned after having been a successful chief operator for one semester.

Explanation of Forms Used

The operator’s record sheet serves two purposes which are:

1. Gives the technical description of the film or slides, where secured, costs and other data.
2. Tells how the equipment, slides or films worked and what the operator did. (This provides a definite check on damage done to the equipment, films or slides while in use.)

The teacher’s evaluation record sheet gives a brief record for the office of the film’s or slide’s educational value. This record sheet tends to prevent the showing of pictures that have very little educational value.

The public address record sheet describes the use of the public address amplifier for public speaking, dramatics, assemblies, or other groups.

Instruction and question sheets on operation of the movie machine, provide a standardized procedure for training all operators of the movie machine. The instruction sheets state specifically the necessary steps to be mastered in order to become an efficient movie operator of this particular machine. The question sheets emphasize important points in the operation of movie machines.

Maintenance of Equipment

Uninterrupted operation of visual and audio equipment is desired at all times. When interruptions caused by machine or equipment failure do occur it is desirable to fix the trouble as quickly as possible in order that the film or slides may be shown before it is time to return them. Most troubles with equipment are not serious and can be quickly remedied if the following conditions are met:

1. As many operators as possible should have a knowledge of either radio or electricity. Photography is also helpful.
2. An instructor who has some knowledge of radio or electricity should be in charge of all maintenance work.
3. An extra set of the following supplies should be kept on hand:
   (a) Complete set of tubes.
   (b) Extra fuses of the proper sizes.
   (c) Projector lamps.
   (d) Belts or cables used on the machine.
   (e) Line cords and extensions.
   (f) Speaker cable if one is used.
4. A schematic hookup of the amplifier with values of all parts should be available if there is no direct factory service.

Conclusion

Organizing the visual and audio education program with an efficient system of student operators provides the school with the lowest possible cost of operation and leaves the teacher free to carry out to the fullest advantage the subject content being considered.

The record sheets provide practical reference material when it is desired to use the film again. The operator’s record sheet prevents the school from being charged with damage to films or slides that were already damaged when the school received them. The record sheets also provide the administrators with facts that may be used to evaluate the results of the visual and audio education program.

References.


The following record sheets and instruction sheets are copies of those in actual use. Sheets for use are mimeographed.

Record Sheet

Name of film or slides..................................................
Date received........ Date used........ Date returned........
Where secured..........................................................
What the cost was: Total..... Rental..... Film service.....
Transportation....... Purchase price...... Damage......
Film and slide specifications 8mm ( ) 16mm ( )
35mm ( ) Sound ( ) Silent ( )
Slides ( ) Strip film ( ) Color ( ) Black & White ( )
Lecture booklet was supplied ( ) Subject content not satisfactory ( )
Condition of the film when previewed was
   Good ( ) Poor ( )
Comments ..........................................................
Operator's Report

This must be filled in after every show.

<table>
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<tr>
<th>The volume free it silent.</th>
<th>Connect 1</th>
<th>Fair For Adjust Total No.</th>
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</thead>
<tbody>
<tr>
<td>The machine worked satisfactorily.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble was experienced while operating. The cause was: Machine ( ), Film ( ), Slides ( ).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was no interference from others. I rewound the film on the reel and delivered them to the next operator in good condition.</td>
<td></td>
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</tbody>
</table>

The operation of the machine and the conduct of the operator was: 1 2 3 4 5 6

<table>
<thead>
<tr>
<th>Good</th>
<th>Poor</th>
<th>Teacher sign here</th>
<th>No. seeing the picture</th>
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<tbody>
<tr>
<td>1</td>
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Operator's Instruction Sheet

Subject: Sound movie picture machine. Discussion: The following instructions are for sound films. To project the silent film follow the same directions with the following exceptions:
1. Set the speed control at silent instead of sound.
2. Do not connect up the speaker or turn the amplifier on unless the microphone is to be used for comments on the picture.

Special Precautions: If anything goes wrong with either the machine or the film while projecting, turn the line switch and volume control to off positions and pull out the line plug from the power line. Do not attempt to make any repairs or adjustments after failure of the machine or film without permission. Report trouble at once and record it with explanations in your operation report.

Procedure:
1. Turn all switches to their off positions. (a) The line current switch, this controls the projector. (b) The volume control switch, this controls the speaker. (c) The projector lamp switch.
2. Place the screen or lower it to required position. (a) Keep it free from wrinkles and place at right angle.
(b) Prevent dirt from getting on the screen.
(c) Never punch a hole through it to fasten it.
3. Place the speaker in front of the screen and connect up. (a) Keep all obstructions away from front of the speaker box within 18 inches of the speaker back.
(b) Remove the small door covering the speaker front.
(c) Plug the speaker cable into the speaker and the amplifier! DO NOT FORCE PLUGS INTO SOCKETS!!
4. Connect power to amplifier and projector. (a) Plug the Y cord into projector and amplifier first.
(b) Plug bayonet plug into A.C. outlet using extensions if necessary.
5. Do the following before threading. (a) Start the projector with the line current switch and turn on the lamp with the lamp switch.
(b) Move the projector as necessary to get the picture frame on the screen properly.
(c) Adjust the height of the projected picture frame on this screen by means of the tilting knob.
(d) Turn the projection lens to the left or right as necessary to bring the edges of the illuminated area into sharp focus.
(e) Turn off both lamp and line switches.
6. Thread the film and observe the following precautions: (See page three for picture of threaded film)
(a) Check over threading to make sure that the loops are correct.
(b) See that all sprocket teeth are properly engaged in film perforations.
(c) Make sure that sprocket guards and film gate are closed.
(d) Set speed switch to sound for sound film and to silent for silent film.
(e) Run projector for two seconds
   1. Push clutch forward.
   2. Turn projector lamp on.
   3. Start projector with line switch.
(f) Check film with the projector turned off.
   1. Check the loops making sure that 8 perforations are in the loop spaces.
   2. Examine film in sprockets, around sound drum, etc. (If the film is not threaded right upon inspection, do the job over again until it is o.k. after running for two seconds)
7. Focus and frame the picture. (a) Turn the line and lamp switch on.
(b) Focus the projection lens on titles, turning the lens to the right or left as is found necessary to secure sharp focus.
(c) Adjust picture frame line on screen by pressing up or down on the frame until the frame line disappears on the screen.
8. Adjust volume level and sound quality.
(a) Turn volume control in a clockwise direction until sufficient volume is obtained.
(b) Set tone control on amplifier to low and adjust speaker tone control for best sound quality.
(c) Adjust amplifier tone control for best quality
   1. For speech adjust amplifier tone control towards the low end.
   2. For music adjust amplifier tone control towards the high end.
(d) Readjust the volume control.
9. Project the picture. (a) Frequently check the film for marks by holding fingers against the film as it winds up after going through the projector.
(b) If marks are felt on the film or if it tickers bad, stop the machine and check for the cause.
(c) Readjust volume control if volume level changes.
10. Stop machine on final scene or title.
(a) Turn volume control down.
(b) Turn off projection lamp. (the white light should never show on the screen)
(c) Turn room lights on.
(d) Let film finish winding up on the take-up reel.
(e) Turn projector off by means of the line switch.
(f) Turn volume control off position if another reel is not to be immediately threaded and shown.
(g) Rewind all reels just shown (see directions on rewinding).
(h) Pull out line cord at the power outlet.
(i) Carefully roll up line cords, speaker cables and pack or store them in place provided for them.
(j) Lower tilt, knob and carefully close doors to the projector and speaker cases.

(Concluded on page 261)
National Film Evaluation Cards Adapted to the Needs of an Extension Library

Much is said about evaluation of visual materials by teachers, but before the initiation of the National Film Evaluation Project little general use was made of the information that was available. For several years the Bureau of Audio-Visual Aids at Indiana University attempted to obtain teachers' evaluations on materials that were borrowed from the Bureau. Self-addressed, stamped postal cards, sent out with films and other visual materials, included questions on how each subject was used and its value for a particular teaching situation. Even though a majority of borrowers returned cards following the use of materials, it was difficult to interpret the brief comments or to devise effective procedures for summarizing the information available from the returned cards. As a result, we had no reliable objective basis for judging the educational worth of the many subjects distributed by the Bureau.

In order to meet the growing need on the part of the Bureau for a more discriminating source of information about subjects to be added to the library, and in order to offer more assistance to administrators and teachers who frequently request information on the educational effectiveness of the different audio-visual teaching aids available for a unit of instruction, we printed two new evaluation cards. Permission was obtained from Mr. Nelson L. Greene, editor of Educational Screen, to reprint the Standard Score Card of the National Film Evaluation Project, with the modifications necessary to meet our specific needs.

For the convenience of teachers and for our own records, two evaluation forms were devised. One form printed on a yellow card (figure 1) will be used in evaluating films, and the other printed on a white card (figure 2) will be used in evaluating sound films, slides, lantern slides, strip-films, radio recordings and phonograph records. Both cards ask for the same information concerning the producer, date of use, date of return, number of times used, and total attendance. On the film report card the eleven evaluation questions of the National Film Evaluation card were reprinted with only a minor modification in question two. A fifth level of use was added to this question, which deals with grade level, since some of our materials are used by adult community groups. A twelfth question was added which asks whether or not a teacher's guide is available and, if so, the rating of the guide as excellent, good, fair or poor. On the card to evaluate sound films, slides, lantern slides, strip-films, radio recordings and phonograph records the questions on "silent titles" and "sound accompaniment" were omitted, and "pictorial and technical quality" was changed to read "technical quality" only.

Our evaluation cards are made similar in form to a double postal card, perforated at the bottom. By inserting a carbon between the two copies, the teacher's evaluations are recorded on both. The teacher retains the duplicate card for his files and sends the original card to us. Enough cards will be furnished to the persons in charge of local audio-visual programs so that each audio-visual aid used in the school system may be evaluated by the teacher who uses it, whether the aid

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**Standard Score Card of the National Film Evaluation Project**

**Return to:** Indiana University Extension Division, Bureau of Audio-Visual Aids Bloomington, Indiana

<table>
<thead>
<tr>
<th>Exact Title of Film</th>
<th>Radio Sound Silent</th>
<th>This Film Produced By</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Used by me in Classroom for Subject</td>
<td>Good, Poor</td>
<td>This film produced by:</td>
</tr>
<tr>
<td>(2) Used by me in Audience for Subject</td>
<td></td>
<td>Most important:</td>
</tr>
<tr>
<td>(3) Good</td>
<td>Very, Excellent</td>
<td>Good, Poor</td>
</tr>
<tr>
<td>(4) Fair</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(5) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(6) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(7) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(8) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(9) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(10) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>(11) Foul</td>
<td>Good, Fair</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Teacher | School | Town and State
---|---|---
If you add comments on back of card, check here [ ]

Minimum for complete form—11 blanks filled, 111 cards unmarked

---

**Figure 1. Indiana's Own Version of the Score Card**

**Return to:** Indiana University Extension Division, Bureau of Audio-Visual Aids Bloomington, Indiana

<table>
<thead>
<tr>
<th>Exact Title of Aid</th>
<th>Type of Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Used by me in Classroom for Subject</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(2) Used by me in Audience for Subject</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(3) Good</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(4) Fair</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(5) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(6) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(7) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(8) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(9) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(10) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
<tr>
<td>(11) Foul</td>
<td>Good, Fair, Excellent</td>
</tr>
</tbody>
</table>

Teacher | School | Town and State
---|---|---
If you add comments on back of card, check here [ ]

Minimum for complete form—11 blanks filled, 111 cards unmarked

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**Figure 2. Score Card for Visual Aids Other Than Films**

An exceptional example of cooperation in developing an evaluation service for the audio-visual field.

**Pauline J. Ellis and L. C. Larson**

Bureau of Audio-Visual Aids
Extension Division, Indiana University
was secured from our Bureau or whether it was obtained from another source.

Most of the teachers in our state who are using audio-visual materials realize the necessity for previewing and analyzing each subject for its possible contribution to a unit of work. A growing file of evaluations on audio-visual materials used during previous years will refresh the teacher's memory and will save him a great deal of time by making duplicate previews unnecessary. To supplement, modify, or confirm his own evaluations, the teacher may purchase at a very small cost the National Film Evaluation Supplements of 50 cards each, as they become available from the Educational Screen. These cards, of the same standard library size (3" x 5"), contain a detailed description of the content of the 50 films, and a summary and average of the responses of fifteen or more teachers, from all parts of the country to the questions included on the Film Evaluation score card. The development by teachers and administrators of such a card index record of materials will do much to facilitate a better selection of audio-visual materials for school use.

Data from the original film report cards returned to our office, will be of use to us in various ways, and at regular intervals the original cards will be forwarded to Educational Screen for inclusion in the National Film Evaluation Project after we have tabulated from them the information we need. The evaluation cards for other audio-visual aids will remain in the files of the Bureau and reports will be compiled from them periodically.

A master card will be prepared for all aids on which we receive evaluations, and responses to all questions will be entered. A summarization of the data given in the upper right hand corner of the card and that given in answer to the first three questions (see figures 1 and 2) will present a fair picture of the conditions under which audio-visual aids are being utilized in Indiana. It is imperative that we know the name of the producer of each subject on which we receive a report, because there is much duplication of titles among the films in use today, and it is difficult to locate the source for an outstanding subject unless our records contain the name of the producer as well as the title of the film. For our own library use, we also need to know the number of times that a film is used while on loan to a school. Previous reports, indicating only the number of days of use, did not show how many times a film was actually projected. A record of actual times projected will give a more accurate basis on which to determine the life of a film. A study of the extent to which audio-visual materials are being used in the classroom as compared with auditorium presentation; the relative proportion of use on elementary, junior high, senior high, college and adult levels; the teaching purposes for which the materials are employed—these will give us some indication of the type of materials which we should add to our library.

By assigning a numerical value to each descriptive adjective under questions 4-12 of the film card and 4-10 of the card for other audio-visual aids, it will be possible to compute an average score for each question and an average over-all rating for each subject on which we have information. Comparison of the average ratings will indicate to us those aids which teachers have found most effective. In some cases, we may find teachers using an aid from another source which is better than the one we have in our library. Data from the card will therefore guide us in the acquisition of prints which would be much in demand, since it is difficult to know without the benefit of teachers' evaluations which of these titles governing similar content would be most valuable.

The evaluation data will likewise be useful to producers, and we plan to make the information available to them. Teachers point out that at the present time there is a paucity of good audio-visual materials in many subject-matter areas where these aids could make a definite contribution. In other areas there are subjects available which met educational criteria three or four years ago, but which fail to satisfy the more exacting present-day standards. As a result, teachers have no other alternative than to use available subjects, even though they consistently rate them as unsatisfactory. Undoubtedly, as standards for selecting audio-visual aids are raised during the next few years, producers will find it advantageous to use teachers' suggestions in planning replacements of subjects now available or in producing new materials.

Our records and the Film Evaluation Cards of the Educational Screen will be useful to administrators and teachers who are confronted with the problem of developing their own audio-visual library on a limited budget. Information from our master card files will be made available on request, in order that school administrators may select their materials on the basis of evaluations by teachers who have used them in actual teaching situations. Summarization of information will also help beginning or inexperienced teachers to make a wiser selection of materials.

Curriculum committees in revising courses of study often include at the end of each unit a selected list of audio-visual aids which can be rented or purchased from reliable sources. When curriculum committees, as well as instructors and students in the teacher-training institutions of our state, wish information on the audio-visual aids available for units covering various topics on the different grade levels, they will be encouraged to take advantage of the available evaluations.

The ultimate success of the Indiana state-wide program for cumulative evaluation of audio-visual aids will depend on the interest and cooperation of teachers. We know from personal contact with many of our borrowers that they are interested in the problem and that they are willing to cooperate in every way possible to make a cumulative evaluation project successful for the State of Indiana and at the same time contribute importantly to the National Film Evaluation Project for the country at large. They feel as we do that information on the effectiveness of audio-visual aids, compiled from the evaluation of teachers who have used the materials in the classroom, will greatly simplify the problem of selecting these aids, either by, lending libraries who wish to distribute the best available materials, or by teachers who wish to use them for particular teaching purposes.
MOTION PICTURES—NOT FOR THEATRES

By ARTHUR EDWIN KROWS

Merger interests did not necessarily mean that the previously independent concerns lost their individuality, and it often happened that separate divisions handled their own motion pictures, although as time passed a greater degree of coordination and elimination of duplicate endeavors were accomplished within the organization. That was true of several of the leading subsidiaries of United States Steel. Even today, on special request, American Steel & Wire Company can supply single reel films on the manufacture of electric power-cables, or fences. National Tube Company has maintained two silent films to date, one in six reels demonstrating principally the four leading processes of making pipe and tube, and another in three, devoted to the seamless method. Universal Atlas Cement Company now has three single reels, one presenting the stages of manufacture of this interesting product, another showing its application in general construction work, while the third illustrates how the material is used in highway building. Similarly, American Bridge Company has film records of several outstanding examples of structural steel work which are still exhibited on occasion. It is interesting to recall that seventy-five separate reels of motion pictures produced by United States subsidiaries were shown in continuous sequence at the Panama-Pacific Exposition in 1915. In most cases, however, the earlier films, made independently, are now obsolete and unfit for general distribution, although they remain of considerable value for record purposes.

Film production of this great organization has been entrusted to various established motion picture concerns, a considerable portion of the work having been done by Loucks and Norling in connection with the six-reel silent "Story of Steel," which was made in 1920 and revised several times before it was finally retired in favor of a seven-reel sound film in 1940. The latter subject was also prepared in silent form for special use.

Coordinated film activities were first undertaken for United States Steel by the U. S. Steel Bureau of Safety, Sanitation and Welfare. This Bureau was organized in March, 1911, to keep the subsidiary companies advised concerning the latest and best methods in accident prevention and welfare work, under the sympathetic and intelligent direction of the late Charles L. Close. Mr. Close became interested in the possibilities of using films for the benefit of employees, and those he acquired were widely used and studied by other concerns similarly interested in employee conditions. Mr. Close screened the films to good advantage to broaden the ordinary worker's knowledge of his own industry and to impress upon him the value of careful, clean and faithful operation. Superficially they were general "process" pictures, showing conditions as a visitor would see them if he were privileged to go through the various plants and observe the successive steps of production; but the safety angle was always emphasized, and thus they played an important part in that accident prevention program which did so much to eliminate hazardous conditions and practices and generally to improve working conditions throughout the steel industry. The first U. S. Steel welfare film was "An American in the Making," produced in 1912; the second was "The Reason Why," made in 1917.

Efforts of John H. Patterson to fulfill his social responsibilities were to make him an almost legendary figure in stories of American industry.

Workers were generally proud to appear in the films, and they were frequently seen, usually as operatives but sometimes merely to emphasize the huge size of the machinery used in the plants. Embarrassing circumstances sometimes developed through over-anxiety of workers and foremen to be sure that they and their departments looked their best, but this condition was soon overcome, and unintentional posing and "mugging" were avoided as experience in taking pictures was gained. Intelligent cooperation of the camera crew is obviously essential for the presentation of an honest picture of conditions as they normally exist. This accounts for the reluctance of United States Steel subsidiary companies to permit indiscriminate picture-taking in their plants, or even the taking of any pictures without such supervision as will eliminate the possible misuse of "clips."

Good Will by Telephone

1. To John Patterson is due the initial development of employee welfare as a company responsibility in America, to Theodore N. Vail should be given a meed of praise for proving another company responsibility in public relations. No more admirable work has been done in that respect than by the Bell Telephone System which, beginning in 1881, was chiefly instrumental in organizing. In that case, however, the act of organization of reform, because the Bell enterprise had held a clean record from the start, and had won public sympathy as the abused party in bitter attempts by the previously established telegraph companies to suppress it. Moreover, the charge of monopoly, so frequently thrown at Big Business, never had any real point as applied to the Bell interests. The consolidation of industry as a public benefit never has been more clearly evident than in ending the nuisance and confusion of having to maintain in each office and house two or more competing telegraph companies.

In 1899 the expansion of the Bell Company into the American Telephone and Telegraph Company brought the industry into its stride which it has ever since so worthily maintained. But, in the organization's prosperity, it involuntarily joined a class which had become distrusted through demagogic appeals to popular hatreds and fears. Whatever favorable might be said for it, its ownership by thousands of stockholders, none of whom possessed as much as two per cent of the whole for instance, it still was just another Big Business, rich, powerful, far-reaching. Its early struggles were forgotten by an older generation too bewildered by the swift march of progress to impress the facts upon the new. Benevolent though it might be now (so the specious agitators said) it could, in its strength and in the hands of unscrupulous leaders to come, be converted into an irresistible juggernaut. The assumption was fallacious and even vicious, but there were many ears willing to listen. It is basic in human nature to distrust the strong neighbor, so, for the Bell System, as for all other great corporations (including Government itself), it became an added responsibility not only to serve the public faithfully and well, but constantly to reassure its fickle members.

Despite the sharp failure of foreign Government operation of communications industries abroad, the Bell System narrowly escaped federal confiscation in wartime on the ground that it was a vital public utility which should not be permitted to remain in private hands. The
The Educational Screen

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Under Charles Wayne Brookman's management of the Western Electric Company, the division which manufactured the earliest sound motion picture equipment, the company ran smoothly throughout fourteen years of world unrest.

It was during the early 1920's, when the demand for sound motion pictures became more and more popular, that Charles Wayne Brookman, then president of the Western Electric Company, decided to take action. He approached the management of the company with a proposal for the manufacture of sound motion picture equipment.

The proposal was accepted, and the first sound motion picture equipment was produced in 1924. This equipment was used in the production of a number of films, including the famous "The Smiler." The success of this equipment led to the creation of a new department within the company, dedicated to the production of sound motion picture equipment.

With the advent of sound, the demand for sound motion picture equipment increased dramatically. The Western Electric Company was able to meet this demand, and the division continued to grow, eventually becoming one of the leading suppliers of sound motion picture equipment in the world.

During the years that followed, the Western Electric Company continued to innovate and improve its sound motion picture equipment. The company was always at the forefront of the industry, and its products were highly regarded.

In conclusion, the Western Electric Company played a vital role in the development and advancement of sound motion picture equipment. It was a company that was always looking for new ways to improve and expand its products, and it was a company that was always able to meet the demands of the industry.

End of the page.
Bird Study - with Hand-made Lantern Slides

By ANN GALE

Lindblom High School, Chicago

For bird study in intermediate grades, slides showing variations of birds' bills and claws are very useful. These slides help in developing generalization as to the variation of bills and claws according to the birds' food supply and habitat.

1) The insect eating warbler, the fisher heron, the shell fish eating flamingo, the insect and honey eating humming bird and the water insect duck are shown here.

2) This slide presents the drilling woodpecker, the flesh eating hawk, the seed eating grosbeak, and the worm and insect eating robin.

3) The woodpecker's tail and feet are very useful in keeping him anchored on the tree while he drills the wood.

4) The duck's webbed foot acts as a paddle in the water.

5) The bluebird's claw is useful for lighting on and grasping small twigs and branches.

6) The eagle's talons are used to carry his food as well as to tear it.

The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.
Community Study Is Realistic Education

EDWARD G. OLSEN
Department of Education, Colgate University

"The test of the pedagogue was: Does he know the city, old and new, and can he make the child see and understand the city: not some fragment of the city nor many fragments, but the human community, broken yet still real, the background of his life and character and destiny?"

—JOSEPH K. HART,
A Social Interpretation of Education, p. 45.

Does he know the community? Here rings again the clarion call for realism in school education, for first-hand comprehension of the varied social factors and forces that shape the human living of today. Here is that same bold challenge which permeates the writings of Rousseau, Pestalozzi, Parker, Dewey, Kilpatrick, Wilson and a host of lesser pedagogical prophets from the seventeenth century to the present day. And here also is a basic philosophy of education that has been ignored or attacked in every generation by "ivory-towered" scholars who proudly exalt verbalistic speculation above tested sense experiencing, and who perhaps deny the validity of the latter because they unconsciously fear it may disclose the unreliability of the former.

Although powerful voices are still raised in protest, serious community study is today widely considered an essential prerequisite to effective social education in a democratic society. Even more clearly it becomes apparent that formal education must be projected out of the sheltered classroom and into the living community which is the child's primary scene of present and future life activity. For education is inherently a social process, and if it is to be realistic, vital and defensible, its curricular program must surely be framed in terms of continuous, first-hand acquaintance with concrete social conditions. Thus the test of the teacher today is emphatically this: Does he know the community in its multiple historic and contemporary aspects, and can he lead the child into an ever-growing understanding, appreciation, and participation in that community ... the inevitable background of his life, character, destiny?

Since the turn of the century the rising demand for social realism in American education has found increasing fulfillment in many schools of varied philosophy and practice. Analysis of their basic curricular programs reveals six major steps toward educational realism, each of which is one stage nearer to first-hand experiencing of social reality than is its immediate predecessor. Ranged in ascending order of reality, those six steps are these:

1. DOCUMENTARY MATERIALS — Books, periodicals, pamphlets, newspapers, etc.
2. AUDIO-VISUAL AIDS — Drawings, photographs, slide and film strip projections, motion pictures, recordings, etc.
3. INCURSIONS — Assembly speakers, classroom demonstrations, etc. from outside the school.
4. EXCURSIONS — Short or lengthy field trips by individuals, committees, or entire classes.
5. LOCAL SURVEYS — Personal collection and classification of community data by individuals, committees, or classes.
6. SOCIAL PARTICIPATION — Continuous, active, responsible participation by students in constructive adult activities within the local community.

Significant and interesting is the fact that the progressive emergence of these six steps toward social reality roughly parallels the development of three major stages in American school emphasis and organization. Let us glance at each of these in turn:

(1) The traditional school, insisting upon book-knowledge - set-out-to-be-learned, typically utilizes documentary materials only (Step 1), and even then confines itself largely to books, seemingly disdaining periodicals, pamphlets, and newspapers. Being primarily concerned with Book Mastery rather than with Child Interests or Community Welfare, this first stage of school development comes to its logical conclusion in the presentation of a curriculum composed exclusively of the Hundred Best Books.

(2) The activity school, emphasizing child-interests-to-be-expressed, makes extensive use of varied documentary materials (Step 1), and also of audio-visual aids, incursions, and excursions (Steps 2-4). Yet because its fundamental concern is with Child Interests rather than with Book Mastery or Community Welfare, its basic center of operation is still the classroom which it seeks to transform into a purified miniature of the larger social world outside the school.

(3) The community school, stressing human-needs-
Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

interests are represented. The principal disadvantage of the method is lack of continuity which results in a rather drastic turnover in officers each year. This disadvantage is felt most sharply in the handling of routine business affairs of the Department by the Secretary-Treasurer.

The officers and members of the Executive Committee serve the members of the Department by maintaining close relationship with The Educational Screen (a subscription goes to each member), by planning and conducting two annual national conferences, by promoting regional conferences conducted by its branches, by maintaining professional relationships with other educational organizations, and by maintaining an organization through which its members can speak and act collectively in their common interest.

That the Department of Visual Instruction has been able to maintain its existence for eighteen years and during this time absorb other competing organizations; that it has been able to expand its membership slowly but surely; and that it has continually moved forward toward achievement of its purposes are facts that bespeak the loyalty of its members and the zeal and efforts of its workers. The Department, parcelling development of the visual field itself, has survived the hazards of infancy and the growing pains of adolescence and now as it approaches maturity seeks to assume its useful place as a responsible citizen in the educational world with all the rights and duties that such citizenship implies.

Expanding Needs

The use of audio-visual aids in the classroom is rapidly increasing. New mechanical means and a wider use of new materials, in order to understand the media based upon evidence of research, improved methods of distribution and administration of visual materials based upon experience, and final acceptance of newer instructional methods on the part of reluctant school administrators are all factors constantly raising the level of importance of audio-visual aids in the instructional processes.

With this increasing interest and growing emphasis on audio-visual aids came multiplied problems for the school administrator and teacher alike. Commercial producers are releasing an increasing variety of materials and equipment. In the face of conflicting claims and interests, school workers are more than ever in need of a reliable source of disinterested advice and counsel. There is special need for improved systematic procedures for sharing the great wealth of experience that is being hoarded away or extravagantly wasted in the classrooms of the nation.

The Department of Visual Instruction is the organization which can and should provide the means for this sharing of experience. It proposes to do so.

Unique Function Of The Department

According to the Constitution "The object of this Department shall be to promote the improvement of classroom instruction through the effective use of visual and other sensory aids; to serve as a clearing house of information regarding the sources, values, and guiding principles in the use of visual materials, as determined by research; and to cooperate with other domestic and foreign agencies with similar interests and purposes." The very existence of this organization, "the clearing house," coupled with the above stated need for providing the means for a greater sharing of experience among those using visual materials, indicates the direction of the expanding role that the Department is to play in the educational world.

The future program of the Department of Visual Instruction should place greater emphasis upon its clearing house function. The Department should provide the one central point where

1. individual teachers can turn for specific information...
about the availability and suitability of audio-visual materials and the techniques of their use. For instance, they should be able to obtain detailed bibliographies of visual materials on special subjects;
2. school administrators can obtain assistance in developing administrative procedures to provide their schools with visual materials;
3. other educational organizations can seek assistance in planning their conference programs and printed publications;
4. magazine editors can find help in securing authors to write about audio-visual aids and their use;
5. commercial producers and manufacturers can obtain guidance.

Department Ready For Increased Responsibilities

The internal affairs of the Department are in order. Membership is steadily increasing. An impressive number of members have indicated by word or action their enthusiastic interest and willingness to work in the interests of the Department. The sincere determined attitude of the many members who are assuming leadership responsibilities in the Department is one of the most promising assurances that the Department is ready to assume increased responsibilities. Their interests and efforts need continuous direction.

Evidence of willing and intense cooperation has been apparent in every phase of the activities of the Department and other officers and members of the Executive Committee. Eleven of the fourteen officials of the Department were in attendance at the Executive Committee meeting in Atlantic City on February 26, One, U. S. Burt, came all the way from Corvallis, Oregon, for the specific purpose of attending departmental meetings. Branch organizations have been unusually active during the year. The Louisiana Branch, organized only last year, has maintained its membership of fifty, conducted a well attended conference in New Orleans on November 18 and 19, and has started a periodic mimo- graphed publication for its members. The older New England Branch has been unusually active, has pushed its membership above one hundred, and has prepared its annual conference held in Boston on March 29, planned and carried through four state conferences: Cambridge, October 5; New Britain, Connecticut, December 14; Providence, Rhode Island, February 1; and at the University of New Hampshire on May 3.

The Zonal Plan idea is perhaps one of the most important organizational steps that the Department has undertaken in its eighteen years existence. The idea was first proposed in an Educational Screen editorial in December, 1939, and further elaborated in the June issue, 1940. Growing interest led to the appointment of a Zonal Committee of the D V I—namely, U. S. Burt, Lee W. Cochran, Carleton W. Erickson, Nelson L. Greene (Chairman), C. A. Lindstrom, W. T. Powell, Alvin B. Roberts—to work out details for presentation at the Mil- waukee meeting in June 1940. At the Business Meeting the Committee's tentative proposals for a Zonal organization, together with an outline draft of changes in the D V I Constitution and By-Laws needed to cover such zonal organization, were approved and the Committee was continued. The Committee met in important session at Atlantic City in February, 1941, and finally adopted the "Working Outline for a Zonal Organization of the D V I" to be presented at the Boston meeting in June, along with a tentative list of 100 nominees for the 10 offices in each of the 10 Zones. (A copy of the Working Outline for a Zonal Organization is appended to this report.) Voting on the amendments to put this plan into effect will be the most important item of business at the Boston meeting.

Special mention should be made of four committees now making specific attacks on problems related to the more effective use of visual materials. In collaboration with the Society for Curriculum Study the Department is planning a yearbook publication to be published in the spring of 1942. F. Dean McCluskey, one of the Department's veteran technical supporters, is Co-Chairman with Edgar Dale, who represents the Society, in the planning of this publication. William Wattenberg of Chicago Teachers College is Chairman of the Committee on Field Experiences, which is conducting special studies in the conduct of excursions and school journeys. They plan to report through the pages of Educational Screen and through special pamphlets. Following the winter meeting a Committee on Teacher Training was appointed with Floyd E. Brooker, energetic staff member from the United States Office of Education, as chairman. James D. Finn of Colorado State College of Education is chairman of the Educational Committee which has assumed responsibility for providing material for the Department pages of the Screen and which plans to expand its activities so that through the Committee an increased number of articles in many magazines may be stimulated.

Department Recognizes and Acts Upon Needs

The Department is energetically meeting its responsibilities. But the Department recognizes certain basic needs which remain to be fulfilled. In this report to the members, presented at the winter meeting, the President briefly summarized three important needs of the Department:

"The Department needs most of all a planned program of action. It needs to recognize the problems impeding progress in the visual field and to devise a realistic and definite program for their solution that can call all of its members into cooperative action." This report with its appended data represents a definite response to that defined need. It presents a basis for an expanding program of action.

"The Department needs more members. It needs more members because of the kind of program that needs to be planned will demand participation by larger numbers. The Depart- ment realizes the greater financial strength that will result from increased membership. A particularly significant develop- ment in relation to potential future membership and the stability of the Department is the proposed Zonal Plan. It holds out the promise of greatly increased membership and raises new organizational leadership problems." An increase in membership of more than twenty per cent since the February meeting indicates that the Department is already well on the way toward filling this need.

"The Department needs the stability that can be given it by an executive secretary, employed at least part time by the Department, and a permanent national office. An executive secretary would carry on the routine business affairs of the Department and eliminate the inefficiency of a complete shift in administration each year. The Zonal Plan will make this need greater and may make its fulfillment possible."

The helpful conference between Mr. H. A. Allan of the National Education Association and the Executive Committee in Atlantic City did much to clarify potential relationships with that group. Further elaboration of these relationships, with an Executive Secretary to carry on many of the Department's functions through the N. E. A. headquarters in Washington. A meeting of the Association of School Film Libraries held on February 26 in Atlantic City gave a clue to the method by which the Department might achieve its objective of employing at least part time an executive secretary with head- quarters in Washington.

Since the February meeting, the President has discussed the status of the Department further with Mr. Willard E. Givens, Secretary of the N. E. A. and with Mr. Allan. He also attended a conference called by Dr. George F. Zook, President of the American Council on Education. This con- ference also attended to obtain the endorsement of an Executive Secretary to carry on many of the Department's functions through the N. E. A. headquarters in Washington, and to consider the specific function of these three related enterprises and to consider the possibilities of bringing about a partial fusion of interests which would probably result in a definition of functions and a unified program while maintaining the separate identities of the groups con- cerned. The present interrelationship of these groups is sharply indicated when it is considered that the representatives of the three groups concerned, all members of the Department, are also on the Board of Directors of the A. S. F. L.

Here Are Specific Proposals

It is proposed that the Department of Visual Instruction join with the Association of School Film Libraries and the American Council on Education in setting up a Washington office for the transaction of the business of these three related groups.

It is proposed that a person mutually agreeable be selected to serve as Director of the American Council on Education's
motion picture activities, Executive Director of the Association of School Film Libraries, and Executive Secretary of the Department of Visual Instruction.

It is proposed that Charles E. Hoban, Jr., be appointed Executive Secretary to the Department of Visual Instruction for the year beginning July 1, 1941.

It is proposed that the following outlines of the Responsibilities and Services to be performed by the Executive Secretary be his guide for the conduct of his office:

I. The Executive Secretary would perform the duties of the Secretary-Treasurer as outlined in Article III, Section 3, of the By-Laws of the Department:

"The Secretary-Treasurer shall be charged with the following duties and responsibilities:

(Ten duties of the Secretary-Treasurer are printed in full in the Constitution and By-laws, and are therefore merely summarized here) (1) Advise members of meetings and mail mimeographed program to each two weeks in advance. (2) Keep record of meetings. (3) Keep record of memberships, notify of expiration, collect dues, issue member cards. (4) Keep record of receipts and expenditures. (5) Prepare printed forms and stationery. (6) Conduct membership campaign and supply copy of Constitution to each new member. (7) Conduct annual election. (8) Make all disbursements. (9) Prepare annual report and proceedings for publication. (10) Prepare financial report for Auditing Committee.

(Note: There are a few revisions in this statement of duties proposed as a part of the group of amendments which will be voted upon at the 1941 Summer Meeting to put the Zonal Plan into operation.)"

II. The Executive Secretary would aid in the planning of the program for the two national conferences and for regional meetings conducted by the Zones.

IV. The Executive Secretary would maintain service contacts with other Departments and organizations affiliated with the N. E. A., to aid them whenever their problems relate to the visual field. This would include advising in the planning of conference programs and in preparation of yearbooks and other publications.

V. The Executive Secretary would counsel with the appointed committees of the Department, such as the Committee on Teacher Training, Yearbook Committee, Committee on Field Experiences, etc., and aid them in executing their programs.

VI. The Executive Secretary would aid the Editorial Committee in (a) the publication of magazine articles for the general promotion of the visual field, and in (b) the publication of monographs and printed manuals that will help inquiring teachers in their understanding of visual education and help them in the solution of their problems.

VII. The Executive Secretary would confer with the President and Executive Committee on ways in which the Department can be of most service to its members. He would take an active part in developing and executing the total program of the Department.

It is proposed that this report, when approved by the Executive Committee of the Department, be respectfully submitted to Mr. Willard E. Givens, Secretary, and Mr. H. A. Allan, Business Manager of the National Education Association, with the request that they:

1. Give their approval to this understanding.
2. Lend the active support of the National Education Association to the successful fruition of the program and plan here outlined.
3. Provide clerical assistance in carrying on the routine business of the Department.
4. Set up financial and accounting procedures that will safeguard the funds of the Department.
5. Draw up a budget for 1941-1942 for the Department in consultation with the American Council on Education and the Association of School Film Libraries that will implement this plan.

PROGRAM

Summer Meeting of the Department of Visual Instruction of the N. E. A.

Boston, June 30, July 1 and 2, 1941

Monday, June 30

9:00 A. M. — Copley Square Hotel, Puritan Room —
Meeting of the Executive Committee.

FIRST SESSION

1:45 P. M. — Public Latin Hall — Joint Meeting with Department of Secondary Teachers.

Theme: What Lies Ahead for Secondary Education?

3:15 P. M. — Public Latin School, Room 226

What are the Most Promising Developments in the Visual Field for Secondary Teachers?

Presiding: Paul C. Reed.


Using a Camera to Bring the World into the Classroom — Donald A. Eldridge, Director Audio-Visual Education, New Haven.

SECOND SESSION — Dinner Conference

6:00 P. M. — Copley Square Hotel, Puritan Room —
For those specifically interested in the administrative problems of visual instruction.

Tuesday, July 1

THIRD SESSION — Luncheon Conference

12:30 P. M. — Copley Square Hotel, Venetian Room

Presiding: Abraham Krasker, Director Division of Teaching Aids, Boston University, School of Education.

Enriching the Social Studies — John R. Fitzgerald, High School, Wethersfield, Conn.

Sound Slide Films for Classroom Use — Jerome Rulon, Harvard University.

Discussion

Annual Business Meeting.

Wednesday, July 2

9:00 A. M. — Copley Square Hotel, Puritan Room —
Meeting of the Executive Committee.

FOURTH SESSION

2:15 P. M. — Copley Square Hotel, Venetian Room

Theme: Visual Instruction in New England

(fifteen minute reports)

Presiding: Paul C. Reed.

The Assistance that Teachers Need — Donald B. Grover, High School, Hanover, N. H.

Organizing the Visual Program in the School — Howard A. Smith, High School, Milton, Mass.

Opportunities For Teacher Training — James R. Brewster, Harvard Film Service.

Visual Instruction In A Medium Size School System — Martha P. Farwell, Brockton, Massachusetts.


Evaluation Of Visual Instruction In New England —

The Audience.
Notes from the Field

The Rocky Mountain Radio Council, a cooperative organization of all institutions of higher learning and several civic organizations interested in educational broadcasting in the Rocky Mountain region, has announced a new development in the field of audio-visual education. Through the Council Committee on the Use of Radio Programs and Transcriptions by Schools, a plan has been set up to distribute approximately 300 electrical transmissions of radio programs to schools in the Rocky Mountain region.

The Committee obtained the cooperation of Miss Leila Trolinger and the University of Colorado Film Library to act as a distributing agency. Distribution will be handled on a cost basis. The library will consist of all the American School of the Air transmissions for this year, made available by Radio Station KLZ of Denver, one group of NBC recordings, obtained from Station KOA, Denver, and a large group of programs produced by institutions who are members of the Council.

The Rocky Mountain-Radio Council itself was a pioneering enterprise, and this cooperative transcription library marks still another step forward in better utilization of audio visual materials.

Mr. Ellsworth C. Dent, Director, Educational Department of the RCA Manufacturing Company at Camden, New Jersey, was the featured speaker at the meeting of the Department of Audio-Visual Instruction of the Georgia Education Association in Augusta on Friday afternoon, April 11. The complete program for the audio-visual department meeting appears in the April, 1941, issue of the Georgia Education Journal, or copies may be obtained upon request from the University Extension Division.
A New Source of Visual Material for Teaching the History of Art

OF THE many types of course instruction which rely to a considerable degree upon illustrative material, classes in the history of art throughout the ages, as taught in schools, colleges and museums, are probably the most dependent upon the visual resources of slides and photographs. Appreciation of art can only be fostered by direct contact with original works of art or good reproductions of them. It is true that school children have often been told in considerable detail about the Madonnas of Raphael without being shown illustrations of the paintings themselves, and it is this illogical approach which must be supplanted by true visual education.

The perfected techniques of modern science offer new opportunities in the field of education: for example, color photography has only recently reached full maturity and the subject presents a direct challenge to educators. The majority of art courses deal with fundamental principles: beginners are confronted with unfamiliar objects and paintings which they must convert from visual images into a mental record. Only rarely will the students be able to see the original works of art. If they can be shown full color slides of the material they will receive an infinitely richer impression than can be obtained from the conventional black and white slides. They have no background of experience which will enable them to supply the proper colors with which to fill in the areas of black and white projected on the screen by the conventional slide. Where students have been shown color slides of works of art their attention has been greatly heightened and their interest in the course itself much enhanced.

About two years ago several people engaged in teaching the history of art began to discuss the possible methods by which color slides could be made available to educational institutions throughout the country. There seemed to be a positive advantage in the idea of establishing an organization to do such work whose program would be determined by the actual needs of the schools and museums themselves. Such an organization could produce exactly the type of material most useful in teaching and might be able to establish a standard of color recording against which the quality of color slides made by commercial organizations could be checked. The project would produce standard (3½ x 4 inch) size lantern slides and in addition make a special effort to encourage smaller institutions to build up collections of the relatively new and much less expensive 2 x 2 inch (35 mm.) size slides.

The outgrowth of such discussions was the organization of a non-profit association called "Color Slides Cooperative", near the end of the year 1939. The project is independent of direct connection with any single institution or scholarly group and is responsible solely to its member institutions. The Cooperative now has one hundred and thirty such members who comprise museums, institutes, secondary schools and the art departments of colleges and universities throughout the United States and in Hawaii, Canada and Cuba. New members are constantly joining the Cooperative and inquiries about the nature and program of the project are welcomed.

The color slides produced by the Cooperative are sold only to members. Because of definite restrictions placed upon the distribution of such slides by the owners of the works of art from which they are made, private individuals cannot be accepted as members of the Cooperative at the present time. Membership costs $7 which includes the privilege of purchasing slides and also a permanent subscription to the printed Bulletin of the project which describes current activity and supplies information pertinent to the problems of slide collections and their use. Members who purchase slides in quantity receive dividends in the form of free slides and it is anticipated that the value of such dividends will equal the cost of membership in a period of less than two years. The invaluable support which turned the tentative plans of the Cooperative into a working reality has come from the Carnegie Corporation of New York in the form of two grants totalling $7000. General policy is controlled by an Executive Committee: C. Rufus Morey of Princeton University is chairman of this committee whose members include teachers of art history in the New York area.

Color slides are made in both the 2 x 2 inch and the usual 3½ x 4 inch sizes: the former sells for .75 each and the latter for $1.40 each. The slides are mounted Kodachrome film transparencies and the most important thing to be noted is that they are made only by direct color photography of original works of art and are never taken from color prints or color reproduction.

Every effort is made to produce slides of subject matter essential to the teaching of general courses on the history of art. This program is carried out in two ways. One section of it has to do with the successive production of complete sets numbering approximately fifty slides: these sets are designed to be directly adaptable to the average type of general survey course. About four such sets will be made each year and a single set will record either an historical period of art, a museum collection, or a particularly noteworthy temporary exhibition. The first set, which was issued last October, was composed of fifty slides of paintings in The Frick Collection of New York City. The slides were made from master transparencies in the possession of the Collection and about 3200 of them were purchased by our members. The subject matter included world famous pictures by such masters as Duccio, Fra Filippo Lippi, Bellini, Titian, Veronese, Rembrandt, Velasquez, El Greco, Van Dyck and Reynolds and many others. The second set represents thirty-nine of the paintings shown at the "Masterpieces of Art" exhibition held at the 1940 New York World's Fair and includes pictures of the Renaissance and modern period including notable work by Tiepolo, Poussin, etc.

(Continued on page 205)
Announcing
A NATION WIDE SERVICE
with a
$100 MEMBERSHIP PLAN
which reduces the usual film
rental charges one half

Details of $100 Membership Plan
1. It offers a school, school system, or institution $200
worth of rental charges in accordance with the following
list prices as adopted by “NEEFA”, (The New England
Educational Film Association.)

<table>
<thead>
<tr>
<th>Regular Rental Charges</th>
<th>One day</th>
<th>Two days</th>
<th>One week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent films</td>
<td>$1.00</td>
<td>$1.50</td>
<td>$2.00</td>
</tr>
<tr>
<td>Sound films</td>
<td>1.50</td>
<td>2.50</td>
<td>3.00</td>
</tr>
<tr>
<td>Technicolor films</td>
<td>3.00</td>
<td>4.50</td>
<td>6.00</td>
</tr>
</tbody>
</table>
| Industrial and U. S. Govern-
ment films (per subject)  | .50     | .75      | 1.00     |
| Lantern slides (per set) | .50     | .75      | 1.00     |

Educational Recordings... .30 Per Record
2. Under this plan films may be booked for any length of
time in accordance with the listed charges.
3. All of the Departments in a school, or the schools in a
school system may be served under this plan.
4. A wide choice of material is made possible. The library of
motion pictures, lantern slides and educational record-
ings contains materials for teachers of: Art, Biology,
Current Events, Chemistry, Physics, General Science,
Guidance, Occupations, Physical Education, Sports, His-
tory, Geography, Civics, Nature Study, and Elementary
Science.
5. The library contains materials suitable for the primary
grades, elementary grades, junior high schools, senior
high schools, and colleges.
6. This plan has no time limitation. You may use the
service to the full extent of the $200 credit regardless
of how long it takes.
7. Printed catalogues of available films are furnished to
the members of the service.

Visit the BOSTON UNIVERSITY DIVISION OF TEACHING
AIDS while attending the N. E. A. Convention

Dr. Abraham Krasker
Boston University, School of Education
Division of Teaching Aids,
64 Exeter St., Boston, Mass

My dear Dr. Krasker:
Please send me your catalogue listing the available ma-
terials under the $100 membership plan.

NAME
SCHOOL
ADDRESS

AN INVITATION
FROM ELsie

Dear Friends:

Members of the Department of Visual
Instruction attending the N. E. A. Con-
vention at Boston are especially invited
to preview my debut in an animated
teachnicolor film entitled:

"FROM MOO TO YOU"

It is an educational film, yet highly
amusing. I hope to point up the story
behind a bottle of milk in, if I do say
so, a very engaging fashion.

I worked hard on this picture. In fact, I
turned down eleven different scripts
before I found exactly the proper
vehicle for my talents.

Save me some time on Wednesday after-
noon, July 2nd—won’t you?

Do come! I’ll look forward to seeing
you!

Excitedly,

Elsie

The Cow

P.S. I almost forgot! You get your
formal invitations by

SENDING YOUR BOSTON ADDRESS TO:
OR CALLING

Consumer Relations Dept.
The Borden Exhibit
The Borden Company
Booths E2 and E3
330 Madison Avenue
New York
Mechanics Building
Boston
The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

ADMINISTRATION

The County Film Library: A Handbook—Godfrey Elliott, Mercer County, West Va.—Published by Harry L. Barr, Morgantown, West Va., 50c

There is no doubt but that most of the progress in extending the use of audio-visual aids in the near future is to be made by schools in rural areas. Probably every city school system already has some opportunity for securing audio-visual aids. Statewide libraries have attempted to meet local needs where school units were too small or too poorly financed to buy films or projectors. But the most promising movement for initiating a film program along educationally significant lines is that of the cooperative county film library.

Mr. Elliott has been pioneering in his state of West Virginia. The handbook here described is the result of experiences in five counties. In each instance the film library grew out of the local needs and it was an attempt to meet the problem within the limits of small budgets through the technique of cooperation that has proved satisfactorily in other areas of living in rural communities.

Financing of such a project should come from the local board of education. But, says the author, it is understandable that a board of education may feel reluctant to pour money into the creation of a new thing for which there has been no demonstrated justification in the local schools. . . . The easiest way to 'sell' a film library to the board is to operate a cooperatively supported library for a year or two. . . . The responsibility for demonstrating the educational value of the film library rests upon the school, the teachers and the principal.

The author is aware of the need for integrating the distribution of many types of teaching aids, but it is felt that the operating plan for the county film library can be extended.

Producers and distributors will be thankful for Mr. Elliott's advice about previewing. He suggests that preview prints be returned promptly, especially since the customer receives a fresh print if he decides to purchase the film. The previewing of films by staff members can become a good beginning toward in-service teacher education. Among other good hints is that of buying from reliable firms and delaying the purchase of industrial films that are not.

The chapters on administration and maintenance should be especially valuable to the growing number of busy teachers who have been given the extra responsibilities involved in keeping a film library. It is certain that novices in administration can be spared much expensive blundering by following the lead of Mr. Elliott.

Cooperative Film Exchange—Leon H. Westfall, New Hartford, N. Y.—New York State Education, 28:520 Apr. 1941

The recommendations made in this article follow rather closely those made by Elliott in his Handbook. Dr. Westfall is also concerned with schools in small communities. Although he recognizes the weaknesses of the film library system, he indicates that a flexible curriculum can adapt itself to the inflexibility of film scheduling. For a successful exchange the following conditions are desirable: 1) A headquarters equipped for inspection, repair, storage and shipment of films; 2) A headquarters for convenient transportation; 3) A secretary or manager; 4) A responsible membership which abides by rules; 5) A library of at least 30 well-selected films.

UTILIZATION

Audio-Visual Aids for Rural Schools—Etta Schneider—Curriculum Journal, 12:166 Apr. 1941

A review of the possibilities of selecting and using audio-visual aids with special reference to rural schools. Sources and cost of equipment are described. A variety of materials available for a particular unit of work, viz. "Power and Machinery" is listed. The titles were selected to indicate the various types as well as the various agencies distributing them.


A summary of the types of materials that may be used, based on standard texts in visual education.


A summary of studies already made in physical education which show the effectiveness of films for orientation, demonstration and diagnosis in teaching sports.

Celluloid Servants—Ralph R. White, Principal, Weld High School—Maine Teachers' Digest 1:89 Mar. 1941

A summary of techniques recommended by leaders in the field. Basic procedures include: 1. A preview before showing films. 2. Integrate films with the subject matter of the regular classroom. 3. Have class discussions after showing films, etc.

PHOTOGRAPHY

New Developments in Photography—Charles A. Savage, Instructor in Photography, Rochester Athenaeum—School Science and Mathematics, 41:370 Apr. 1941

Three lines along which progress has been made to help teachers in producing educational materials of their own are: a) advances in lighting equipment such as the new speedlamp for fast action shots, the midget flashbulb and the use of fluorescent lighting; b) advances in projection equipment, such as enlargers, and a Purpose paper where the use of filters gives control over the light intensities to help in copy work; c) the growth in instruction in schools and colleges where special training may be secured in photography.


The teacher who can use a 35mm. camera will find many opportunities for preparing educational materials. Pictures of a field trip, a trip to the museum and the like can be made. Copies from books and flat pictures may be made on filmstrips.

EDUCATIONAL RECORDINGS AND RADIO

An Experiment with Phonograph Records—Effie G. Bathurst, State Education Dept., Albany—N. Y. State Education 28:518 Apr. 1941

A description of one of the most valuable types of research ever undertaken in the field of audio-visual education. The curriculum workers in the New York State Education Department were interested in determining how effective phonograph records could be for rural schools. They could make recordings only if—a) they used records that were especially suited to the curriculum needs of New York State Schools; b) the records were technically excellent; c) the technique of presentation were directed to the rural school audience; and d) teacher cooperation were secured in reporting on classroom effectiveness. Dr. Bathurst was engaged to carry out the study from the beginning. Under her direction the curriculum areas were selected, scripts written, recordings made, teaching guides prepared and classroom use evaluated. Copies associated with Drs. Bathurst in the study were the various committees of the State Department, subject matter specialists, the Evaluation of School Broadcasts Projects at Ohio State University and many others.

This article describes the purposes of the study, the criteria for selection of areas, techniques and personalities involved in production and the list of titles.
NOW - A Silent Projector you can convert to SOUND!

Ampro 16mm. Convertible-to-Sound Model has 1600 ft. film capacity — sufficient for one hour of uninterrupted showing of silent film

With the rapidly growing libraries of 16mm. sound film—for entertainment, education and industry—here is the ideal projector for those who want silent film projection now—but who may wish to switch to sound film projection later. Ampro Model "YC" is essentially a sound projector minus the amplifier and sound features, but provided with all castings for convenient conversion to sound. It permits the present user of silent film to enjoy the convenience of the 1600 ft. reel capacity sufficient for one hour of uninterrupted showing of silent film. At the same time it enables him to convert this model whenever he chooses, at a minimum of expense, into the modern sound-on-film projector model "YSA"—thus avoiding the "trade-in" losses usually incurred in disposing of a silent projector to purchase a sound projector.

Some of the features of Ampro Model "YC" include: 750-1000 Watt illumination; Automatic Rewind, Pilot Light, F1.6 Objective Lens; Film Reversing Switch; Still Pictures; Attached Folding Reel Arms.

Complete Ampro Line of Precision 8mm. and 16mm. Silent and Sound Projectors

Model KD—(left) 16mm. Silent Projector, 750 watt illumination, A.C.-D.C. motor, automatic rewind, Pilot Light Reverse Pictures, Still Pictures, Attached Folding Reel Arms, Centralized Controls, F1.6 Super Lens and numerous other features.

Model UA—(right) 16mm. Sound on Film Projector — offering complete mixing of sound from film, microphone and phonograph — with ample volume for audiences ranging from a classroom to a large auditorium. Also has many other exclusive features.

Send for Catalog giving all the features, specifications and prices on the complete Ampro line of 8mm. silent and 16mm. silent and sound-on-film projectors. Ampro projectors are approved equipment in thousands of schools, universities, government departments, U. S. Army and Navy, churches, clubs and homes.

Ampro Corp., 2839 N. Western Ave., Chicago, Ill. (ES 41)

Please send me new Ampro Catalog. I am particularly interested in:

☐ Ampro 16mm. Silent and Convertible to Sound Projectors
☐ New Amprosound 16mm. Projectors
☐ Ampro 8mm. Silent Projectors.

Name__________________________________________
already available. The records are now being tried out in rural schools of one, two or more rooms throughout New York State. Teachers are evaluating the records on forms prepared for the purpose, for educative value, listener appeal and effectiveness. From the findings of the study the Committee will make available to all schools those records that were found most suitable by teachers.

Areas covered by the records include:

- (The titles of the 38 records are given in articles.

Recordings: A Significant Aid in Teaching — J. Robert Miles and I. Keith Tyler, Ohio State University — Scholastic, Jan. 27, Feb. 24, Mar. 31, Apr. 28, 1941

The series of articles summarizes the experiences of the workers in the Evaluation of School Broadcasts Project with respect to radio transmissions and phonograph records. Aspects treated include classroom use, problems of production and presentation and sources of educational recordings.

An eighth grade class in American history used the entire series of "Cavalcade of America" as an overview of the problems of American history to help in planning for more detailed study. A high school class used selected records from the "Lest We Forget" series to understand the courageous efforts and sacrifices made by the early colonists and pioneers. A sixth grade class used the series "Frontier Fighters" as a basis for discussion and reading about the pioneering life and westward expansion of America. A junior high school class used the "Lest We Forget" records to help compare contemporary problems with those of early America. Problems in modern day problems dealing with civil liberties, refugees and labor were studied with the aid of such records as Elmer Davis's "Then Came War," Archibald MacLeish's "Air Raid," Raymond Massey's "Abe Lincoln," Paul Robeson's "Ballad for Americans" and the Office of Education's "Americans All — Immigrants All." Some schools used school-made recordings to supplement the others.

Suggestions to teachers are given on the use of recordings.

Experience Transcribed — Paul C. Reed, Rochester — N. Y. State Education, 28:516 Apr. 1941

Description of the pioneer work being done with the library of educational recordings. Reference to the activities of the Rochester schools is also made in the series by Miles and Tyler referred to previously.


Proposals for training of undergraduates and teachers in service.

The Central Sound System in the School — Kenneth G. Bartlett, Director, Radio Workshop, Syracuse University — N. Y. State Education, 28:513 Apr. 1941

Some practical suggestions for making sound systems a potent factor in the educational program.


The author of Listen and Learn protests that radio networks and stations are providing programs only for the majority and are making no particular appeal to the listener who wants a more complex, more informative, or more sensitively artistic fare.

Radio the Master Teacher — Janet Conklin, Herkimer High School — N. Y. State Education 28:511 Apr. 1941

A stimulating accounting of a classroom teacher's experiences with high school students in an English class where radio programs were explored and tied in with reading.

TEACHERS GUIDES


It will be recalled that in the March 15, 1941 issue of Library Journal Miss Alice I. Lyman described the important project now under way in the use of films for promoting intelligent discussion among adults. The American Assn. for Adult Education, one of the sponsors of the project, is making available a series of excellent guides for discussion leaders. The greater factor in making for effective discussion is the preparation and skill of the group leader.

The guide "China's War and the U.S. A. " is based on two films, China Strikes Back and Japan's War in China. Background is given to help in making critical evaluation of the film content, and to help in promoting understanding. Readings and questions for discussions are also included.

The second guide in the series is called "Planning for Living" and is based on the film The City. Obviously, this picture calls for discussion on the basis of the observers' own community. The guide, therefore, recommends a study of the local housing conditions and a comparison with the wholesome living conditions pictured in the film. Other guides, including one on "Unemployment and Defense" will follow shortly. The Association has done a scholarly and important service for educators who use these films as well as for the distributors.

* EXCURSIONS

Youth Hosteling: Social Travel toward Democracy — Justin J. Cline — Educational Method, 20:251 Feb. 1941

A much-needed description of this important youth movement, which is being used by some school systems, such as Roslyn, L. I., for student tours.

The Educational Screen

CARTOONS

Shifts in Attitude Caused by Cartoon Caricature — R. Ather and S. S. Sargent — Journal of General Psychology, 24:451-55 April, 1941

A much-needed study for helping teachers in teaching the interpretation of cartoons in the social studies. Students indicated their attitudes toward social concepts first presented in verbal form and later in both verbal and cartoon form. Graphs accompanying the article show the great amount of shift in attitude.

PERIODICALS


The annual "review" which this bulletin affords is excellent evidence of the progress that is being made in the field of audio-visual education, especially as it applies to the filmstrip and, more recently, to the Kodachrome 2"x2" slides. The magazine contains articles by workers in the field, describing the areas in which successful application has been made.

One article by Mrs. Camilla Best (reviewed in the April, 1941 Ed. Screen) illustrates the use of filmstrips for teaching "Americanism" by means of filmstrips. Another form of civic education is described in the article by Carleton C. Pierce, Jr. of Arthurdale, West Va., entitled "Filmstrips for Local History." The places of interest in the United States and similar to them in any community anywhere in the nation. Charles F. Hoban, Jr. picks up the story of illustrated local history in the case studies cited in his article, "Teachers Can Solve the Problem of 2"x2" Slide Libraries." He recommends that filmstrips be used to supplement the commercial collections for places of local interest and as records of teachers' travels.

In the field of adult education the use of filmstrips and 2"x2" slides is growing rapidly because of the ease of handling and low cost. C. Kent Childs examines a thesis which he prepared for the Oberlin College Department of Religious Education on the subject, "A Study of the Value and Use of Projected Pictures as Visual Aids in the Minister's Educational Program." The support of county agents and other workers in the agricultural extension service continues to grow, as is pointed out in the article by Max McAlleny on "Visual Aids in Extension Service." A very significant trend is described by John Adams Fox in the tremendous success of filmstrips for vocational education in the CCC camps of the First Corps Area in New England. There were 13,000 bookings for filmstrips on a vast array of subjects in the single year, 1940.

Other trends in the field are described in the articles: "Motion Pictures and the Curriculum" by Harry E. Erickson, "Fifty Years of Audio-Visual Instruction" by Ellsworth C. Dent, and "Curriculum Planning and Visual Education" (Concluded on page 271)
Experimental Research in Audio-Visual Education

(Introducing a monthly column to be edited by David Goodman, New York University, New York City.)

The field of audio-visual education has received much needed "blood transfusion" in establishing its rightful place in education through the scores of experimental investigations and research projects recently completed, and being carried on at the present time. These studies have helped to remove permanently the question, "Why audio-visual aids?" Instead, they have begun to supply some answers to the question, "How best to use audio-visual aids?"

This development has been well stated by Miss Etta Schneider, in the Delta Kappa for May, 1941:

"There are few areas of educational interest which can claim such widespread and significant investigation as the field of audio-visual education in the past four years." These investigations, valuable as they may be, unfortunately are unknown to the majority of superintendents, teachers, and other workers in the audio-visual field. The studies are usually filed away to gather dust. Their findings and results, recommendations, significance and practical application—indeed, even the fact that they are being carried on—are seldom brought to the attention of the teaching public.

There is a need for the regular reporting of such information in educational journals. To meet this need, and to visualize research in the field, the Educational Screen is proposing to add a new column on Experimental Research, as a regular feature beginning with the September 1941 issue. This column will present, each month, abstracts of a few of the various studies recently completed throughout the country, including masters theses, doctoral dissertations, foundation studies, individual projects, and W.P.A. and other governmental agencies' experiments. The abstract would embody such information as name of the investigator, statement of the problem, significance of the study, brief discussion of techniques used, findings and results, and practical applications of the research. Frequently, current investigations of particular significance would be reported in some detail.

The values which may result from such information would be at least fourfold:

1. The finding and recommendations arising from these studies may be of practical value to the readers,
2. It may stimulate or suggest additional areas for investigation or aid other research workers in delimiting their problems,
3. It will acquaint workers with others in different localities who are dealing with similar problems and make possible an exchange of experiences,
4. It will serve to introduce to the reader some of the "new" names who are at work in the field of audio-visual education and who might be called upon for additional work in the field.

Correspondence of information relevant to the objectives of this column is invited.
SCHOOL MAD
By HARDY R. FINCH

Head of the English Department
Greenwich High School, Greenwich, Conn.
Member of the Committee on Standards for Motion Pictures of the National Council of Teachers of English

In November, 1938, I reported to the first Conference on the Educational Production of Motion Pictures that more than two hundred schools had made films. Today that number is above the three-hundred mark. This new figure does not include schools from which I have not received reports of activity, and a large group of schools that are engaged in the production of films for the development of football and other sports. An estimate which would include these film makers would place the total over five hundred.

The following observations on school film production since 1938 might prove of interest to readers of The Educational Screen:

1. Schools are planning their films with greater care. Cooperative planning as used in the Traffic Safety Film Project and in the Denver Film Project seems to be very effective. One school that is planning a public relations film has spent two months in the examination of films of this type, and is now developing two different kinds of scenarios, one of which will be chosen.

2. Schools are beginning to use their funds as substitutes for other means of presenting subjects. The Bristol film on clocks and the Greenwich water film are designed to take the place of excursions. Some of the Denver films might be used in this way, also. After collecting considerable information on a printed picture report of the school’s activities, the Greenwich Board of Education voted to make a film report instead.

3. School film-making is becoming more widely recognized by educators and others as an important school activity.

4. More aids are being offered to persons who are interested in the making of school films. The Harmon Foundation in New York City has made a series of films to help the film-maker in improving techniques. Several universities are offering special courses in film production for educators.

5. Although many of the topics of recent films are similar to those reported before 1938, the new topics indicate that the field covered by the school-made product is expanding.

6. The future of school film production is exceedingly bright. I feel sure that the next two years will show even greater activity than the last two have shown.

An illustrated account of the making of safety films by schools in Ohio and West Virginia is given in an article by William G. Hart in the March, 1941 issue of Safety Education magazine. Mr. Hart, who is affiliated with the Bureau of Educational Research of Ohio State University, gives evidence in his article, “Learning Safety Through Making Movies,” that schools can produce good safety films and that students learn much about safety by producing such films.
MOTION PICTURES

"The Educational Production of School Movies" is the title of an article by Godfrey Elliott that has appeared in the April issue of Home Movies magazine. Emphasizing the educational activities involved in production, the author lauds today's school systems for the increased emphasis upon educational production of films, and notes how the production activity and allied activities are "vitalizing classroom subjects and democratic procedures."

Beginning with the May issue, Home Movies magazine will review films made by educators and students and will judge such films as "one-" two-", or 3-star leaders" as it is now doing with other amateur films. Educators and students are invited to submit their films for this service. For further details regarding the reviewing service, write to Home Movies, 6060 Sunset Blvd., Los Angeles, Calif.

One of the services of the Amateur Cinema League, an organization of amateur movie makers, is a scenario consultation service for its members. Aid in planning and developing a satisfactory movie script is given by the League. Persons using this service have found it very satisfactory. Full particulars may be secured from the League offices at 420 Lexington Avenue, New York City.

The booklet, "The Motion Picture Goes To School," has been out of print for several weeks. Additional copies of the booklet have been made and are available at $.20 each from your editor.

At a meeting of the Connecticut Audio-Visual Education Association held at Danbury Teachers College on May 10, a panel discussion on "The Use of Films and the Radio in Public Relations" was held under the chairmanship of Donald Eldridge, Audio-Visual Director of New Haven, Conn.

Some of the points stressed regarding public relations films were: (1) Careful planning of films of this type is very important. School film makers should plan a continuity that will secure for the educational institution a "publicity advantage." They should consider for what audience the film will be made. (2) Publicity films should not replace other more effective means of bringing the story to the public. (3) Not only the "school activity" film, but also many other types of school-made films make effective public relations media. (4) After the completion of the film, adequate provision for the showing of the film should be made.

During the coming school year, your editor would like to publish samples of scenarios or shooting scripts of school-made films. If you have such a script available, send it in for consideration. Accompanying your script should be one or two gloss prints of scenes from your film or some stills showing your group in action. If you have completed a new film, don't forget to report it for inclusion in the brief listing of films. This column will be devoted to these film reports in the September issue.
THE STORY OF CIVILIZATION

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M. MINTER CULVER
Editorial Office
55 E. 73rd St. New York City

Audio-Visual Conferences

California. A visual conference will be held during the week July 21st to July 25th, at the University of California, Berkeley, which will include demonstrations of educational films and other visual materials, demonstrations of the use of the films in elementary and high school classes and demonstrations of the use of various types of projectors. The fee for the conference is $5.00.

Audio-Visual Aids Association of Northern California is the name of a new organization formed at a meeting of North California teachers in San Francisco, March 1. Gardner Hart, director of visual education, Oakland, was elected chairman of the group.

Indiana. The third annual Indiana University Audio-Visual Conference will devote two days, July 24 and 25, to the study of issues and problems in the field of instructional materials. Speakers will be Dr. Edgar Dale, Ohio State University; L. C. Larson, Dr. R. W. Holmstedt and Mrs. Merle Brown of Indiana University. Some of the topics to be discussed are “Experience, a Basis for Learning.” “The Organization and Administration of a School Audio-Visual Service,” “Financing the Audio-Visual Program,” “Integration of Audio-Visual Aids with the Curriculum,” and “Use of Audio-Visual Aids in a Rural, and a City School.”

Connecticut. On Saturday, May 10, the Connecticut Audio-Visual Education Association held a meeting at Danbury State Teachers College, under the chairmanship of Donald A. Eldridge, New Haven Public Schools. Panel discussions on “What Makes a Good Classroom Film,” and “The Use of Films and Radio in Public Relations” occupied the morning. In the afternoon Edward F. Wheeler, Bristol Schools, president of the Association, spoke on the “Preparation and Place of Recordings in the School Program,” and Mr. N. S. Light of the State Department of Education, summarized that department’s attitude toward school use of audio-visual aids.

Ohio. A series of nine Working Laboratories of Teaching Aids featured the Second Regional Conference on Radio and Visual Aids in Education which was held at Zanesville on May 16 and 17. Other highlights of the program included a group of demonstrations of utilization of visual materials and radio in such fields as safety, science, conservation. General meetings treated such topics as “Recent Developments in Radio and Visual Education,” and “Radio and Visual Aids in the Present Crisis.” The conference was sponsored by the Zanesville Schools, Radio Station WHIZ, and the Evaluation of School Broadcasts of Ohio State University.

Notes

Participate in Previewing Films,” “Techniques in the Utilization of Sound Films,” and “Producing Films For Public Relations” were some of the subjects of the talks. Class demonstrations, a panel session, and film showings completed the program.

Sound Slide-Films for Experimental Use

The Committee on Scientific Aids to Learning, 41 East 42nd Street, New York City, is distributing without charge a series of sound-slide films produced by the Metropolitan Branch of the Department of Visual Instruction of the NEA. The slide films are available only for experimental use, however, and each instructor using them will be required to make a report to the Committee on reactions to the film.

The series consist of the following subjects: The City Mouse and the Country Mouse—story telling, first and second grade levels; Safety, third and fourth grade; Nature Study, fourth and fifth grade; Graphic Representation, junior high school; Your World of Tomorrow—vocational guidance, senior high school; Team Work, human relations, senior high school. The productions are recorded at 33 1/3 r.p.m.

Annual Convention of Non-Theatrical Film Group

The Allied Non-Theatrical Film Association held its annual convention on April 18 and 19 at the Hotel Astor in New York City. Committees reported on the year’s activities and outlined the plans for the coming year. One session was devoted to panel discussions on the following topics: Libraries and their problems, legislation and the non-theatrical field, machine and equipment sales, problems of distributing and projection servicing of industrial films, problems of the distributor, membership, finances and welfare services, making most of your product.

At the second day’s session the following officers were elected: President, W. K. Hedwig of Nu-Art Films; Vice-President, Thomas J. Brandon of Garrison Films and Harry A. Kapit of Walter O. Gutlohn, Inc.; Treasurer, Samuel Goldstein, Commonwealth Pictures; Secretary, H. T. Edwards, Non-Theatrical Pictures. Bernard Willoughby, who has been President of the Association for the last two years, was elected Honorary President by acclamation.

Library Film Forums

A series of ten Film Forums have been held by twenty libraries throughout the country this spring to try out the use of motion pictures as a basis of discussion on various subjects, centering around the theme “What We Are Defending.” The organizations cooperating in the project were the American Library Association, The American Association of Adult Education, the American Association of Applied Psychology, and the American Film Center.

The films shown included such documentary films as The Plow that Broke the Plains, The City, The Case of Charlie Gordon and United States the Good Neighbor. The forums held this year are preliminary.
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NEW RELEASES

The Alabama Education Association is taking steps to encourage the use of visual aids in the state, having voted to establish a film library in the headquarters office at Montgomery to meet the growing demand for suitable films for classroom instruction. In cooperation with leaders in the visual field throughout the state, the headquarters office will prepare a selected list of films and the necessary forms for film ordering and distribution. Information on the service was given through a series of screen showings at the A. E. A. convention in Birmingham last month.

Denver Radio Conference

The First Annual Conference on Radio in Education was held by the Denver Public Schools at West High School on April 25 and 26. Dr. I. K. Tyler and Mr. Seerley Reid of Ohio State University were the leaders of the conference.

On the program were demonstrations on the utilization of radio programs for secondary schools and elementary schools. Included also were a panel on out-of-school listening of children, a panel on radio in the home, and a production demonstration by a Denver high school radio workshop group.

Summer Courses in Visual and Audio-Visual Instruction, 1941

(Supplementing April and May Listings)

Colorado
Colorado State College, Fort Collins
Visual Education July 5-25
Lloyd E. Aspinwall

Illinois
DePaul University, Chicago
Visual Education (3-1/3)
Walter A. Eggert

Mississippi
University of Mississippi, University
Audio-Visual Education (2 or 3)
S. C. Gladden

New Jersey
Rutgers University, New Brunswick
Visual Education (3) June 30-Aug. 8
L. R. Winchell

Oregon
Southern Oregon College of Education, Ashland
Construction and Use of Visual Aids (3)
Wells-Messenger-Smith-Allen

Pennsylvania
Marywood College, Scranton
Visual Aids to Teaching (3) Sister M. Sylvia

Texas
Abilene Christian College, Abilene
Audio-Visual Introductory Course (3)
G. C. Morlan

Integration of Perceptual Aids with Other Instructional Materials (3) G. C. Morlan
Student Operation of Equipment
(Concluded from page 238)

Questions for Operators On: The sound-on-film projector
1. When trouble occurs while operating turn ................
   and the ........................................
2. No repairs or adjustments are to be made without ....
3. The first step in setting the machine up is ............
   (a) .....................................................
   (b) .....................................................
4. How is the picture affected if wrinkles and dirt spots are
   allowed to form on the screen? ....................
5. Why must the speaker cable be plugged in before any
   power switches are turned on? .................
6. The height of the projected picture is adjusted on the
   machine by means of the ........................
7. Give four precautions to observe while threading the
   machine: ........................................
8. What is meant by framing the picture? ............
9. What is the purpose of the tone control on the speaker?
10. Usually you set the tone control towards the ..........
    for speech and towards the ....................
    for music, ....................................
11. What causes marks or identifications on the film that
    can be felt? ..................................
12. How many perforations should be in the loops after the
    film is threaded? ..............................
13. How can you find out if the sound volume level is too
    high or too low? ..............................
14. How do you check the film for marks caused by the
    machine or already on the film? ..............
15. What might be a cause for a readjustment of the volume
    control or tone control after the film has been running
    a few minutes? ..............................
16. Why should the machine be stopped before the white light
    shows on the screen? .......................
17. When should you turn the volume control down—when
    the white light shows ............ or on the last scene?
18. Usually the reel just shown should be rewound when?
19. You should disconnect the speaker cable before ........
    or after ........ turning the power off and pulling line
    plug from the power outlet? ..........
20. All operators in charge of a picture program are required
    to fill out ..................... and have the ........
    ........ before turning the machine over to another
    operator. ..................................

Special: State any idea you have that will improve the showing
of pictures.

Community Study, Realistic Education
(Concluded from page 244)

to-be-met, finds its center of orientation neither in
Book Mastery nor in Child Interests, but rather in
Community Welfare. It therefore utilizes available and
pertinent documentary materials, audio-visual aids,
incursions and excursions (Steps 1-4), and in addition
continuously emphasizes local surveys and social par-
ticipation (Steps 5-6). Thus it is no accident that the
community school, which seeks above all else to relate
school and community in functional fashion, should
also be the school which alone is able to utilize fully
all six of the major steps toward social reality.

From a Book-centered, through a Child-centered,
into a Society-centered school—from ivory-towered
memorization of abstract verbalisms to active partici-
pation in challenging community activities—such has
been the progress of our search for educational realism
during the first four decades of the twentieth century.
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

With this issue the New Films of the Month department completes its first school year of existence. Taking its origin from a critical statement which backfired into a job for your writer, and supported by a loyal group of local teachers who voluntarily attended weekly meetings through rain and shine and through good films and bad, the department has discovered what appears to be an increasing response from producers and readers alike.

It has been an interesting experience for all of us who have worked together reviewing and discussing films. At the outset we recognized that the process of "committee" or "preview" evaluation of films has basic deficiencies which make it improbable that a committee or preview group will render uniformly accurate judgments, in the absence of actual use of the films under classroom conditions. But we recognized also that several months are at best required to assemble, tabulate and publish the evaluations based upon teachers’ judgments as reported after classroom use of films. This Department, therefore, was designed to fill the need for critical information on new films supplied promptly after release.

Whether or not this objective has been realized is a question which certainly is not appropriate for answer here. We have published descriptions of 58 individual films in the 9 issues of the Educational Screen which have carried the New Films of the Month page.

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service Division of General Extension,
University System of Georgia, Atlanta

To accomplish this, preview groups of teachers have met in the projection room of the Division of General Extension once each week, with the exceptions of holidays and vacation periods, since October. On the average, about 15 persons attended each of these meetings. Appropriately enough, junior and senior high school teachers were most numerous in the Committee membership, but there was good representation also from elementary schools and from colleges. For any work which may have been accomplished, we cannot give too much credit to these people who, voluntarily and without thought of compensation, gave so freely and faithfully of their time and ability.

If this department, undertaken by the writer and his Committee solely as a service to the teaching field, has roused increased interest in the new films, we shall all feel well repaid for our time and effort.

Little can be said at present concerning next year’s plans. Like some hundreds of thousands of other young men, your writer has of late begun to feel the hot breath of the Selective Service Administration on the back of his neck, so to speak, and at this time we cannot predict whether or not the Department will continue to originate here during the 1941-42 school year. If any of you who read this are in position to over the work of film reviewing, in case the present writer is called into service, we should be glad to hear from you.

DON WHITE

City Water Supply (Erpi) 11 minutes, 16mm sound, sale price $45.00. Teacher’s guide to be furnished.

In five sequences this film shows our need for water, water sources, how New York City’s water supply is obtained, and how city water is safeguarded and distributed. First the film explains the necessity of an adequate water supply for every living thing, and shows the differences in amounts of rainfall required for dense forests, grasslands, and deserts. Next, water sources for man’s supply are listed: springs, wells, rivers, lakes and watersheds, and for each source a map shows some of the cities in various parts of the country which obtain their water in this manner. In the next sequence New York’s watershed and aqueduct system is described in detail both from historical and functional viewpoints. The development and use of the Croton, Esopus, and Schoharie Watersheds, the Catskill Aqueduct, and the Delaware Watershed are shown. The next sequence outlines various methods of water treatment designed for safeguarding a city’s water supply. Sewage treatment, filtration, and the use of water control laboratory tests, including fermentation test, microscopic examination, bacterial culture test, titration, testing for ammonia nitrogen, and turbidity, are explained. Also shown are the uses of alum and filter beds to remove suspended matter, and the uses of activated carbon and aeration to remove color, odor and taste. The final scene, addition of chlorine, completes the process. The concluding sequence explains the process of distributing water, through tunnels, water mains, street mains, and finally through service connections to the consumers. As the film ends, several uses of water which are vital to our daily life and health are enumerated.

COMMITTEE OPINION—An excellent film for use at the upper elementary and all higher grade levels in general science, civics and other social studies, health, and chemistry. Organiz-
Dramatizing the famous "run" into Oklahoma
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zation and sound are good, photography is good with the excep-
tion of one or two scenes which appear dim and occasionally
rather jumpy. The
Automobile Mechanics Series (Jim Handy)—series of 16
films, each 1 reel, 16mm or 35mm sound. Apply to producer
for sale and rental prices. A series of 35 slideshows on same
topic is available from this producer.

Titles of motion picture films are as follows: Down the
Gasoline Trail, Free Air, Horsepower, Hot Head, Power, Fire
Control, Riding the Film, Smooth Starts, Soft Pedal, Spinning
Lever, Around the Corner, Get Going, On the Level, Curve
Control, Stop That Car, and Current Flashes. Space
limitations prevent the inclusion here of descriptions of the series
of films, but complete description may be obtained from the
producer.

COMMITTEE OPINION—This series of films provides brief,
popularized explanations of some of the basic principles in-
volved in modern automobiles. Many of the principles are ade-
quately explained by an excellent series of laboratory experi-
ments and models, but in some of the films "stunts" are per-
formed whose application to the principles being demonstrated
is remote. In some of the films there is propaganda for the
particular mechanical features embodied in the Chevrolet auto-
mobiles, and these are also used in all demonstrations and
experiments. The films should prove fairly good for use in
shop training courses in automobile mechanics, and in driving
classes. Technical production is good in all respects.

What Shall I Wear? (HFC) 2 reels, 16mm sound, "Free."
A study of the ways by which a family of moderate means
may build an adequate wardrobe at reasonable expense. As
the film begins, a typical mother is studying her problem of
keeping her husband and their three children well-dressed
without exceeding the limits imposed by a moderate income.
In three major steps, the film shows the solution recommended
for their problem.

First, adequate planning of the family wardrobe is necessary.
This includes a thorough examination of the clothes already
owned, with a view to adapting them to additional uses; a
survey of the probable needs of each member of the family,
and a planned program of buying new clothes. Second, skillful
shopping is recommended. To accomplish this, the buyer needs
a reasonable knowledge of fabrics, design and tailoring, and
correct uses of accessories. Full recognition also must be
given to the comparative cost and utility of "high style" and
"classic style" in clothes. Third, the family's clothes must be
kept wearable by best possible care. Clothes in use must be
mended, cleaned and pressed, and out-of-season clothes must
be correctly stored.

COMMITTEE OPINION—A good film for use in home eco-
nomies and girls' vocational guidance classes at the junior high
level and above; should be especially suitable for use with adult
women's groups. The film is well-designed and accurate, al-
though it was suggested that the wardrobe described is some-
what elaborate for the family portrayed. There is no adver-
tising except a title giving credit to the sponsor; technical
production is good in all respects.

The Precious Ingredient (Westinghouse) 3 reels, 16mm
sound, "Free." Produced by Roland Reed Productions;
sponsored by the Westinghouse Electric and Manufacturing
Company.

In this film a story treatment explains the importance to
good health of employing cooking procedures which preserve
the vitamins present in foods, emphasizing the use of the West-
inghouse electric range in food preparation. In the first part
of the film two families are compared. The first one presents
a happy scene at the dinner table. But for the second family,
the scene is less joyful because no one is hungry. In explaining
the reasons for this, the film takes us to a college classroom

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Emanuel Feuermann
Igor Gorin

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Biological Laboratories  
Harvard University  
Cambridge, Mass.

where an instructor lectures on vitamins and the various ways by which some of them may be destroyed through improper cooking. Water-soluble and fat-soluble vitamins are enumerated and explained, and the values of various mineral foods are also explained.

Sources of foods are briefly shown. But before serving, these foods must be cooked. The values of various new features found in the Westinghouse electric ranges are emphasized as the wife in the first home demonstrates her "Vitaminized" cooking for the wife of the second family. The latter decides to purchase a new range. One complete meal is cooked automatically, using the proper techniques. The two husbands come home and the film concludes with a happy dinner scene as the narrator emphasizes that every housewife is the guard of her family's health through proper cooking.

**COMMITTEE OPINION**—A fairly good film for home economics, biology, health, and general science classes at the high school, college, and adult levels; should be useful also for P.-T. A. and similar adult groups. There is considerable emphasis upon the values to be derived from electric cookery; the sponsor's name is mentioned only once in the narrative. Photography, sound, and organization are good.

**Producers Named Above:**

Erpi, Erpi Classrooms Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

HFC, Household Finance Corporation, Department of Visual Education, 919 North Michigan Avenue, Chicago, Illinois

Jam Handy, Jam Handy Picture Service, Inc., 2821 E. Grand Boulevard, Detroit, Mich.

Westinghouse, Westinghouse Electric and Manufacturing Company, 246 East Fourth Street, Mansfield, Ohio; or apply to nearest Westinghouse dealer.

**Correction**—"Fluffy, the Kitten," reviewed in May, is now distributed by Foster Films, 40 E. 17th St., Brooklyn, N. Y.

**Department of Visual Instruction**

(Concluded from page 249)

route he will also visit educational institutions in Los Angeles. Mr. Dent will also demonstrate the new three dimension color photography process developed by the Society for Visual Education, Inc., in conjunction with the Eastman Laboratories. His demonstration-lectures will deal with the educational uses of photographs and records, instantaneous recorders, motion pictures, slides, photography, radio, and centralized sound systems.

His first stop will be at Austin, Texas, June 12-14, at the Texas Conference on Radio and Visual Education. His subject there will be "Harnessing Available Power."
Visual Material for Teaching Art

(Concluded from page 250)

Hals, Renoir, Cezanne, Degas, Gauguin and others. About 2200 of these slides have already been sold to members of the Cooperative.

The third and fourth sets are now in production. One of these sets will record some fifty-five of the paintings shown at the remarkable exhibition held last December at the Carnegie Institute at Pittsburgh which was entitled "A Survey of American Painting". This material will constitute a history of American painting from Colonial times to the present day, including works by Stuart, Copley, West, Peale, Inness, Homer, Bellows, Sargent, Luks, Davies, Sloan, Burchfield, Sheeler, Marin and many others. The other set will be objects of art from the Egyptian, Mesopotamian, Greek and Roman collections of the Metropolitan Museum of New York City. Typical of this material will be slides of Greek vases, bronze portrait heads, marble statues, and gold cups and jewelry from ancient Egypt.

The details connected with the production of these sets are in the hands of a Committee for the Selection and Approval of Slides which is composed of nine art teachers from colleges in the Eastern States. The committee determines the subjects to be included in each set, selecting those paintings or objects of high artistic value and of a character suited for use in general courses in the history of art. This committee will also pass upon the quality of the final slides before they are issued so that member institutions may have expert assurance as to the standards of photography and general production.

The other section of the production program concerns a recent decision to expand the services of the Cooperative beyond the actual issue of four sets of slides a year. From time to time the Cooperative is able to photograph important temporary exhibitions and material in private or public collection which is not especially suitable for inclusion in the regular sets. Further, there are an increasing number of sources from which the Cooperative is able to purchase or borrow fine color transparencies. All material of this nature will be listed in a catalogue from which individual orders can be made at any time: the first such catalogue list of more than two hundred titles will appear in the near future. Its contents will include works by well known Canadian and American painters; a large number of French paintings of the 19th century; works of Oriental art, especially Chinese paintings; pictures by Italian, Dutch, Flemish and English artists; records of early fresco technique; objects of art from the ancient and mediaeval period. The list will be a serious one omitting such over popular subjects as "The Baby's Prayer," "The Family Doctor" or "Man's Friend, The Dog." School children can certainly grasp the story illustrated in a masterpiece by Fra Angelico as readily as they can the content of a magazine illustration and the highest standards will be adhered to as regards subject matter. The first catalogue list will be followed by supplementary ones.

The project welcomes inquiries from educational institutions and letters addressed to Donald N. Wilber, Director, McCormick Hall, Princeton, New Jersey will be given immediate attention.

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Current Film News

Colonet Productions, a new educational film producing organization with studios at Glenview, Illinois, was launched at the completion of an extensive survey conducted during the past school year by Indiana University, to whom Coronet made a research grant to study needs for educational films in four fields of instruction. One survey was conducted by Dr. Karl Bookwalter to determine film needs in Physical Education at all levels from grades to High School. Two recent 1-reel releases are in this field, namely:

Beginning Tumbling—script by Dr. Bookwalter.

Volley Ball for Boys—written by two critical teachers at Indiana University, Lloyd Miller and Frank Overton. Dr. Wendell Wright, elementary curriculum specialist of the School of Education, supervised the second survey to determine film teaching aids needed in the first six grades. The other two surveys were made to determine materials needed on the Junior and Senior High School levels in the fields of Social Studies, and Commerce and Business. Dr. Owen Foster of the University School of Education supervised the study in Social Sciences and, in cooperation with fellow researchers, has prepared a script for a film on the banking system of the country. Mr. Dillon and Dr. Lewis conducted the study of needs in the teaching of Commercial Courses.

In addition to the films based on the results of the survey, Coronet has several other series of films planned. Those completed are:

Aptitudes and Occupations—600 feet—the first of a series on Vocational Guidance. Dr. E. G. Williamson and Milton E. Hahn, of the Vocational Coordination department of the University of Minnesota, are in charge of this series of six which will discuss the fundamental human abilities and indicate to students how they may determine how many of these aptitudes they possess. The films will also indicate broad fields in which certain combinations of abilities are required.

Parliamentary Procedures in Action—500 feet—shows the proper procedures for conducting a meeting and should find wide use in classes in English, Civics, Dramatics, Social Science, History and Commerce. Script was written by Harold Crabill, critic teacher of English at Indiana University High School.


Paper Making—800 feet in black and white, 600 feet in color—first of several films on major U. S. industries. Script by Dr. J. E. Hansen, University of Wisconsin. Animated drawings explain in detail the more intricate processes in paper manufacture.

Joan Avoids a Cold (400 feet) and Safe Use of Tools (200 feet)—both in color—are also completed. In production are Principles of Levers, Work of the Stock Exchange, Conservation of Forests, Proper Clothing for Children, and several films on natural science.

All the scripts for Coronet Productions are written and supervised by educators, leaders in their respective fields. The films are produced direct in 16mm instead of photographing in 35mm first and then making reduction prints, and extensive use is made of synchronous dialogue scenes and natural sounds. Coronet is planning to offer its subjects in both color and black and white versions. The added realism of color and natural sound will make a significant contribution to teaching methods.

M. M. Winter Culin, 55 East 73rd Street, New York City, is now releasing the series:

The Story of Civilization—seventeen 4-reel 16mm sound films, each a complete story in itself. The producer explains that the programs are built for auditorium use before an entire student body, as a medium of background and factual material for the immediate curriculum, from the primary through the advanced grades. Study outlines for teachers are provided so that as much of each film as desired can be utilized in class analyses. The series cover the more important features of our civilization. In building these programs, it has as its objective to humanize the story by utilizing every possible proper dramatic and human interest, and to show the development from cause to effect.

The films are grouped under three headings: "The Evolution of Economic Life," and "The March of Civilization." The "Evolution of Economic Life," comprising eight units, follows the economic and social development of peoples from the most primitive who lived solely by fishing and hunting, through successive stages of discovery, invention and more complex social organization to the industrialized, urbanized civilization of today. Titles of the films are Primitive Life, Herdsman and Farmers, Out of the Earth, From Farm to Factories, Story of Transport and Travel, Story of the City, Story of Science, Story of the Daily Life, and Story of Nature. "The March of Civilization" shows the restless migrations of peoples ever seeking more favorable environments—particularly of the Indo-European group of peoples. It traces them from their homes in Central Asia to their migrations into India, to the successive waves of their migrations into Europe, and from Europe into and across America to the shores of Asia. Cradle of Our Race, Land of Our Forefathers, Our Own Country are the films in this group.

These films will be made available for the first time this fall on a rental basis to schools and other institutions. A plan is also under consideration for making them available on a lease basis to the cooperative school film libraries. A complete descriptive list of the films, together with an advance prospectus of the series, will be mailed to inquiring schools.

Astor Pictures Corporation, 130 West 46th Street, New York City, has acquired for 16mm distribution the Lyman Howe Hedge Podge sound reels, consisting of one reel each, formerly handled by Educational Pictures Corp. in the theatrical field. Included in the series of 25 are the following:

Speed Up, Tidbits, Money Makers of

(Continued on page 268)
IN THESE DAYS of flaming headlines, special emphasis is being placed on Patriotism and Citizenship in the school curriculum. And although our Democracy may be understood and appreciated by students through the study of our history, genuine patriotism and loyalty to the United States is also a matter of emotions. As a result, patriotic music, American folk songs and other typically American music play a very definite part in creating among pupils the concepts we deem most important.

To help you select this music and to aid you in your program of making better citizens of the youth of America, we have prepared a booklet you will find of great value. It contains a complete listing of music which will serve you in making your program more interesting to all students, regardless of age. It includes patriotic music, folk songs, ballads, speeches of American Presidents, songs and stories of our early history and native national music of our Latin-American neighbors.

This booklet is yours for the asking. Just fill in and send the coupon below.


Modern schools stay modern with RCA Radio Tubes in their sound equipment
Manhattan, Jungle Giants, Vaingold Melodies, Highlights of Travel. The Field, The Wonder Trail, The Prowlers, Fury or the Storm, Bubble Blowers, Women's Work, Traffic, Down on the Farm, Skipping about the Universe, Women of Many Lands, Capers in Clay. Astor Pictures has also made a deal with Rasin Productions, producers of Explorers of the World, to handle both the theatrical and 16mm rights to that film.

Explorers of the World features the adventures of Harold Noyce, Laurence M. Gould, Harold McCracken, Gene Lamb, James L. Clark, Lt. Com. J. R. Stenhous. The territory covered in the film includes South America, Tibet, the Arctic, India, Bali, Africa, China, the Antarctic, South America.

Garrison Films, 1600 Broadway, New York City, has completed production on an aviation training film, made in cooperation with the Missouri Aviation Institute.

Aviation Engine—2 reels, 16mm silent and sound—is designed for use in training groups where an actual airplane engine is not available. The picture introduces the various major units that make up the radial type of engine; identifies the units and indicates the functions. It also identifies the sub-assembly units and illustrates methods of locating cracks in parts of the engine.

The film is a Garrison release, distributed by Brandon Films, 1600 Broadway, New York City.

Bell & Howell Company, 1801 Larchmont Avenue, Chicago, offers over sixty reels of 16mm film in color.

Our Colorful World series includes thirty-seven single reels, for the most part silent, dealing with various geographical regions. The list includes a series of five on National Parks, one on Indian life today, and one on Porto Rico. There is also a series of nine new reels on wild life, with several more in preparation. These pictures are mostly with birds, each reel covering either a single species, such as the Golden Eagle, White Pelican, Humming Bird, etc., or a habitat group, such as the birds grouped respectively, at an inland lake, a mountain meadow, and the ocean shore.

Lewis Film Service, 216 East First Street, Wichita, Kansas, advises that his library now carries in 16mm:

Tumbleweeds, the famous William S. Hart silent feature, its background the Oklahoma land run of the 80's.

Nu-Art Films, Inc., 145 West 45th Street, New York City, report that Edward L. Costello, President of the Association of Motion Picture Advertisers has joined their staff and is handling the sales and distribution of the "Fireside Films" in 8mm, and 16mm sound and silent. The first six of this series now being distributed are:

Alice in Wonderland, Tiger Hunt in Bengal, Zoo in Manhattan, Femine Flashes in the World of Sports, Colonial Williamsburg, Africa Squawks.

Castle Films, Inc., 30 Rockefeller Plaza, New York, has just released a national defense namely:

America's Call to Arms! picturing changes in the economic lives of every American family, of industry, commerce, office and farm, occasioned by the need for the strongest possible unified defense. Industry is shown, relinquishing its normal output and adapting its mighty assemblies to the production of planes, tanks, guns, ships, everything needed to assure the country of an impregnable front in the face of any aggressor.

Stirring action depicts millions of boys and men mastering the mechanized methods of modern warfare, in military camps, on the sea, in the air. Parachutists leap into thin air to land fully equipped for surprise attacks on a mythical enemy.

A tank in action.

Ski troops train for effective service in wintry climes in the Arctic. Tanks and armored cars crash their mighty way through all barriers of land, nature and man, while anti-tank crews attempt to withstand their advance. Young pilots eagerly learn the use of wings in warfare. A growing navy thunders on active patrol in the seas of two shores, Army and marines guard the vital Panama Canal. Cantonments beat to the rhythm of thousands of feet as America's mighty army takes form. Artillery booms at coast defenses, in the field, aboard ship, into the air from anti-air units.

Walter O. Guthrien, Inc., 35 West 45th Street, New York City, announces the following new silent films in color, for sale or rent:

Freighter Trip to the Caribbean—2 reels—life aboard a freighter in Southern waters with scenes of the native industrial life of the West Indies. Included is the interesting story of sisal from the plantation stage until it is finally processed into rope.

Camera Sketch of Costa Rica—1 reel—pictures as it is lived in Costa Rica, with outstanding events such as the festival days, the government sponsored lottery, the sham bull fights and scenes of the interior native villages.

Porto Rico—Haiti and Havana—1 reel—scenes from Porto Rico's modernized capital, San Juan, with its metropolitan life. Interesting views of the rugged Haitian Cape are also shown with the famous citadel and palace, San Souci, of Henry Christopher, the black emperor. Havana with its beautiful boulevards, public buildings, and beaches conclude the film.

Boston University Division of Teaching Aids, Boston, Massachusetts—a member of T.M.E.E.A. (New England and Educational Film Association)—is now offering a national service in film distribution to educational institutions, with a membership plan whereby they may rent $200 worth of film for $100.

The Boston film library provides a wide selection of teaching aids on many subjects of the curriculum—art, physics, chemistry, general science, biology, guidance and occupations, sports, psychology, history, social science, nature study and elementary science. In addition, forty "March of Time" subjects, many free films, and several United States Government films, are included. The library contains both 16mm silent and sound motion pictures. Nine historical subjects of eighteen reels are in technicolor—Declaration of Independence, Give Me Liberty, Sons of Liberty, Bill of Rights, The Man without a Country, Romance of Louisiana, The Song of a Nation, Lincoln in the White House, Under Southern Stars. These were produced by Warner Brothers and made available in 16mm through Teaching Films Custodians.

College Film Center, 59 E. Van Buren Street, Chicago, offers for rent:

Children from Overseas—1 reel, 16mm sound—produced by the Canadian Film Board. Stories of the work being done in Canada to educate and care for children evacuated from England showing them in the home, at play, and in school.

Also added to the College Film Center rental library are the following 16mm sound releases of the British Library of Information:

Transfer of Skill—1 reel—showing how skilled craftsmen—jeweler, watchmaker, model engineer, fisherman—have adapted their talents to wartime needs.

Health in Wartime—1 reel—problems of health arising from war, and how they are solved, with a detailed explanation of London's emergency hospital system, arranged in zones to deal with any emergency.

YMCA Motion Picture Bureau Opens Dallas Office

From the Y. M. C. A. Motion Picture Bureau comes news significant of the growth of that organization's film distribution service. On August first an additional Branch Office will be opened at 1700 Patterson Street, Dallas, Texas. This increases the Bureau's branch exchanges to four, the other three being located in New York City, Chicago, and Portland, Oregon. Mr. George J. Zehrung, Director, also reports that 450,000 reels of films were served last year to over 12,000 sound film users.

Just issued by the Bureau is the new 16mm catalog "Movie and Adventure Pictures" revealing many additional subjects added since last year, both to its free industrial films and to its rental subjects. This representative film library embraces films in such subject fields as Art, Aviation, Biology, Citizenship, History, Literature, Music, Natural Science, Industry, Vocational Guidance and Religion. Entertainment subjects are also included.
Some Valuable Literature —

"1000 AND ONE" FILM DIRECTORY

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually in famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

132 pp. Paper. Price 75c. (25c to E. S. subscribers)

The FILM EVALUATION SUPPLEMENTS TO "1000 and ONE"

A new, unique, outstanding service to the teaching field—authoritative film evaluations in card-index format. The first two Supplements are ready—presenting, on 100 standard-size library cards, evaluations tabulated from multiple judgments of the 100 films most widely used and scored—after actual class use—by the Judging Committee of 500 Teachers under the National Film Evaluation Project. Each succeeding Supplement will carry the next 50 films to attain their quota of Score Cards from the Committee. Price per Supplement of 50 cards, with an explanation accompanying, 50 cents (paid if cash with order). (Sold only to owners or purchasers of "1000 and ONE Films," 16th edition)

VISUALIZING THE CURRICULUM

By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman

Prepared in present and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK. (3rd Edition)

By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."


SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation.


PICTURE VALUES IN EDUCATION

By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 156 pp. Cloth. Illus. Price $1.00

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AN ALTERNATIVE FOR REVOLUTION AND WAR

By Albert E. Osborne

A stimulating, wide-range view of the higher potentials of visual instruction in promoting world harmony by a "more humanity-centered education." A pertinent reply to H. G. Wells' dictum that the "future is a race between education and catastrophe."


EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Troller

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.


THE EDUCATIONAL TALKING PICTURE

By Frederick L. Devereux

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of education. The first six chapters deal with the development of fundamental bases of production, with the experiment which has been conducted, and with suggested problems for future research. The remaining chapters discuss the effective use of the sound film in teaching.

220 pp. Cloth. Illus. Price $2.00. (20% discount to schools)

HOW TO USE THE EDUCATIONAL SOUND FILM

By M. R. Brunstetter, Ph. D

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based on extended experience in studying teachers' use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

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THE USE OF VISUAL AIDS IN TEACHING

By Ella Callista Clark, Ph. D.


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Among the Producers

Where the commercial firms announce new products and developments of interest to the field.

Filmstrips on Vocational Guidance

Vocational Guidance Films, Inc., of Des Moines, Iowa, announces 20 new vocational guidance film strips. The authors are Dr. Walter J. Greenleaf and Franklin R. Zeran. Dr. Greenleaf has been with the Office of Education for a number of years, and Dr. Zeran went to Washington recently, having been guidance counselor at Manitowoc, Wisconsin for a number of years. Both men are authors of note in the guidance field.

The first 10 strips are based on the Job Dictionary, recently compiled by the U. S. Department of Labor. All jobs are grouped into seven classifications, namely: Professional and managerial occupations; Clerical and sales; Agricultural, fishery, forestry and kindred occupations; Service occupations; Skilled; Semiskilled; Unskilled occupations; Typical jobs in each classification are presented in the strips. Two strips each are used for skilled and semiskilled jobs.

The second group of 10 cover industrial occupations, crafts, etc. These include: Aircraft operation and manufacture; Textile industry; Surgery; Osteopathy; Printing, optometry, cement, steel, hotel and railroad.

The strips run from 50 to 60 frames. Student guides which accompany the strips are designed for use in the classroom and the contents are such that the students will want to own copies.

First Two Recorded Lectures Released

The first two releases of the new firm, "Recorded Lectures Incorporated," 2727 North Michigan Avenue, Chicago, are now available to all institutions of learning. The first lecture is by Ernest O. Melby, Dean of the School of Education, Northwestern University, and is on the timely subject of "Democratic and Education." The second lecture is by Hugh M. Cole on the subject of military history. Mr. Cole is a professor at the University of Chicago and author of the volume, "War in the Era of the Blitzkrieg." He also is a regular contributor to such publications as The Military Engineer, The Infantry Journal, and Current History, and is heard as military expert on the University of Chicago Round Table over the National Broadcasting System. These recorded lectures are direct electrical transcriptions of broadcast quality which will play uninterruptedly for fifteen minutes in any classroom equipped with a reproducing machine capable of playing records at 33-1/3 revolutions per minute.

"We of Recorded Lectures Incorporated," stated Mr. Gerald T. Stanley, President, "hope that these first releases are only the beginning of a long series of interesting and timely lectures to be delivered by these and many other outstanding men. In our search for lectures and subjects we are guided by the advice given us by interested educators all over the country. We earnestly solicit their opinions as to whom they would like to hear and what subjects they would like to have them discuss. It is our hope that educators will continue to give us their very fine cooperation in this matter. So far their response to the announcement of our company has been most gratifying. Educators from Maine to California have written us giving us lists of the speakers they would most like to hear. We have paid strict attention to these lists, and we are busy now compiling a catalog of releases that will be available for the new school year."

"Recorded Lectures, Inc.,” concluded Mr. Stanley, "plans to serve institutions of learning in much the same manner as publishing houses do with textbooks. Schools will be able to build up a library of the thoughts and theories of today’s outstanding leaders as expressed by themselves, just as in the past school libraries have compiled the printed thoughts of these noted men."

Filmslide on Flag Usage

The timely subject of Flag Etiquette has received extensive treatment in the newest of the Visual Science 35mm filmslides, entitled "The Story of Our Flag." Recent tests have shown that few people have even the vaguest knowledge of the background of historical tradition connected with our Flag. Still fewer persons are aware of the fact that certain fixed rules have been prescribed for displaying the Stars and Stripes.

The film reveals much interesting information, namely; the meaning of the colors, George Washington’s interpretation of the Stars and Stripes, who named the flag “Old Glory,” the story behind Francis Scott Key’s inspiration to write the “Star Spangled Banner,” and that our Flag is the third oldest of the National Standards of the world. Full textual information is included with each picture, clearly indicating just how the Flag may be carried and displayed under all conditions. For instance, it should be raised to the peak before lowering to half staff, and only one other flag may fly at a masthead above the Stars and Stripes on certain occasions.

Credit is given the National Americanism Committee of the American Legion, Encyclopaedia Britannica and others who very kindly granted the use of source material for this work. It is pictorially throughout and may be effectively used in any Patriotic Program by Schools, Churches, Boy Scout and Girl Scout organizations and Service Clubs. No reading script or manual is necessary since the full story appears on the screen. It is sold $2.00 postpaid by Visual Sciences, Box 264 E, Suffern, New York.

Manual on Opaque Projection

Spencer Lens Company has issued a new 36-page illustrated publication on “Opaque Projection, a New Frontier in Teaching,” by J. Y. Taylor, which describes the many applications of opaque projection in modern teaching technique. It has been prepared to help teachers get maximum service from their opaque projectors, by outlining suggested procedures for the use of this equipment in teaching primary and intermediate grades, and high school classes. Definite directions are given for various subjects of the curriculum. The value of the Delineascope as a diagnostic and drill device is also discussed. Some special uses to which the opaque projector can be put effectively are—preparing class for field trips, schools announcements, winning community support for schools, and preparing for promotion. Chapters on screens, darkening the classroom, collecting and classifying material, and a list of picture sources, complete this valuable handbook. It should be a welcome addition to the text material for summer courses in visual instruction.

The manual may be obtained without charge from the Spencer Lens Company, Buffalo, New York. A copy of the Spencer new sales folder, which describes and prices opaque projectors, will also be sent on request.

Shakespeare Album Offered by RCA

Recordings of memorable scenes from six of Shakespeare’s most outstanding plays, enacted by Otis Skinner and his noted daughter, Cornelia Otis Skinner, have been made available as aids to teaching dramatics and literature in the classroom, according to Ellsworth C. Dent, RCA Victor Educational Director, Camden, New Jersey.

The recordings, combined into a single RCA Victor Red Seal album of three records, include The Murder Scene, from Macbeth; The Wooing Scene and Katherine’s Advice, from The Taming of the Shrew; Marc Antony’s Oration, from Julius Caesar; the Potion Speech, from
Romeo and Juliet; Portia's Mercy Speech, from Merchant of Venice, and The Seven Ages of Man, from As You Like It. The album is designated as M-753.

"Never before has it been possible for the school teacher to enlist such skilled talent to aid in teaching dramatics and literature within the confines of the classroom," Mr. Dent said, "The Skinners bring an authentic flavor of the theatre to every student hearing these recordings of the most memorable passages in Shakespeare.

DeVry Elects New Officers

William C. DeVry has been elected to the presidency of the DeVry Corporation, 1111 Armitage Avenue, Chicago, succeeding his latey deceased father Mr. Herman A. DeVry. Another son, Edward B. DeVry, was selected secretary and treasurer of the Corporation and president of its educational subsidiary, DeVForest Training, Inc.

The new officers include chief executive of the three-decade-old projector manufacturing firm was in charge of its selling organization at the time of his father's death. He brings a wealth of experience in film production and projection to his post, having actively produced motion pictures for some years before he joined his father's organization in 1930. Edward B. DeVry has served the projector manufacturing organization since 1926. Having served for a brief interval in the field of industrial film production, he is also well versed in the problems of equipment user and producer.

The Literature in Visual Instruction

(Concluded from page 254)

by John S. Carroll, Significant trends are described by Erickson as: 1) Recognition by educators of the value of audio-visual aids in the curriculum; 2) increase in teacher training activities; 3) a greater interest in the use of sound films by teachers seeking professional growth and promotion; 4) increasing availability of sound film projectors; 5) growth in provision for using projectors by equipping classrooms with proper electrical facilities and dark shades; 6) extension of the use of the sound film projector for auditorium and classroom showings and for the public address system; 7) growing membership in the Department of Visual Instruction, N.E.A.; 8) keen interest in meetings on the use of audio-visual aids. An excellent graph for indicating the extent of this growth accompanies the article by Dent. Curriculum workers, who have been slow in recognizing the special problems involved in the use of film, will find many helpful leads in the article by Carroll.

William F. Kruse repeats his conviction that feature films of theatrical origin have educational value in auditorium showings in the school. His article is profusely illustrated and is entitled, "The School Auditorium as a Classroom."

There is also included in this bulletin a survey of new filmstrips now available in defense training.

Sight and Sound—British Film Institute, 4 Great Russell St., London WC1—Winter, 1940-41

It is interesting to read this issue with a view to noting what visual educationists think and write about during national crises, and more important, what chance there is for progress during war-time. The news notes and editorial comments reveal that the members of the Film Institute are still very much concerned about educational film production, and that there is some measure of free speech permissible even during these times. For example, the editors deplore the fact that in the past year only four films have been produced, but place much hope in the fact that the British Council has agreed to make educational films as part of their cultural program.

An article entitled, "Nationalise!" by Brian Smith, brings a plea for government ownership of the British film industry in order that better British films might be made and Hollywood imports minimized. A reply is published by Michael Balcon who points to the unlimited resources of the Ministry of Information in the film field, and evidence that government ownership won't work. His solution is rationalisation, or encouragement by the government of private film companies.

The perennial controversy "Sound or Silent?" is also included in a review of the Scottish Film Council's recent report.

Building America—Sponsored by the Society for Curriculum Study, distributed by the Americana Corporation, 2 West 45th Street, New York City, Vol. VI Nos. 1-5. 30c per copy

The first five titles in the 1940-1 series of these pictorial studies on modern problems and progress include: 1) Problems of a nation in travail, 2) Ships and men—a discussion of our Merchant Marine, 3) Banking—the part our banks will play in national defense, 4) Rubber—its production, possible loss of supply, development of new sources, 5) Radio—it's story from the experiments of early inventors to the newest of the radio arts.

SOURCES OF INFORMATION


This is another in the series of teaching aids recently distributed by the Office of Education for conservation education. The evaluated film listings are especially good because they indicate ways of using as well as a description of each film. In fact, for each title mentioned there is practically a teachers' guide to help in planning for its use. This listing has been prepared for elementary school classes. The December, 1940 issue of Secondary Education furnished a similar listing for secondary school classes. Both were prepared by Dr. Effie G. Balturk for the Office of Education.

Sources of Free Teaching Aids—Ruth M. Holmes, Lock Haven State Teachers College—Lock Haven, Pa., 1941 50c 84p.

An alphabetically-arranged listing of sources of pamphlets, posters and charts. The volume is the result of a study made by students in Visual Education under the direction of the author. Among the uses for such free materials in the educational program are: 1) As source of information on industrial processes; 2) as visual aids; 3) for an enriched reading program; 4) for a remedial program; and 5) for practical experience in writing business letters; and 6) to help in building a classroom library.

It is obvious that the information has been carefully organized and checked by expert library standards.

Safety Education—A Tentative List of Visual and Teaching Aids—compiled by Lili Henners, Director, Visual Aids Service, New Jersey State Teachers College, Montclair, 1941. 6 pp mimeo. 12c

Lists sources of materials—nims, slides, charts, posters, booklets, etc.—for teaching safety: automobile safety, bicycle safety, safety in sports, play and the home. Briefs the first aid. Gives complete information on what is available from each source, with prices.

Children's Books

Fun at School—B. F. Holland and Gerald M. McDaniel—Steck Co., Austin, Texas 1940.

A primer for children of Mexican descent. The authors also recommend it for developing an appreciation of Latin American children. Photographs of Mexican-American children at school and at play are the basis for the reading material. The teachers' manual which accompanies the primer is designed to give concrete assistance to teachers whose pupils cannot speak English when they enter school.

True Comics—vol. 1 No. 1—Published bi-monthly by the Parents' Institute, 52 Vanderbilt Ave., N. Y. $1.00 a year. David T. Marke, editor.

In format and color this 64-page journal resembles the hundreds of comics and super-comics now being circulated among young people everywhere. But True Comics deals with exciting historical and current events. The villainous anopheles mosquito is wiped out in the story of Yellow Jack; the numerous escapades of a genuine Bandit are those of Winston Churchill; cowboys and Indians serve as the background for the story of George Rogers Clark, "Frontier Fighter". The interest in things material is served by drawings about the first naval submarine and the air war. Latin American history is represented by a biography of Simon Bolivar.

Thus is the fervid interest in comics properly channeled to more socially desirable themes. Because of the great amount of research which accompanies each issue, we may well accept True Comics as a new visual aid.
HERE THEY ARE

A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3) 1425 Williams St., Denver, Colo.
Bailey Film Service (3, 4) 1615 Cosmo St., Hollywood, Cal.
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago

(See advertisement on page 228)

Borden Company, Consumer Relations Dept. (2) 350 Madison Ave., New York City
(See advertisement on page 254)
Boston University, Division of Teaching Aids (3) 84 Exeter St., Mass.
(See advertisement on page 251)

Castle Films R C A Bldg., New York City
(See advertisement on page 225)

College Film Center (3, 5) 59 E. Van Buren St., Chicago
(See advertisement on page 260)
Coronet Productions (2) Glenview, Ill.
(See advertisement on page 259)

DeVry School Films (3, 4) 1111 Armitage Ave., Chicago

DeVry Visual Education Service (1) 730 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Stores, Inc. Kodascope Libraries 356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3) 1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films, Ltd. 1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsh & Kaye (3) 239 Grant Ave., San Francisco, Cal.

Holmes Projector Co. (3, 6) 1813 Orchard St., Chicago
(See advertisement on page 262)

Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago
(See advertisement on page 260)


RCA Manufacturing Co., Inc. (2) Camden, N. J.
(See advertisement on page 267)

S. O. S. Cinema Supply Corp. (3, 6) 636 Eleventh Ave., New York City

United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.

Visual Education Service 131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2) Old Colony Bldg., Des Moines, Ia.
(See advertisement on page 256)

Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3) 347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
(See advertisement on page 263)

MOTION PICTURE MACHINES AND SUPPLIES

The Ampro Corporation 2839 N. Western Ave., Chicago
(See advertisement on page 253)

Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago
(See advertisement on page 258)

DeVry Corporation (3, 6) 1111 Armitage St., Chicago
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Hirsh & Kaye (3) 239 Grant Ave., San Francisco, Cal.

Holmes Projector Co. (3, 6) 1813 Orchard St., Chicago
(See advertisement on page 262)

Ideal Pictures Corp. 28 E. Eighth St., Chicago
(See advertisement on page 260)


RCA Manufacturing Co., Inc. Camden, N. J.
(See advertisement on page 267)

S. O. S. Cinema Supply Corp. 636 Eleventh Ave., New York City

United Projector and Films Corp. 228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. Davenport, Iowa
(See advertisement on page 255)

Visual Education Service 131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

PICTURES

Informative Classroom Pictures 44 N. Division, Grand Rapids, Mich.
(See advertisement on page 264)

RECORDINGS

Recorded Lectures, Inc. 737 N. Michigan Ave., Chicago
(See advertisement on page 257)

SCREENS

Da Lite Screen Co. 2717 N. Crawford Ave., Chicago
(See advertisement on page 258)

Eastman Kodak Stores, Inc. 1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc. 918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILM SLIDES

Edited Pictures System, Inc. 330 W. 42nd St., New York City
Ideal Pictures Corp. 28 E. Eighth St., Chicago, Ill.
(See advertisement on page 260)

(See advertisement on page 229)

Radio-Mat Slide Co., Inc. 1819 Broadway, New York City
(See advertisement on page 261)

Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Visual Education Service 131 Clarendon St., Boston, Mass.

Visual Sciences 228 W. 42nd St., New York City
(See advertisement on page 260)

Williams, Brown and Earle, Inc. 918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co. Rochester, N. Y.
(See advertisement on page 226)

DeVry Corporation 1111 Armitage Ave., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc. Kodascope Libraries 356 Madison Ave., New York City

Eastman Kodak Stores, Inc. 1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films Ltd. 1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsh & Kaye 239 Grant Ave., San Francisco, Cal.


RCA Manufacturing Co., Inc. Camden, N. J.
(See advertisement on page 267)

S. O. S. Cinema Supply Corp. 636 Eleventh Ave., New York City

United Projector and Films Corp. 228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. Davenport, Iowa
(See advertisement on page 255)

Visual Education Service 131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

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(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) indicates 35mm sound and silent.

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"Chile and Bolivia"
"Peru and Ecuador"
"Hawaii"
"Life in the Mountain and Plateau States"
"Expanding Frontiers beyond the Mississippi"
"Our Neighbors in Eastern Canada"
"The Atlantic Frontiers"
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Living With Chinese Children

Enriching a fourth grade unit on China with an ingenious utilization of the sound film.

RUTH LIVERMON
Principal, Meadowbrook School, Norfolk, Virginia

The fourth grade Teacher and the school nurse examined the health chart. A thin looking, wistful child approached and asked the nurse, "Will I get my five point health certificate this term?"

The nurse glanced at the chart and then at the boy, "Joe," she replied, "Have you had your teeth filled?" The boy shook his head. "Did you brush your teeth this morning then?" persisted the nurse. Down went the boy's head. The nurse turned to the class. "How many of you remembered to brush your teeth this morning?"

She looked at the teacher, "Miss Turner tells me that today you are going to study a film. It is about a family in a faraway land. Will you look and see if the children in that country brush their teeth? If you find out, will you come and tell me? I'll be in the doctor's office downstairs."

"Suppose we write on the board what we want to look for in the film," Miss Turner suggested. "Question 1. Did the children brush their teeth?"

"Mary, what did you eat this morning for breakfast?" asked Miss Turner. "Oatmeal and hot chocolate," replied Mary. "Well, let's see what these children in the film ate for breakfast—probably not oatmeal and hot chocolate." Henry spoke up, "Where did these children live, Miss Turner?"

"In China, and the film we're going to see is called, Children of China. Jane spoke up, "I got some real Chinese pajamas for Christmas. I'd like to know if they wear those things in that country."

Miss Turner said, "We're going into their class in school, too. I wonder if you will watch what they do in their school work." Harry hurried puffing into the room. "Why, Harry, you are late," exclaimed Miss Turner taking out her attendance book. "Oh, Dad, couldn't get the car started. Battery ran down or something. It might be something else though. He's had trouble all this week."

"Well, suppose we see how Chinese children and their older folks get from one place to another," said Miss Turner. Harry resumed, "Gee, Dad was mad. He'll be late to the office and does that burn him up."


When the class assembled all the questions to be studied, they were:

1. Do Chinese children brush their teeth?
2. What do they eat?
3. What do they wear?
4. What do Chinese children do in school?
5. How do they get from one place to another?
6. How do Chinese fathers make a living?
Immediately after the film was first shown, the class discussed these questions. They discovered that Chinese children had no milk for breakfast. Why was this? Miss Turner asked. "Because they smiled and laughed a lot," answered the child. "Wilma thinks the Chinese boys and girls in the film were happy. What do the rest of you think?"

"Let's see the film again and make a list of what we find out on this," said Harry. The film was presented again for the enlarged purpose of discovering this deeply emotionalized attitude. In the discussion of Chinese happiness which followed this film showing, significant remarks were:

1. "They were happy listening to the music. They didn't have to listen to it."
2. "People do not have to laugh out loud to be happy."
3. "The man playing the violin was happy. He wouldn't play any instrument if he didn't want to, and if he didn't like it."
4. "Mei-ling was happy playing with her baby sister because she was helping someone else."
5. "King Chang and Shiu Ming were happy because they were not fussing with each other."
6. "Father Lee was happy because Mother Lee brought him something to drink in the fields."
7. "Mother Lee was happy because she was doing something for Father Lee."

One day when the fourth grade went for their lunch in the cafeteria they were astounded to see an old foreign woman serving the milk. Upon asking, they discovered that she was the Chinese cook of a Navy family, and that she had been born in Canton.

"Let's invite her over to see our film," said Joe. "What shall we call her in our letter?" several asked. A committee was formed to go and ask her name. Even when she told them, they found it difficult. At length they decided to invite her as "Dear Friend".
Ah Sean came, enjoyed the film with the class, and stayed all morning, answering questions and telling the class about her life in China.

During the work on the class mural the art committee saw the street scenes of the film several times to verify details for their own drawing. As the unit broadened its scope, the following activities grew from the frequent use of the film:

1. Visits of Chinese in the local environment.
2. Committees were formed to explore the local stores and find out what articles China contributes to our markets of trade.
3. Art committee wrote to the Metropolitan Museum of Art for catalogue of their Chinese art available through post card collections.
4. Committee wrote parents inviting them to see the film.
5. Postal authorities were consulted to discover route and time of mail to different parts of China.
6. Committee investigated the route of the China Clipper.
7. Chinese lunch of rice and tea was prepared.
8. Visit to local art museum.
9. Visits made to private collections in the city.
10. Class mural of street scene drawn.
11. Committee wrote to tea companies asking for material.
12. Collections of different kinds of tea made.
13. Visits made to docks to see goods imported from China.
14. Charts showing comparison between Chinese and American customs were made.
15. Chinese music was sung and studied through victrola records.
16. Patterns used on China such as blue willow, dragons, were studied.
17. Drawings were made of different Chinese and American symbols of religion.

18. Letters written to the junior Red Cross asking for the names of Chinese children to whom the class might write.
19. Charts were made of foods of China and America.
20. Differences in transportation were brought out through drawings and charts.
21. Scrapbooks of items and pictures in this school were made to send to children in China.
22. A committee investigated the local radio station to find out if anyone had ever heard China over the radio. They sought to learn also what places in China broadcast and when.
23. Drawings and pictures were made to show contrast between Chinese and American means of communication.
24. Art committee investigated and reported on the color, “Chinese red.”
25. Conversations were written about what a member of the Lee family would think interesting or strange about a visit in their homes.
26. Investigated, through the Boy and Girl Scout Organizations, about chapters in China.
27. The film was presented without the sound. Several of the class acted as narrators and told the story of the film.
28. This activity was repeated when the parents came to visit.
29. Costumes were bought in the stores and made for the exhibit.
30. Chinese articles were collected and presented in an exhibit.
31. Chinese newspapers and stamps were collected.
32. Chinese bowls of paper mache were made.
33. A Chinese ship was visited. Pictures were taken of it for the scrapbooks.
34. One of the Chinese visitors was asked to write each child’s name in Chinese. Each child then made a large chart of his name.  

(Concluded on page 307)
Use of Filmstrip to Assist Retarded Readers

A concrete example of the value of this visual aid in the classroom, which should suggest other possibilities for its effective use.

ESTHER L. BERG
Public School 4, The Bronx, New York

It was found in P. S. 4, of which Mr. Simon Hirshansk is Principal, that the work in reading in the third and fourth years was poor; hence, these years were departmentalized for a one hour reading period daily. We gave the Metropolitan Reading Test and then grouped the children according to the results. Since we have six teachers in the fourth year, we have six reading groups. The two bright groups have in them 45 children, and the work is on an advanced level. The two slowest groups have 20 and 18 children each and are doing very elemental work, practically all individual. The third year has five teachers, so we have five groups. The slowest third year group is composed of 15 children whose reading achievement is from .4 to 1.9. The work is graded to their ability, and emphasis is placed upon phonics. Many devices are used to create an interest and a desire to learn to read.

One of the most interesting and perhaps the most effective devices we have tried is the use of stripfilm. The picture is elemental and the reading simple enough for 1B children, so that these retarded older children are able to read it fairly fluently.

The filmslide we used consisted of a series of titles and pictures which told the story of "Little Sambo." The story was told, step by step, followed by the picture illustrating it. There is a definite continuity in the captions, and the drawings are of the simple line type, without too much detail. This type of visual aid permits of a flexibility in its use, as the caption can be read, followed by the picture; or the picture can be shown, and the caption then read. From the teacher's viewpoint, it would be wise for her to be familiar with the captions, so that she can direct the children's vocabulary.

The result of the use of this device was amazing. Not a child was inattentive; there was an eagerness to read correctly and with expression; and many words beyond their reading age level, as beautiful, umbrella, bazaar, jungle, etc., they attacked without hesitation, pronounced correctly and recognized outside of the text. Psychologically, there was a definite gain in morale, as the children had a feeling of satisfaction and accomplishment. In this regard, these third year children did not have a feeling of inferiority, which comes from reading a pre-primer.

It might be well to plan a series of reading lessons, using the stripfilms that deal with the folk stories, nursery rhymes, etc. with which the children are familiar. We do not advocate this as a panacea to eliminate all reading difficulties, but it does promote interest and serve as an incentive to read, which is a necessary factor, especially for non-readers.

As a further development of the use of the stripfilm, it might serve the second and third year normal readers as an enrichment to their reading program. The children could make their own story slides and write their own captions. In addition, at a higher reading age, the children could view the stripfilm and refer to the original stories, comparing and discussing the techniques, etc.

This short outline serves to show that the use of stripfilm in the classroom has many possibilities, not only for the non-readers, who are limited in their capacities, but also for those who are advanced in reading and with whom stripfilms can be used to enrich the regular reading periods.
YOU can do it; all you need is a station. What kind of station? Radio—not police. Let me tell you what this is all about: it is my intention to weave these print tracks into a pattern that will give you a picture of the preparation and production of our high school radio program.

In September of 1939 our high school for the first time decided to go on the air each week for thirty minutes over our local station. With an enrollment of some fifteen hundred students to help us, with radio the already mature handmaiden of hosts of competitors for the public's attention, and with the conviction that we could and should use the magic of radio to pull out the latch strings of our community homes, we started to work.

I write of "we." This pronoun refers to a committee of four teachers and our principal. Where, you may well ask, were the students? They were patiently waiting for the more experienced competence of their elders to determine the nature of the program to be presented. Certainly, we concluded, any program that was too academic or pedantic must be avoided. Our broadcast material, however, must not be unworthy of the standards of quality we seek to maintain in our classrooms. This, then, was (and is) our chief objective: to present an educational program of sufficient intrinsic worth to justify it as an educating activity, and to present this program in such a manner as would get a favorable reaction from as large a listening public as possible. This effort to keep one eye on education and the other on public interest, needless to say, is quite hard on the eyes.

Having determined broadly our objective, we took stock of our resources and our problems. We found that we had two disadvantages somewhat peculiar to our situation. These obstacles were serious ones, but not insurmountable. In the first place, we have no speech department; consequently our supply of capable "voices" was limited to a relatively small number that had been discovered in school plays and in oral English work. In the second place, we have no individual instrumental instruction, no orchestra, no string groups, nothing except a band and program of glee club work. Now your band can make a recording of your school song to be used in opening your program, but probably very few persons will ever turn off a good string ensemble in order to hear a high school boy play a bass drum solo.

But let us turn to the advantages of our situation—advantages which I believe almost any school may expect in beginning its broadcasts. We quickly obtained the interest and support of our teaching staff; in fact, I do not recall that assistance solicited from any teacher has ever been refused. Their attitudes would indicate that they envision the march of students to the microphone as much an integral part of our public school service as the teaching of agreement of subject and verb. Then, too, we have enjoyed the enthusiasm and dependable cooperation of a sufficient number of able students to guarantee the preparation and presentation of our programs. Of this I am certain, the burden of any program, properly conceived and directed, can rest upon the shoulders of capable student workers, and you can still have a program that will win parental approval and community interest.

We found, too, to our advantage, that there is an inexhaustible fund of material out of which programs of interest can be created. A vast number of subjects ranging from autobiography to far beyond quiz can be presented. And, of course, the most vital of all the conditions favoring our program was the fact that the radio station wanted us on the air. Your station manager signs an agreement to use his station to render a certain amount of public service and he is looking for people who can help him do a good job of it.

Having our general objective now in mind, and being cognizant of our advantages and disadvantages, the Radio Committee selected the following type of program as being most likely to succeed. Each regular program should give news of the school activities for
A stimulating presentation of one school's performance in the field of radio—and the advantages derived therefrom.

The coming week, include student instrumental or vocal talent and present a dramatic biographical sketch of some outstanding personality out of our city's past. To inaugurate the series the superintendent of schools and the high school principal appeared on the initial program. The moral force given this experimental enterprise by the appearance of these administrators on our first program was most helpful; they ably availed themselves of their opportunity to present to the community some of the problems confronting our school.

Our school paper assumed the responsibility for broadcasting the school news. Each broadcast was an assignment to a staff reporter. Our band instructor and the director of our glee club rendered their assistance in ferreting out individual musical talent. A band recording of our school song opened our program; a vocal recording of the same closed it. The dramatics department took the responsibility for selecting students capable of presenting our scripts. Our typing department took over the work of typing sufficient scripts for each cast. Honestly, it was remarkable the way the difficulty of the problem resolved itself into a number of simple tasks. Our most masterly achievement in this direction, however, was in gaining the consent of teachers to supervise student groups active in the preparation of the scripts to be produced. These teachers aided student groups in securing, selecting, and preparing their biographical material in the form of dramatic contributions.

An additional word should perhaps be said regarding the preparation of these scripts. The local historical society, the school and public libraries, the "old-timers" of the community, all made their contributions of material. With the use of model scripts and a list of suggestions worked out from a study of many samples, the student groups worked their biographical material into radio dramatizations. Then matters of English and accuracy of information were checked in conference with the teacher-sponsor; the script was revised and made ready for presentation.

The rehearsal of the dramatic scripts took some three hours time for each fifteen minutes of time on the air. The students cast by the dramatics instructor were turned over to a member of the Radio Committee for these rehearsals. Working with the sound man and the student announcer, the cast completed their final auditioned rehearsal. We were on the air!

Well, we stayed on the air with this series during the school year, 1939-1940. In attempting to achieve our dual objective—namely, "to present an educational program of sufficient intrinsic worth to justify it as an educating activity, and to present this program in such a manner as would get a favorable reaction from as large a listening public as possible"—certain compromises were, of course, necessary. For example: to have kept the musical portions of our program on the highest possible cultural level would have greatly limited the range of usable talent and the interest of students. Consequently, we conceded the inevitable "hot" vocals a minor place on our programs. Such compromises are both reasonable and democratic. If, however, any reader thinks that the general cultural level of a radio program can be no higher than the level of average cultural attainment of the student body, then with that person our entire radio committee and I decidedly disagree.

As we looked forward to another season last year we also looked back over our long and varied experience of a single year. And in doing so we naturally asked ourselves two questions: first, what net benefits accrued to our school from our entry into this activity which was new to us the year before; secondly, what positive suggestions do we have for a new season?

Those students who participated in the preparation of the biographical dramatizations received training in community research. They investigated the facts regarding the lives of many of the outstanding men and women of our community. As they gathered their material they learned political methods of obtaining coop—

(Concluded on page 312)
MOTION PICTURES NOT FOR THEATRES

By ARTHUR EDWIN KROWS

"JERRY" HAMILTON then, in 1927, was in charge of lectures and motion pictures in the General Information Department of the Pennsylvania Railroad. He had come there in 1922, when Leonard Ormerod, who headed the Department, had requisitioned camera and lighting equipment for film production. When the apparatus arrived, Ormerod sent it to Hamilton, indicating the strange tools, and told him to "get busy." The new assistant was naturally taken aback, but not for long. He proceeded at once to learn what the apparatus was all about, and, in the next five years, to expose approximately half a million feet of negative for the production of about a score of exceedingly serviceable pictures ranging from one to six reels apiece. During the first year he composed his own scenarios, directed, photographed and lighted every picture, then wrote all the subtitles, and edited the footage. He even personally developed some of the negative. By way of rounding out the experience, Hamilton had also served an apprenticeship in finding audiences. When he had produced a sufficient number of subjects to warrant the undertaking, he had organized a regular distribution, shipping telephone films to theatres that would run them—and they generally did—from centers established in Philadelphia and Pittsburgh.

His camera had a "stop-motion" attachment, so, after his first production year, he undertook to photograph his own technical animation with an improvised setup. Results were sufficiently encouraging to prove that the method was effective, and when Arthur Loucks, then representing Bray Pictures, called to solicit a production order, he was commissioned to make a professional subject, a screen cartoon entitled "Treat 'Em Right." This, presenting common abuses of the telephone, became popular, selling some 120 prints and being exhibited throughout the Bell System. A succeeding industrial cartoon, "My Hero," was produced by Loucks & Norling, who by this time had left Bray and set up their own independent business.

Carlyle Ellis made several productions for Stokes in the silent films period, and I wrote continuities for a couple. For all who came in contact with Stokes and his high conception of the work to be done with films in public relations it was a stimulating, elevating experience. From time to time unworthy enemies of Big Business have tried to link the motives back of these Bell System good will films, alleging their misuse as propaganda in rate drives; but no such charge has ever been made to stick when the facts have been investigated.

Hamilton joined Stokes in New York October, 1927. In 1929 Stokes resigned to join Electrical Research Products, Inc., and Hamilton was promoted to succeed him. Since then Hamilton has supervised all Aeron Telephone and Telegraph motion picture productions made for the use of Associate Companies of the System.

Utilities

With the example set by Edison himself in producing educational films, the electrical interests were not as prompt as might have been expected in instituting film departments. The New York Edison Company, stirred by its active leader, Arthur Williams, who died in 1931, was among the first to recognize that the educational possibilities of the telephone were greater than anyone had ever realized. The first detailed history of non-theatrical films continues with Part 29 and still more about groups that produce their own propaganda subjects.

HAMILTON Picture Bureau that the General Electric Company instituted its Visual Instruction Section, using films.

C. F. Batcholts, who headed the section, was then aged about 36 years. He was a man of much ability, conscientious and loyal, but rather an odd character. One of his peculiarities was a widespread boast that he had never remained overnight in New York City which he evidently disliked. But despite the quirks, which his friends attributed to his independent and unusual health, he did excellent work to establish the General Electric Film Service. He took his duty with a seriousness which is indicated by his enrollment in the Society of Motion Picture Engineers in 1918, and by the long continued circulation of the subjects prepared under his supervision. He retired from the Section about 1928, being succeeded by John Klenke, who, in 1931, relinquished the place in turn to John G. T. Gilmour, born in Schenectady and educated to a B.A. at Union College, had been cameraman and production manager. He was in the department for some time previously. In November, 1939, Gilmour was transferred to the General Electric television station, W2XlB, the vacated film post being filled by Charles R. Brown. Of late years, in circumstances which will be sketched later in this history, many sound films have been produced for General Electric, but in the active list of silent films available for non-theatrical distribution from that source remain about fifty technical and popular subjects.

Two well-known organizations which had gone into large scale production for theatres, schools and industrial subjects, only to be reduced suddenly, were the Ford Motor Company, with its "Ford Educational Weekly," and the Canadian Pacific Railway, which allegedly spent about half a million dollars in the purchase of the old American Gaumont plant at "Flushing. This particular railroad project was terminated on the generally excellent advice, it is said, of the celebrated public relations counsel, Ivy Lee, just when authoritative journals were hailing the intended work as "the broadest gesture so far in industry rising to the educational possibilities of the screen."

American railroads were actually much disposed to use films in public relations work. The very nature of the business offered innumerable opportunities for producing attractive pictures which would be welcomed in theatres as well as in churches, schools, clubs. "Ray-Bell" shocked 100,000 feet of scenic material for the Northern Pacific in 1925, and the New York Central also considered reels of the same character. But the In-
terstate Commerce Commission, given increased powers as repeated investigations revealed irregularities in rail practice, so strictly limited advertising appropriations.

It was this situation, no doubt, which impelled Ivy Lee to advise the C.P.R.R. as it seems that he did. In all likelihood it was the imminent, rigorous investigation of public utility companies which arrested the natural use of demonstration films in various forms of municipal service such as urban transit, lighting and water supply.

One successful method whereby the "regular" lines of business could avail themselves, without serious criticism, of the new way to cultivate good will, was to make films which in themselves were of undeniable value to employee welfare or, more generally, of public benefit. Thus, there was nothing but praise for the Central Railroad of New Jersey when, in the summer of 1917, its own photographer, Felix Guyette, working under direction of Charles Davenport, produced a real on safety. This was a favorite cause warmly supported by the Public Service Corporation of New Jersey. However, the approach was not peculiarly New Jersey's. In 1923, for further instance, the Boston Elevated Railway made a safety film in cooperation with the Boston Conservation Bureau.

Nevertheless, to the Public Service Corporation of New Jersey—or its earlier organization, if the corporation does not date so far back—probably should go the pioneer status, for its celebrated director of safety education, Alston J. Van Brunt, is said to have supervised the making of a film in the department of his especial interest, about 1904. It was one of the side industrial productions, I understand, of the old Edison Company. I am not well acquainted with Van Brunt in his later years, so I produced some of his subjects. He made a new one annually, as a rule, using employees of the corporation as actors.

His department, at the headquarters in Newark, was ruled with the proverbial rod of iron, but was pervaded by real respect and affection for him on the part of John Orth, his first assistant, his projectionist, William Alexander (who was also Balcom's chief projectionist for the public schools of Newark), and his various other direct associates. It is undeniable that Van Brunt, who died suddenly in his office about 1934 at a ripe age, made a marked contribution to the protection of life and limb in a wide area, far beyond the borders of his State. It may be added that he was an enthusiastic and active member of the National Safety Council.

The New York Central Railroad found the I.C.C. barriers less difficult to surmount when it made films for farmers through its Agricultural Department at Chicago. From the regular advertising department, in New York, others were added and frequent use of the Hudson Valley. Three or four of these were produced for the Central by J. L. Barnard, and given distribution through granges. "Barney" Barnard, as we used to call him, had been a newspaper reporter in

Safety campaigns of the Public Service Corporation of New Jersey owed their effectiveness almost as much to A. J. Van Brunt's personal drive as to force of the utility itself.

Los Angeles, He had worked his way into a publicity position at the Thomas H. Ince Studios, and Ince belonged importantly to the Triangle Film Corporation, where Carlyle Ellis, Charles Barrell and I were also then employed. It is said that in the production of "The Birth of a Nation" he was one of Griffith's fifteen or so assistant directors.

After the War Bernard made his way East and after working briefly at Universal, set himself up as an industrial producer. He was competent, hard-working, and quickly became popular. Barrell gave him a few directing jobs for Western Electric, and he acquitted himself creditably there. His principal clients otherwise were the Jersey Cattle Club, the Masons and the New York Central. He had his two sons at a private school outside the city, and I remember that he used to make a picture for the institution each year to pay for their tuition. But one day along came the Florida land boom and he was caught in it. When that exploded, and most of his prospects with it, he landed for a breathing-spell on his father-in-law's ranch in California. Eventually he made the connection which he held until a grave illness in 1941, of reporter on the Los Angeles Herald-Express, the same newspaper which had employed him thirty years before. The topos-turvy motion picture business is filled with ironic coincidences like that.

I have just counted the names of over five hundred industrial concerns which, in the "silent" period of the half-dozen years prior to the popularization of talking pictures, had so-called motion picture departments for the distribution of films produced expressly for themselves. Some were sizeable and all were serious. They generally told just manufacturing stories. The duPonts and the Hercules Powder Company were stressing explosives rather than their many present by-products.

Pictures sponsored by the Goodyear Rubber Company, of Akron, Ohio, showed that concern to be waxing enthusiastic over what latex could do. The New England engineering firm of Stone & Webster unreeled the saga of modern machinery which scooped and rattled coal from the bowels of the earth.

The Heinz Company of Pittsburgh, guided by its thoughtful advertising chieftain, Franklin Bell, announced new motion on food products, and bewailed the lack of a proper color process with which to glorify its tomato ketchup, chill sauce and soup. In Kansas City Paul Kendall expanded his film section of the Long-Bell Lumber Company, instituted in 1915.

The insurance companies, suspect with all other Big Businesses of the day, kept their film propaganda beyond vile accusation by their happily discovered themes of the prolongation of life and the proper safeguarding of property. None of these made a more genuinely useful job of it than the Metropolitan Life Insurance Company, guided by its Third Vice-President In Charge of Health and Welfare Work of Policy-Holders, Lee K. Frankel, and later, by his successor, Dr. Donald B. Armstrong. Several of the most successful silent productions for this account were made by Carlyle Ell. Their reports were chiefly on prevention and cure of tuberculosis, diptheria immunization and periodic health examination.

Benefit of Clergy

The clergy had been interested unremittingly in the church uses of films, as these pages have amply indicated, from the start of the industry; yet, here was even an added effort of the customers at this time to take matters into their own hands. In this direction, however, the interest was not necessarily in the commercial or competitive sense, but in the positive, predominantly educational and informative use of films in their own institutions. This was the time in which the Hollywood industry was pursuing the "talkie" or "sound" as a successful medium, and in which the public was beginning to feel that it was "too dangerous, too exciting, too everything" for the clergy and church workmen. As a matter of fact there are many points of identity in the forces of drama and religion. Despite their frequent falling-out, the theatre, in all times and climes, has had its origin in religious ritual, and has grown under the fostering care of the priests. Apropos of this, it is ironical that in 1922 the editors of the Christian Herald should have invited audiences "to illustrate the relation of movies to the church." It is perhaps more pointed to remark that the Reverend William Sheafe Chase, while one of the most uncompromising leaders of the movement to censor motion pictures, purchased a Simplex projector and showed films occasionally to his Sunday Schools and adult congregations at St. Peter's Church in Brooklyn, New York.

There may be close resemblances in the respective dramatic tastes of church and theatre, but there are sharp differences at the same time. Because there are, clergymen and their own. They wanted them also for doctrinal reasons. I have been told that approximately fourteen separate film versions of the life of Christ have long been in active cir-

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Visual Instruction in New England

Organizing the Visual Program in the School

HOWARD A. SMITH
High School, Milton, Mass.

Many administrators and teachers too often think of "Visual Instruction" only in terms of movies—in fact the theme of visual aids are synonymous. The use of some type of visual aids has been a characteristic of our schools for more than fifty years. The older methods consisted largely of using pictures and taking of field trips. The teachers usually had smaller classes and such instruction served their purpose fairly well. Too often, today, teachers tend to use a movie instead of taking a trip or performing a difficult demonstration experiment.

From the point of view of the pupil, a trip to Yellowstone or Washington, D. C., is superior to a movie on the subject. A serious defect in many of our school systems is the lack of any readily available time for lengthy field trips. This defect is not as easily remedied as it may seem. In Milton High School, where I have charge of visual education, the biology department regularly schedules field trips on bird identification and habits twice a week during May and early June. Since the birds are best observed in the early morning we scheduled the trips at 5:45 A. M. You might think it would be impossible to have any sizable voluntary group at such an hour. Nevertheless we have to limit the number and require "signing up" a week in advance. The pupils learn a great deal about birds, and, what is more important, find the early morning is one of the beautiful parts of the day.

Since the theme of the afternoon meeting is "Visual Instruction in New England" I should like to summarize briefly the status of Visual Education in this section of the country. There are not many school systems that have a full time director of Visual Instruction. I know of only four—Boston, Quincy, Providence and Bristol, Conn. However, in each of the places named the work being done is excellent. I wish we might have the opportunity of visiting one of theses places.

In setting up a department one of the first tasks of the Director of Visual Education is to make a survey of materials and equipment already in the possession of the school. Undoubtedly, there is much material that most of the teachers do not know about, or that has been monopolized by one teacher. A mimeographed list of such materials should be given to each teacher.

A Department of Visual Instruction must plan much of its work months in advance. The director must cooperate with teachers and supervisors in working out a visual aids program for each course of study. The possession of each teacher's schedule is a great help. Printed forms giving the name of the visual aid, date, hour, and room should be given to each teacher as a confirmation of the booking order. After the visual aid has been used the teacher should fill out a report as to its value, correlation, etc. These reports should be kept on file as they are valuable in planning future programs. A complete cross reference index file of films by name and subject is a necessity.

Many systems are neglecting an excellent source of free visual materials.

The New England Museum of Natural History, the Museum of Fine Arts, and the Children's Museum all offer excellent exhibits in the schools. The director should aid the teacher in securing them. He can also assist in making the necessary arrangements for school museum trips. It is impossible to obtain maximum benefits if a class arrives unexpectedly. If notified in advance, the exhibits can usually give such groups special attention. The director should list the museums, favorable industries, and points of specific interest studied in the curriculum and give mimeographed copies to the teachers.

The selection of visual aids and films should be done entirely by one person. There should be a departmental director, judgment on such items. There must be a decision as to the relative value of renting or owning films. Usually the smaller medium sized school system can save money by renting. The films can usually be secured when you want them, if you place your order in advance. Considerable judgment is necessary to select the few excellent free films from those that are of little value or contain too much advertising.

A program of in-service training must be developed. This can be done by visual education meetings and by individual work with teachers. Many directors prefer the use of student operators. This can often be done by the formation of a Movie Operators Club. The main point is to secure reliable and effective projection.

The problem of transportation between the various schools in a system must be solved by the administrator. The best method will depend on the system itself. Some use the regular school delivery truck, others have an outside delivery service, in others certain teachers come to the main office, while in some the director or his assistant distribute the materials themselves.

The director should provide the materials and encourage the use of pupil-made slides and charts. These supplies should be readily accessible in all buildings. There is an excellent source of free pictorial material in magazines such as the National Geographic, Life etc. The material of permanent interest should be mounted, while that of current value only can be used unmounted. Each teacher should be encouraged to compile their own files of pictures.

Another service of the Visual Aids Department to the teacher is in the making of photographic slides and enlargements. The value of the cooperation of a Photography Club is readily seen. It provides the members with a great deal of
Teacher Training in New England

JAMES R. BREWSTER
Harvard Film Service
Cambridge, Massachusetts

In the good old days Boston was really justified, at least in part, in calling itself the "Hub of the Universe" because New England furnished many new ideas in the field of Education and likewise many of the leaders who put these ideas into effect. But although New England still furnishes a good percentage of material—5 or 10 slides a period are better than 100. Third, strive to develop a receptive mental attitude by the use of a short introductory talk. Fourth, the material used should apply as an integral part of the unit being studied. This last point is extremely important. Everyone who has had anything to do with films has come in contact with teachers who want one or two films a week. As to subject—just anything they hadn't had before. This presents a serious threat to the use of visual aids, since we are too often judged by the worst and not by the best. It gives the pupils the wrong attitude towards visual aids. It is the one thing the director must prevent, even if it means a virtual elimination of such a teacher from the visual program.

It is needless to say that a person who is easily discouraged will not make a good head of a Visual Education Department. Patience and perseverance are two of the prime qualifications required. In closing let me remind you that those interested in visual education of the benefits to be obtained from membership in a group who have a common interest. The Department of Visual Instruction of the N.E.A. is such a group, but there are many other visual educators who do not belong. I think the case of the New England Section will illustrate my point. After 9 years of activity as the Massachusetts Branch we decided to try to spread the visual idea throughout the whole of New England. We changed our name to the New England Section of the Dept. of Visual Instruction. We have started the formation of state branches in order to secure more active local work. Besides our one annual conference we now hold four regional meetings. Our membership has increased to over 110, and we are the largest branch in the D.V.I. These regional meetings provide an excellent opportunity to exchange visual ideas and solve common problems. The new Zonal Plan will make a similar plan nation wide in scope. With its adoption will come a greater increase in membership in the D.V.I. and a much more effective organization and use of visual aids in our schools.

The growth of these two factors (enrollment and use of aids) makes it worthwhile to train teachers, both prospective and in-service. When the courses are incorporated in the regular schedule, they are generally retained by the permanent school.

The courses are of two types—a general course in audio-visual aids and a course in the administration of the aids. The broader, general course is invariably given first. At present, taking the area by states, we have the following teacher training provisions in New England:

**Maine**
1. No course during term time but the University of Maine hopes to offer one in the near future.
2. Three summer school courses—one at Bates College and two, one elementary and one advanced, at the University of Maine.

**New Hampshire**
1. No courses during term time although the Keene State Union has an in-service course for members of that Union. The University of New Hampshire will offer a course this fall.
2. Two summer school courses—one, a graduate course, at the University of New Hampshire and one at the Keene State Teachers College.

**Massachusetts**
1. During term time Boston University offers a large number of courses by Mr. Krasker. There is one general course, several courses in the use of aids in special subject matter fields, and one on the administration of audio-visual aids. Boston Teachers College (Mr. Hennessy) has offered a course every year since about 1929.
2. The University Extension Division has offered various courses in term time throughout the state since 1931, the number and location varying from year to year, whereas over 100 instructors and more than 100 more teachers indicate they want one. Mr. Erickson has given one regularly at Springfield.
3. There are six summer school courses given—three by Boston University, two by Harvard, and one by Springfield College.

**Connecticut**
1. No course offered by a teacher training institution but there are several short, non-credit, local inservice courses offered such as those at Bristol and New Haven.

**Vermont and Rhode Island** do not have any courses.

However late New England may have had been in using teaching aids and in providing for training teachers, we are now making rapid strides in the right direction. There are now six institutions which offer at least one course during term time and seven which offer at least one during the summer session. If this spurt, which began in 1938, keeps on at its present rate, New England may still be called "effete" but hardly ineffectual in the field of audio-visual aids.
Visual Instruction in a Medium Size School System

MARTHA P. FARWELL
Chairman of Teaching
Aids Committee
Brockton Schools, Massachusetts

A request to discuss visual instruction in the Brockton schools presents a problem not easy of solution. Viewed in the light of our ambitions for the work, the problem is not so little that it is spectacular; yet regarded as an accomplishment that has added nothing to school costs and has grown steadily since its inception, the work of our committee is reasonably satisfactory. Another difficulty in treating the subject is its constant change. The program and method of administration vary from week to week, if not from day to day. This constant change results from the revision of the system and the expansion of its services.

An attempt at visual instruction in Brockton almost ten years before had been fostered upon the school with unsatisfactory results, both as to material and to use. A revival of the work necessitated caution and an entirely different method of approach.

Part of our caution in proceeding with the work arose from the situation in the city that the material should be available for high school use only. Brooking some years ago suffered such an industrial loss that it was impossible to add a penny to the school expenditures. In fact it was necessary sharply to curtail educational costs.

Theosophy underlying our use of these materials has several very well-defined principles. We make no distinction between the various types of aids to learning, and from the first have designated our field as a department of teaching aids, especially avoiding the use of visual aids or visual instruction because of the possible interpretation of the terms. We did not establish an elaborate system, but had a very informal organization with no attempt to sell the idea either to teachers or to members of the school committee. Furthermore, it seemed essential that the material should be available to the teachers when they wished it, and that the teachers be encouraged to use the materials in the classroom. There has been a gradual expansion of our services as a result of requests from teachers whom we have kept informed on available materials. Always, we felt that schools and classes in the city should not be encouraged to conduct money-making projects for the work, since we believe it is a legitimate educational cost, not an extra frill. From the outset we realized that, because of a lack of uniformity of work in different schools for the past twenty-five years' standing, free material containing advertising must be discreetly used.

Originally the work was organized as a committee with two high school teachers as co-chairmen, both of whom were carrying full programs in addition to this work. There were no provisions in the budget for any funds for administration or purchases. The first year, we made a survey of conditions, and of available equipment and materials in the high and junior high schools. We used a bulletin board at the front entrance for special exhibits by individual classes or clubs. Later we issued a weekly bulletin in which rights to the speakers, stage, screen, and radio, with criticism of the moving pictures based on "The Motion Picture Review Digest." The bulletin continues as a monthly radio bulletin, but when "The Motion Picture Review Digest" suspended publication, we found it difficult to secure reviews of current films. In the spring, we bought a used silent projector and began the collection and filing of information on the use of teaching aids, and materials for purchase, rental, and loan. We also began a collection, at present stored in the school library, of original material on entertainment films which might be helpful in literature, history, or art classes.

The second year we made a contract for the weekly delivery of films, issued the bulletin to the junior high schools, and gave information on radio programs of particular educational value, especially on series and titles in subject matter fields. One member of the committee had a half year's leave of absence, so the work was continued by the other.

The next year the program expanded into the junior high schools, two of which already had silent projectors. One of the difficulties that had been transferred to junior high school was replaced by the head of the science department. At that time, we divided the responsibility so that he assumed complete charge of equipment and operators, while I, relieved of one of my classes, worked with the high school teachers and students in miscellaneous matters including complaints. This arrangement is still in effect. We purchased a sound projector for the high school late that year, and began a collection of poetry records for use in literature.

Within the next twelve months we had evolved a continuous program for film bookings in the high and junior high schools, purchased a set of Mercury Theatre recordings, and subscribed for sets of illustrations from the Boston Museum of Fine Arts for use in literature, language and history, as well as art classes. We prepared a list of available materials to be used in topics covered by courses of study being revised by the junior high school curriculum committees. As yet, these lists are far from complete. The department that year for the first time submitted a budget to the school department, a report which proved surprising even to those of us who had been closely associated with the work. From January 1 to December 31, 1940, for the high school we had booked 98 films for 290 showings to a total pupil audience of 9,660. This was one of the more impressive when we considered that not one of the showings had been before more than 50 pupils. In the junior high 44 films were used 50 times for a total of 1,980 pupils, and we have seen films in the following subjects: science (all branches), commercial geography, business organization, clothing, foods, history, English, journalism, music, appreciation, home room guidance, shop theory, industrial management, and drama. The high school, Brockton Vocational School and Vocational Education for National Defense Workers classes.

From January 1 to June 1 this year the high school used 49 films 250 times for a total of 9,700 pupils. This illustrates the steady increase in the work. This past year we cooperated with the r.p.m. phonograph (all of the others in the building had nearly ruined our records and had certainly not fostered in the teachers nor in the classes a desire for more school.) The new machine, delivered the middle of October, was used over 1,000 times by English, and language teachers, as well as for home room periods. We have also bought silent projectors for each junior high school which did not already own one, and for the two largest elementary schools. The committee has been expanded this spring to include primary and middle grade supervisors, and one of the district principals.

Under the present organization we are distributing in the spring check lists of available materials, especially films, for supervisors, heads of departments in the high school and for chairs of the various curriculum committees. These lists are compiled from catalogues issued by the sources from which we secure the aids. Each year the lists are longer as we supplement the preceding one; but we also eliminate numerous titles, using as a standard the recommendation by teachers whose classes have used the material. When returned to us, the lists have indicated the aid desired, the approximate date when it would be most helpful, and the topic, or unit, for which it is to be used.

We have evolved a fairly satisfactory borrowing record, because we have used by agencies supplying theatres, by which we can tell for what day or week the material is ordered, by whom it is to be used, and in what subject. Afterwards we record the number of times it was used, the number of pupils present, the place of showing on the film, the teacher's estimate of the value, and any other pertinent information. Moreover, we have trained student operators who are on call during their study periods.

In addition, my room has become a kind of clearing house for all information on teaching aids. A skeptical English teacher pens a hasty note: "How recently was 'Treasure Island' filmed?" or, "Can't we get some recordings on 'Macbeth'?" or "What became of those 'Songs from Shakespeare' records which used to be sold?"

From a member of the history department comes: "Would it be too expensive to
The New England Educational Film Association

R. Haven Falconer
Dartmouth College, Hanover, N. H.

The New England Educational Film Association, commonly called NEEFA, is proud to have contributed towards the more intelligent use of motion pictures in schools, and we feel that we are well established on the road to the more effective use of this medium even though we have been active only a little over a year. Our activities have resulted in the establishment of uniform prices for rental, and shipping procedures for providing aids, printing of a unified consolidated catalog listing all the educational films available from non-profit libraries in New England, and a clearing house for information. NEEFA’s service has helped us to reassert our faith in the possibilities of the film medium as a teaching aid. We have proved to our satisfaction that sincere inter-institutional cooperation provides the only means of lasting advance and improvement in the use of films; and, by implication, for any other educational improvement. United, we are able to take important strides quickly, without losing energy or fostering a competitive, petty, unprofitable effort. We believe that this type of cooperation is the only way in which our educational system can stand against the totalitarian. These convictions lead us to the announcement of several new NEEFA activities for the coming year.

Since each of us individually benefited so highly with a personal contact with others in the same field here in New England, we recommend this same approach for all film library administrators. We believe that this is best carried out by a greater activity within the Department of Visual Instruction of the NEEFA. However, we would like to suggest the addition of some specific action for the solution of common problems, in order to make these meetings mean more than conventional jollity between men with common interests. Since our first step in New England was toward price standardization we believe that this is the first logical step for our cooperation with others, and we are now anxious to help establish standard prices and procedures. If such standard prices are adopted there will no longer be the desire on the part of some users to shop around for educational films, thus wasting valuable time and effort which might be directed to the more intelligent use of these materials.

Our next step would be toward a unified catalog to serve all the film libraries in the field with the consequent saving of excessive duplication in printing, and a simplification of the process of ordering and receiving films. So much for the cataloging and distributing of these materials. Now let us turn to our larger problems which we must confront as soon as mechanized distribution is finally established on an efficient basis. Most obvious of these is for the evaluation of these new materials. A superimposition of work has already been done by the National Film Evaluation Project, and we believe in throwing our entire weight behind this work. In addition, we have initiated a project for the “Yes—No” approval of sponsored films because there are many schools and teachers who do not use these materials at all for fear of presenting biased advertising in the classroom. Our special demonstration meeting yesterday showed how this service may be of real value in stimulating the more extended use of these excellent materials. If approval is given by the members of the NEEFA processing panel, the National Educational New England educators, the NEEFA approval means that educators feel that these materials are valuable for school and classroom use, and worthy of inclusion in any educational program.

Our most important common aim is really that of a missionary, and in this aim we join all those interested in the advance of education. If we can reach our most important objective, all the minor technical details will be solved with lightning speed. We can look forward to the production of educational films of far greater excellence, and efficient distribution to every educational institution in the country.

We must all unite, regardless of specific membership in any educational association, to promote the use of films by convincing teachers that they must investigate the possibilities of this new dynamism, and use it in their individual courses. We may approach this aim in many ways. An excellent start is gained by active membership in the Department of Visual Instruction; but, in the last analysis, our success will depend on the patience and effort of individual classroom teachers in con-
The Assistance That Teachers Need

DONALD B. GROVER
High School, Hanover, N. H.

I HAVE just spent several days trying to organize a program of films for next year at the Hanover High School, and have been appalled by the extreme complexity of the film catalogues. These efforts should not be directed to the replacement of all other teaching aids by the sound motion picture, but, we should expend our energy to help these individual instructors realize the place of the sound film in his teaching program. This, my friends, is a large and important aim, and if we can join each other with a faith in our eventual goal, I am confident that no petty organizational politics or institutional pride can hinder our advance. I look forward to the prospect of advancing with an ever larger army of teachers for the betterment of our educational system with films efficiently used as one cog in America's vast educational machinery.

Now don't tell me that my outline takes fifteen lines of print against two in the present catalogue. I know that it would be more expensive to print; but I believe you know more about the film than you did before. And mind gives at least four cross references for an index:

1) Birds—flying power.
2) Fish, unlimited size.
3) Ancient monsters.
4) Mammals—evaporation area.

I believe that educational films should have factual outlines available for the faculty of the institution which owns the film in the case of the college libraries, and for the use of those smaller institutions which may want to refer to them. With a statement of the facts of what a film actually shows, the teacher is at least on the way to being able to make an intelligent choice as to whether the film fits into his program, and where it fits in.

Packing the time when this shall be done with any degree of completeness, by the film libraries or by some gigantic elaboration of current film catalogues schools, should, for their own good, join hands to make some valid information available.

Each teacher in my high school, upon using a film, fills out a quick check evaluation blank for my files. On the back of that blank appears the title "Factual Outline 1, 2, 3, 4, 5, 6," with space to fill in the topics. At the bottom is the additional question "what advertising or other undesirable features?" This outline, or a digest, of several will be pasted in the catalogue overlapping the description by whatever company is renting it, or whose catalogue we are using.

But we should not have to do this work. It should be standardized and available, either on library cards, like those of the Evaluating Project prepared by EDUCATIONAL MOVIE SUPREME, or included in our own catalogue. By catalogue I do not mean just a listing of the films available from any film library, but some standardized description of the facts about films. I believe that I am simply stating a situation concerning what the film-using public must have if there is to be anything but chaos in the future of the educational film.

Comparisons of films with books are interesting, but they are not like books in use. Books are not rented from libraries at $1.00 or $1.50 for one day's reading. Books do not cost from $24. upwards. Therefore the catalogue information about films must be more thorough than that about books as long as the rental system continues. Even when and if every school should own a library of a thousand films purchased at five dollars each (the price will come down if schools begin buying) even then the films will remain in the closet or will be selected at random unless thorough catalogue information is available.

In the meantime, let's get going. Keep your own record of every film shown at your school—a record, not of some teacher's opinion (keep that too) but a carefully prepared digest of the scenes actually shown. Let's get the facts, write them down and then pass them on.

Sound Slide Films for Classroom Use

JEROME RULON
Harvard University Graduate School of Education

THE sound slide film is a simple audio-visual device consisting of a slide film and a phonograph record. The slide film is the conventional 35 mm. film-strip made up of a series of still pictures to be projected on a screen. The record is a 16 inch transcription type disk played at 33-1/3 r.p.m. to provide fifteen minutes of continuous sound.

Synchronization between the sound and the film-slide is not a difficult problem since the pictures are 'still' pictures. The sound of a chime from the record indicates to the operator when to turn the projector knob to change to the next frame. In some cases the recorded voice simply announces the number of the next frame, instead of using the chime; but, in either case, keeping the slide film in step with the record is a simple matter.

It is apparent, then, that there is nothing radically new about the component parts of the sound slide films. The 35 mm. film strip is well established, and is generally considered to be an effective visual aid. The use of phonograph records as audio instructional aids is widely accepted, and the 16 inch slow speed record is increasing in popularity for providing educational radio programs at times more appropriate to the instructional schedule than the original broad cast.

It may seem odd, therefore, that the sound slide film, a combination of these two teaching aids, has not come into popular use long before now. Certainly the idea of using a phonograph record in combination with a slide film is not new. Large oil companies, automobile manufacturers, insurance companies, and other commercial concerns have been successful in using sound slide films for about ten years. They have been used to train salesmen, to acquaint distributors with new models or products, to put over safety campaigns, and even to present the "perfect" sales talk to prospective cus-
tomers. The willingness of these companies to pay commercial producers from fifteen hundred to three thousand dollars for a film to meet their particular requirements, indicates that they have some confidence in the effectiveness of the sound slide film.

For classroom use, however, the educational sound slide film has lagged behind other visual aids. There is little demand at present from teachers for educational sound slide films since their actual effectiveness as teaching aids has not been experimentally determined. There are few commercially produced teaching sound slide films available.

Schools, or individual teachers could, of course, make up their own sound slide films to suit their particular needs. Any series of photographs, charts, or maps can be made up into a slide film by a commercial slide film producer, at a cost of less than fifty cents per frame. Once the film is made extra prints can be purchased for only a few cents a frame. Home recordings might be used for short films, or a single fifteen-minute acetate record could be made for about ten dollars. A recent article by Orin D. Trapp contains many valuable suggestions to school producers of both sound and silent film slides.

Considering the relatively high cost of producing a good sound slide film, and the very low cost of making extra copies of both the film and the record, the most promising future for sound slide films probably lies in commercial production. A fifteen minute sound slide film could be purchased by a school for about five dollars, and would then be available for each succeeding class.

Some investigations on the use of sound slide films in the classroom have been carried on by the National Research Council’s Committee on Scientific Aids to Learning, under the direction of Dr. Irvin Stewart. Five films, sampling instructional levels from primary school through high school, were produced under the direction of the Executive Committee of the Metropolitan New York Branch of the Department of Visual Instruction of the National Education Association. These films were shown in 58 New York schools to 23,506 students. In the opinion of an overwhelming majority of the teachers using these films, the medium of the sound slide film is suitable for classroom use, and is valuable as a teaching aid.

The results of this study indicate that the sound slide film may be used successfully at the instructional levels and in the subject matter areas sampled. However, the number of cases used in controlled experimentation with these films was too small to yield reliable evidence as to their actual effectiveness as audio-visual teaching aids.

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1-Orin D. Trapp—The Use and Production of Sound and Silent Films, Slides and Microfilms in Schools, Bibliofilm Service, 6c/o U. S. Dept. of Agric., Wash., D. C.
2—Dr. F. Dean McGilvery and Esther L. Berg—What are the Educational Values of the Sound-Slide Film? 1941 Yearbook, New York Society for the Experimental Study of Education.
3—These films are now available to schools on an experimental basis. See EDUCATIONAL SCREEN, June, 1941.

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Pictures from the sound slide films in production. Top: Adding sulphuric acid to soda produces carbon dioxide. Center: Common fire extinguishers contain soda and acid. Bottom: To operate turn upside down.
At the present time, a study is being conducted by the writer in order to provide more reliable classroom use. This investigation is being carried out with the aid of a grant from the Committee on Scientific Aids to Learning of the National Research Council.

For use in this study, a series of six sound slide films are being produced on the subject of General Science. These films are designed for use in the manner that visual aids are most commonly employed. That is, they attempt to parallel the usual general science course and textbook. Each film has a presentation time of fifteen minutes, and contains approximately forty pictures.

Since only one side of the record is required for the fifteen minute script, two complete scripts will be used for each film. On one side of the disk will be recorded a general overview of the material, to be played with the first showing of the film. The other side of the record will be played the second time the film is shown, and will provide a more factual and detailed treatment of the same material. During the experimental use of the films, each film will be shown three times, over a period of two weeks. The second script will be used for the second and third presentations.

The evaluation study will begin the third week of the fall semester, and run for twelve weeks. Ten cooperating science teachers, and approximately one hundred ninth-grade students will participate in the experiment. All teachers will be using the same textbook and the same general teaching plan. The classes will be the first course in science for these students.

Five experimental groups are to be used. All five groups will take the usual general science course normally taught in the school. They will all use the same textbooks, have the same assignments, and see the same demonstration experiments ordinarily used in the general science class. The controlled differences between the groups will be in the additional materials they will use. Group I will see the sound slide films. Group II will see the slide film, and the teacher will read the script (the same script used for the records). Group III will use the recorded sound, but will have booklets of pictures on their desks (the same pictures as in the slide film). Group IV will use the picture booklets, and the teacher will read the script. Group V will be a control group, and will use no extra material.

At the beginning of the experiment, a series of pretests of General Science and General Science background test will be given. The results of these tests, together with information as to age, sex, etc., will be used to define the groups. A general test on the material to be covered in the twelve weeks of the experiment will be given after the completion of the work pertaining to each film, every two weeks, a test on this particular material will be given. At the end of the twelve weeks a second form of the general test will be given. A third form of this general test will be used a month or two after the end of the experimental period, as a retention test. The comparisons planned in this study are by no means all of the interesting and worthwhile comparisons that might be made. However, the major purpose of this experiment is to provide reliable evidence as to the practical effectiveness of the sound slide film for classroom use. The results of this investigation should be available by next spring. (An abstract of one of the sound slide films to be used in this study was shown at the Boston meeting).

Motion Pictures—Not for Theatres

(Continued from page 285)

Motion Pictures—Not for Theatres

The last important frankly religious picture to reach the screens of America, before the First World War interfered with its world-wide expansion, was the fine Italian passion play "Cristus." It had been completed about 1915, after approximately two years of elaborate production ranging over authentic locations in Egypt and the Holy Land. A feature was the re-creation of world-famous pathetically told and set in the Temperance League, as Count Giulio Antamoro, the scene-anter Fausto Salvatori, the sponsor Cineas. With a record of "more than 1,000 performances in Paris, Rome and Madrid," it opened at the Criterion Theatre in New York, May, 1917, prepared for a run. But the Broadway public, it seemed, was in no mood then for the retelling of an old story about the Prince of Peace, how ever beautifully it may have been done, and the attraction was obliged to close.

Produced by Romans at about the same time, directed by Armand Vay, the cost of approximately $1,000, with dollars devoted in part by the Italian Government, was a long film on the Old Testament: but this did not appear publicly in America until late in 1922, when it was released non-theatrically by Harry Levey. And the French series of twenty-one reel biblical travelogues entitled "A Visit to Palestine," was not distributed by the Pathé Educational Department here until 1925. But central church organizations in America are usually kept well informed about what other nations are doing in their line, and I suppose that these foreign productions, even while they were being wintered over, were a certain force of example upon our native workers.

An interesting story probably could be told by survivors of the Bible Film Company, which was launched in the unexpected place of Las Vegas, New Mexico, in the year 1917. It was announced to begin "in two or three months" on the company's property at Montezuma Hot Springs. Harry C. Grigsby of Los Angeles, was the reputed financial backer, and the president and general manager was named as Dr. A. L. Andrews, a prominent minister of Fort Worth, Texas. Roger Topp, a prominent Los Angeles business man, was treasurer, and Phil H. Le Noir, of Las Vegas, appeared as scenario editor and publicity manager. In May, 1917, C. S. Edwards, manager of the exchange at St. Louis, Missouri, resigned to become director-general of the Bible Film Company—but after that the record stops.

In the spring season of 1917 one heard of the Unique Film Corporation of New York, which evolved the Truth motion pictures. From Madison, Wisconsin, in October, 1917, came the report of the Trinity Film Company, to produce pictures "having biblical, historical, educational and industrial settings," started, so 'twas said, by A. Dorin, director, and later with Pathé. The strong film activities of the Methodists, 1915-1920, covering the employment of D. W. Griffith and the sowing of eighty-six missionaries with propaganda reeds, have already been mentioned. There now began a Lutheran Film Division, distributing films, and in the same city, the Board of National Missions of the Presbyterian Church of the U. S. A. organized a motion picture program. There is more concerning the Presbyterians on a later page.

The Luthereans have clung to the idea. Virtually all of the college and college Colleges already have films in promotion of their own endeavors, and these enjoy a regular and fairly extensive circulation. In June, 1938, the National Lutheran Council reappeared with an even more elaborate project, although Dr. Ralph H. Long, executive director, pointed out that the plan had still to be approved by the executive committee. However, a study of possibilities was even then under way. The idea was to serve Lutheran colleges, churches and missionary societies; and for them six general types of film were to be provided, to wit:

1. Films covering every phase of activity within the Lutheran Church: home, foreign, and inner missions; colleges, academies and seminaries; brotherhood, Luther League and Missionary Society; summer camps, Bible schools, district and national conventions; buildings, monuments and localities.
2. A newsreel, issued monthly, incorporating outstanding current events in the Church.
3. A series of films covering the history of the Lutheran Church in America from the time of the first settlers until the present day.
5. A series of problem films, depicting life situations centering around ethical, religious or social problems, with information for use in regenerating discussions.
6. Religious and educational films from other sources.

(The Educational Screen)
Among Ourselves

The President’s Letter

NOW is the time! This year presents the greatest opportunity for service in the history of the Department. With visualization playing such an important role in world affairs, it is but natural that duissant impetus be given to the use of audio-visual materials in the schools.

Although the school year has just started, the zonal officers and committee members are already at work on well-planned campaigns for membership. Many memberships had been received by the national secretary before September 10.

The increased membership in our organization will enable it better to carry out its objectives. A brief explanation of our objectives for 1941-42 has been printed in leaflet form. Copies of this leaflet are available to the membership for distribution among interested persons. Following is a brief summary of the leaflet contents:

To Promote the Effective Use of Audio-Visual Aids in Classroom Instruction—The Department will supply to its members information on the correct technique of the use of excursions, museum materials, flat picture materials, stereographs, film strips, film slides, lantern slides, motion pictures, transcriptions, and other audio-visual teaching tools. The Department will also give all possible assistance to its members in the production of audio-visual aids by students and teachers.

To Serve As A Clearing House for Its Members in the Exchange of Ideas and Experiences—The media of this exchange will be THE EDUCATIONAL SCREEN, the official magazine of the Department; the Yearbook; and other publications. Materials presented will offer valuable information to those now in the field and will challenge the interest of the pioneers. All members are urged to share with others their suggestions and reports of their experiences through these media.

To Provide An Opportunity for its Members to Participate in Meetings with Other Educators Interested in the Production and Proper Use of Audio-Visual Materials—The national winter meeting is being planned to present the work of audio-visual aids in our changing social, political, economic, and educational environment. The summer meeting will emphasize methodology of use of audio-visual aids in classroom instruction.

Contributions of the Zonal Plan—The zonal organization will coordinate existing local activities into an integrated and unified effort to bring audio-visual instruction to its proper status in education. Added to the services of the national official staff are those of 100 zonal officers who are familiar with the problems of their respective territories. Zone headquarters will provide more intensive coverage facilities for collecting and organizing material for publication. Ten additional official meetings of the Department, one in each zone, will be held during the year. Many people who have not had the opportunity to attend national meetings, will be able to participate in one or more zonal meetings. Announcement of zonal meetings will be made in THE EDUCATIONAL SCREEN through the year.

On August 15, the president of your organization sent a letter to all of its members. The number and nature of the responses to this letter were far beyond what he had even dared hope. Real talent is available and enthusiasm is abundant for the perfection of our zonal organization. Now Is the Time!

W. Gayle Starnes, President

Minutes of Executive Committee Meeting
Boston, Mass., June 30 and July 2, 1941

President Reed reviewed the work of the Editorial Committee, the Committee on Teacher Training, the Committee on Field Experiences, and the Yearbook Committee. After brief discussion it was agreed to recommend to the incoming president that the present personnel of the Committee on Teacher Training, the Committee on Field Experiences, and the Yearbook Committee be retained, because of the nature of their work, but that he feel free to appoint an entirely new Editorial Committee.

The proposed order of business for the annual business meeting was presented by President Reed and approved by the Executive Committee.

A proposed amendment to the By-Laws of the Department, making the membership year run from September first through August thirty-first, was discussed and was approved for presentation at the annual business meeting.

As a step toward simplifying inter-office correspondence and procedures, it was voted to recommend to all Secretaries of Zones that new memberships taken should, as far as possible, date from September 1.

As another step toward the same end, it was voted that memberships expiring during the months of June and July of the current year should be extended through August thirty-first.

Mr. H. A. Allen, Business Director of the N.E.A., was present by invitation and discussed with the Executive Committee the general problem of closer affiliation between the Department and the parent organization. Following are the significant conclusions developed during this discussion:

1. The Department should continue to work toward closer affiliation with the N.E.A.
2. Steps should be taken to bring the financial and membership arrangements of the Department into conformity with the rules and regulations of the N.E.A. (Note: the proposed amendment of the By-Laws to make the membership year September 1 to August 31 is a step in this direction.)
3. The Department should work toward the employment of a full-time clerk at N.E.A. headquarters to handle the routine work of the Department.
4. It was strongly urged that the incoming President, and possibly the Secretary also, should spend a few days in Washington to observe the organization and procedures of the Department and to shape plans for closer cooperation.
Minutes of Annual Business Meeting
Boston, Mass., July 1, 1941

The annual business meeting was called to order at 3:40 p.m. by President Paul C. Reed, with approximately 20 members present.

The minutes of the annual business meeting held at Milwaukee, Wisconsin, on July 2, 1940, were read and accepted.

The Secretary-Treasurer gave a brief report on membership.

The Treasurer's report for the period June 16, 1940 to May 31, 1941 was presented by the Secretary-Treasurer, Mr. Howard A. Smith, Chairman of the Auditing Committee, then presented a statement approving the Treasurer's report.

The following report on the ballotting for officers for the ensuing year was presented by the Secretary-Treasurer, with an explanation from the President that the tabulation had been cowed and verified by the Executive Committee:

For President: W. Gayle Starnes 243, Abraham Krasker 151. For 1st Vice-President: Camilla Best 228, Ford L. Lemler 158. For 2nd Vice-President: U. S. Burt 215, Charles M. Milner 166.

Mr. Starnes, Mrs. Best and Mr. Burt were declared elected for the year 1941-42.

Mr. W. T. Powell reported for the Nominating Committee that Nelson L. Greene had been nominated to succeed himself as a member of the Executive Committee, and that Miss Marian Evans had been nominated to succeed Edgar Dale. On motion by Mr. Emmert, seconded by Mr. Smith, it was voted that the two nominees be declared elected.

President Reed reported briefly for the Yearbook Committee and the Committee on Teacher Training, no members of these committees being present.

Mr. Reed then reviewed the work of the Committee on Zonal Organization. It was then moved by Professor Archer and seconded by Mr. Falconer that the proposed Zone Plan amendments to the Constitution and By-Laws be adopted. During the ensuing discussion, minor changes in the wording were made and recorded. The amendments were then passed, 18 voting for, none against.

It was then moved by Miss Kalal and seconded by Mr. Emmert that the proposed slate of officers of the ten zones be accepted. After brief discussion, the vote was 18 for, none against.

President Reed reviewed the negotiations which had been made relative to affiliation with the National Education Association, including the proposal for a permanent Secretary in Washington. He reported that the N. E. A. had declined to accept the Department proposals, but that the way was still open for future negotiations.

Mr. Milner presented the following amendments to the Constitution and By-Laws, to be voted at the next annual business meeting:

1. To amend the Constitution, Article VIII Appointive Committees by deleting a Membership Committee composed of one member from each state.

2. To amend the By-Laws, Article 1, Section 8, by substituting for the first sentence a new sentence as follows: "The membership year shall run from September first through August thirty-first."

On motion by Mr. Lemmon, seconded by Mr. Moore, it was voted that The Educational Screen be declared the official magazine of the Department during the year 1941-42.

On motion by Mr. Falconer, seconded by Mr. Milner, it was voted that the Secretary transmit to Mr. Nelson L. Greene a resolution of regret at his inability to be present, with an appreciation of his labors in behalf of the Department.

On motion by Mr. Kruse, seconded by Mr. Lemmon, it was voted that the President be authorized to appoint a Committee on Nomenclature and Standards to which might be referred all questions relating to uniformity of nomenclature and procedures.

On motion by Mr. Waggoner, seconded by Mr. Childs, it was voted that an official statement be framed relative to the place of visual education in the national emergency. A preliminary draft of the statement was read at the time the motion was made.

Adjourned by motion at 6:05 p.m.

D V I Officers for 1941-42

President Starnes, promptly after the Boston Meeting, submitted to the Executive Committee his appointment of H. G. Daily, Director of Audio-Visual Aids, Lafayette School, Lexington, Kentucky, as Secretary-Treasurer of the Department of Visual Instruction for 1941-42. The appointment was promptly approved by the Executive Committee, and it is therefore possible to give below the complete list of DVI officials for the current year:

Officers
W. Gayle Starnes, President, University of Kentucky, Lexington, Kentucky; Camilla Best, First Vice-President, Orleans Parish School Board, New Orleans, Louisiana; U. S. Burt, Second Vice-President, President, Zone VI, Member at Large, Oregon State College, Corvallis, Oregon; H. J. Daily, Secretary-Treasurer, Lafayette School, Lexington, Ky.

Executive Committee
James R. Brewster, President, Zone I, Harvard University; Ella Callista Clark, President, Zone V, Winona State College; L. W. Cochran, President, Zone IV, University of Iowa; E. Winifred Crawford, President, Zone II, Member at Large, Montclair City Schools; Marian Evans, Member at Large, San Diego City Schools; Nelson L. Greene, Member at Large, Zone IX, President, Zone VIII, University of California; Paul C. Reed, Member at Large, Rochester City Schools; Leila Telinger, President, Zone VIII, University of Colorado.

Notes from the Field
Washington
The Bureau of Visual Teaching, Washington State College at Pullman, has the following helpful hint for this month... "Tufted pipe cleaners available at any tobacco counter make excellent and inexpensive cleaning tools for projectors. Costing only a nickel for two dozen cleaners, they will get into cracks and behind sprocket wheels where your brush won't reach. As an added feature, they absorb loose oil and grease."

Wisconsin
In a recent survey of the pupils of South Milwaukee Junior-Senior High School, it was found that at each grade level the pupils preferred films to any other type of assembly program. The March of Time films were the most popular. Safety, educational, and historic programs ranked next to the March of Time in popularity.

Emery W. Leamer, Director of Training, State Teachers College, LaCrosse, Wisconsin, reports that in one of their new buildings they have provided for projection screens to be built in the walls of several of the classrooms.
Maps on slides offer one of the best ways of visualizing the rapidly changing boundaries of countries in the present world. Everyone may see the map at the same time and see it equally well when it is presented on a slide. The fine maps from newspapers or magazines, showing current events, may be traced.

Children in history classes in high school and elementary school and parent-teacher groups will find these maps useful.
1. The Russo-German war showing the movement of German troops.
2. The Invasion of Iran showing British and Russian troop movements.
3. The situation in the far east.
4. The Territory of Vichy and Free France.
5. Iceland, showing its position on the globe.
6. The Azores and the Cape Verde Islands.

Keystone crayons or ink may be used to distinguish the various countries.
Social
Our Daily Bread
The Scarlet Letter
Delinquent Parents
Juvenile Court
Magnificent Obsession
Newsboys Home
Nagana
Outsider
Rebellious Daughters
Slander House
What Becomes of Children

Biographical
The Iron Duke
Abraham Lincoln
Rhodes, the Empire Builder
Rembrandt
Henry the Eighth
Catherine the Great

Historical
Last of the Mohicans
Daniel Boone
Silent Barriers (Building Canadian Pacific Railroad
Custer's Last Stand
Diamond Jim
The Law Commands
Old Louisiana
Rebellion

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Count of Monte Cristo
Dead Men Tell No Tales
Girl of the Limberlost
Her First Romance
Hoosier Schoolmaster
Hoosier Schoolboy
House of Seven Gables
Jane Eyre
Keeper of the Bees
Little Men

Musical
Words and Music (Gilbert & Sullivan)
Harmony Lane (Life of Stephen Foster)
April Romance
Heart's Desire

From the feature "Tomboy"

Documentary
The Man of Aran
The Edge of the World
With Williamson Beneath the Sea
Airmail
Blazing Barriers
The Challenge
Life Returns

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From the feature "Son of the Navy"
The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

ADMINISTRATION

Use of Visual and Auditory Aids in CCC Camps—Howard W. Oxley, Director of CCC Camp Education—School Life, 26:282 June, 1941.

An excellent account of the activities of the camp leaders in using field trips, models, specimens, exhibits, charts, graphs, posters, motion pictures, recordings and filmstrips. From this brief description one may infer that teachers in the more formal types of educational programs can learn much from the experiences of the CCC educational leaders. Throughout the nation boys are learning mechanics, agriculture, conservation, science, citizenship, health, safety and occupational adjustment, attained through every available means of enrichment. There are, for example, 1000 sound film projectors in 1500 camps; 1200 filmstrip projectors, 350 opaque projectors, and about 8 radio sets per camp. Each corps area has a film library and bookings are made from a central catalog used by the central libraries. There are about 7,500 educational films shown per month in the 1500 camps. There are organized radio listening groups in many of the camps. Interesting discussions have resulted from the use of radio transcriptions of such programs as “Immigrants All,” “American All.”

An integral part of this program is the training of teachers in the intelligent use of these aids. This is accomplished in three ways: a) through publications from the national and district headquarters; b) through annual conferences of camp education advisers; and c) through instructor training programs conducted in the respective camps.

Visual Instruction—Albert Earley, Supervisor of Schools, Delaware Dept. of Public Instruction—School Life 26:271 June, 1941.

Practical suggestions to small schools with little or no money for new-type materials. Special reference is made to building a picture library and a workable school museum.

UTILIZATION


The contributions of motion pictures and radio are discussed as part of the “environment.” There is a lack of motion pictures for classroom use in modern language instruction, except for some feature films in French and other languages. Many of the current theatrical films, however, present themes with a locale in the countries which speak the languages studied in school. Teachers should become acquainted with such films and recommend special observation where they are pertinent. In the field of radio, the opera, many of the dramas on the “Great Play” series and other language programs are available.

Visualizing a Unit in Social Studies—A. D. Kramer, Outhwaite School for Boys, Cleveland, O.—Ohio Schools, 19:60 June 1941.

A description of some of the ways in which visual aids are used with non-academic seventh grade boys, especially in helping to promote desirable leisure-time activities.

RESEARCH


This study, carried out at the University of Maryland in 1940, compared the learning of high school pupils who had viewed microscopic materials projected upon the screen with the learning of pupils who had observed the materials directly from microscopes. No attempt was made to eliminate sources of learning other than the slides. All pupils concerned in the experiment had available texts, charts and blackboard drawings, and heard frequent discussions and descriptions by other pupils and by the teacher.

The experiment was conducted four times in two successive years and in two senior high schools. In one school there were 9 or 10 microscopes for each class of approximately 35 pupils. In the other school each of the 35 pupils had an individual microscope and slides. An objective test was given before and after the study, the difference between the scores indicating the change in learning. The test was based on learning from microscopic material observed. The reliability coefficient of each test was fairly high. In each of the four experiments, two classes—the control group—observed material through microscopes. In the experimental groups the microscopic material was presented by projection on the screen. Groups were paired according to IQ and age.

Results showed that learning was generally more uniform where microprojection was used. Where individual microscopes were used, there was greater variation in individual learning. Pupil comments showed some preference for each of the methods, but most favorable comments were noted for the microprojector. If structure and function can be as effectively taught through a projected image as through use of individual microscopes much money can be saved in the purchase of equipment. The writer believes that both methods are valuable, but that the microprojector is especially desirable at the beginning of a study of microscopic life.

TEACHER TRAINING


A summary of a survey made throughout the state of Maine.

EDUCATIONAL RECORDINGS AND RADIO

Symposium: The Effective Use of Radio in Education—Papers presented before the Department of Secondary Teachers at Atlantic City in Feb. 1941.—Secondary Education, 10: 131-147 June 1941.

Chester D. Snell of Town Hall describes the cooperation given teachers in utilizing the Town Meeting of the Air Series. Many suggestions for using radio in the high school are given by Harold W. Kent of Chicago. He proposes that teachers borrow some of the radio forms of presentation for their own classroom lessons, a la People’s Platform; that students be used to organize and distribute information about available programs; that program types be discussed and evaluated.

The radio activities of the Cleveland Board of Education are reviewed by Assistant Superintendent H. H. Bucklely. Other contributors are S. Howard Evans of the National Committee on Education by Radio and Bernice Orndorff of Indianapolis.

I Listen to Children—Mae O’Brien, Horace Mann School—Teachers College Record, 42:619-34 Apr. 1941.

A study made at Horace Mann Schools with 18 fifth-grade boys and girls in connection with a series of radio programs, “Tales from Far and Near.” The teacher was interested in learning, through children’s verbal comments, whether good literary programs heard and discussed during school hours help raise the standards of listening and of reading. Other purposes of the teacher included: Can the non-commercial broadcasts heard during school hours compete with the commercial programs in attracting and holding the interest of the children? What do the children like in a radio program? What do they dislike? Will discussion of radio programs help develop critical thinking?

The article makes most interesting reading, besides being specific in detail about the materials used, the techniques of presentation and discussion, and the ways of keeping records of children’s comments. The teacher’s recommendations are based on the children’s discussions, samples of which are quoted in the article.

(Concluded on page 300)
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The Educational Screen

California Journal of Secondary Education—vol. 16, April 1941 issue—is largely devoted to the use of radio in education. Titles of the articles, and authors, are listed below:

"Producing a Thirty-minute Weekly Broadcast" — Richard Lewis, Glendale Junior College (p. 227). The organization for radio production in the Glendale Schools is centralized in a City Committee on Radio.


"The Alameda City School of the Air" — E. A. Kenney, director (p. 219). The district has worked closely with the classroom teachers in assuring effective use of the programs.

"A Teacher's Use of Radio and Transcriptions"— Mark Jennings and John Feeley, Santa Barbara County (p. 223). How the radio was actually used in a specific classroom situation, a ninth grade core class unit on health, in the Santa Maria Union High School.


"Responsibility of Radio and of Education"—Tempe E. Allison, San Bernardino Valley Junior College (p. 210). In the field of elementary education the American School of the Air has already made a great contribution. It is in secondary and college education that programs are needed. Some suggestions are made by the author for the utilization of programs for these levels.

"Radio Education in Los Angeles County"— Elizabeth Gonye, Director of radio (p. 213). Services performed by the Radio Office, Division of Secondary Education of Los Angeles County.


PHOTOPLAY APPRECIATION

Reflections on Freedom of the Screen—Roy Wenger—The Social Studies, Apr. 1941

The opinions of many well-known personalities in the field of film appreciation have been sought on the problem of controversial issues shown on the screen. Excerpts are given from the replies. The conclusions appear to point to two lines of action: 1) Educate the consumer to be selective and to patronize films that are socially truthful. This applies especially to social studies classes in high school; 2) Encourage this growing audience of critical movie-goers to make known their likes and dislikes and to recommend worthwhile subjects for production.

MUSEUMS


The museums of today are interesting and alive. Schools in New York State are very fortunate, for in almost every section of the state there is a large well-equipped museum within easy driving distance of the schools.

NEW BOOKS


Motion Pictures in a Modern Curriculum—Reginald Bell, Leo F. Cain, Lilian A. Lamoreaux and others—American Council on Education, Washington D.C. (Series II, Number 6, May, 1941) 179pp. $1.00.

These reports have been eagerly awaited by the many educators who follow the activities of American Council's Motion Picture Project. The former book describes the community-school project in the Denver high schools. The latter covers the use of films in the city of Santa Barbara, California. It is an amplification of the type of study described by the teachers of the Tower Hill School in their previous publication. Every school, regardless of its size or location, can benefit from this interesting summary of the use of films.

The films produced in Denver were designed as teaching aids for other classes and involved high school problems of a local nature. The high schools of Denver follow a core curriculum, where in a group of students meets for an extended portion of the school day for more than a year under the direction of a group of instructors. This makes possible field trips and other types of school activities that entail much planning. When the schools decided to produce educational films on the problems of living in Denver, each of the high schools selected a topic for study. East High studied the amount and kinds of food shipped in and out of Denver, how they are processed and distributed. The film which they produced is now available as "Food the Modern Way," showing the use of machinery in the processing and distribution of food. North High School studied health in the community and incorporated this in the film, "How Our Health is Protected." South High School made a film on the recreation facilities of Denver. Housing, jobs and banking are other subjects studied.

Both these volumes should be read in their entirety. No review is adequate.

School Recording Technique—Committee on Scientific Aids to Learning—31 East 42nd St., New York City 17th Apr. 1941.

Professor Karl S. Van Dyke, of Wesleyan University, has written a manual for persons interested in making the most effective use of their portable recording machines—either at home or at school. With excellent diagrams to illustrate the text, we are told how the machine works and is set up. There is also a room microphone, stylus and other adjustments for making recordings that are the best for the type of equipment. A brief summary is given at the end of the book of the recording program at Wesleyan University. The author recommends that the distribution of this program be centralized for economy.

Two other recent publications listed in this book as "musts" for those concerned with recording techniques are: Techniques of Recording by F. H. Goldsmith and V. G. Geisel 1939, 439pp. $1.50 Gabriel Hagedoorn Co., Chicago, Ill. and How to Make Gold Recordings 1940. 128 pp. $1.25 Audio Devices, Inc. N. Y.

SOURCES OF INFORMATION

Aids for the Spanish Teacher—Dr. Lili Heimers, N. J. State Teachers College Upper Montclair, N. J. G. E. Stechert and Co., 31 East 10th St., N.Y.C. 1941 76pp. 50c (send coin with order.)

This is no doubt one of the most intensive compendiums ever presented in this field. It seems to have omitted none of the teaching aids. Sources are given for pictures, filmstrips, motion pictures, phonograph records, radio programs, magazines, plays, stamps, flags, illustrated books, many other types.


A handy book for teachers of English and one which has become a well-known reference book because it first appeared in 1933 and was revised and enlarged in 1939. The authors have attempted to collect sources for pictures, phonograph records, motion pictures, filmstrips and other teaching aids helpful for the study of literature. Classification is made by the author to be studied, ranging from the ancient to the modern. Theatrical photoplays have been listed as teaching aids.

Details of price, catalog numbers and the like are included. There is no doubt that this volume represents much work on the part of the authors. English teachers would have found it especially helpful by annotations or brief comments on the films given, especially since many of them are feature-length productions and involve a considerable cost in time and money. English teachers would, for instance need to be directed to the excellent photoplay study guides available on many of the theatrical productions.
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Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

PRELIMINARY returns of a comprehensive survey to determine the status of research in Audio-Visual Education reveal significant results. At least a score of studies were completed during the past year with an equal number of investigations in an unfinished stage. This represents a tremendous increase in research activity over that of past years. Two studies for the Doctor of Philosophy degree recently completed at Boston University Graduate School on the use of motion pictures in education are herewith presented in abstract form.

Theories of Grade Placement of Motion Picture Film Materials (Thesis completed 1940) by PAUL ZIMMERMAN RUMMEL.

Purpose of Study. To determine the learning achieved on various grade and intelligence levels through the medium of the motion picture as measured by objective factual tests, based upon the film content. It seeks to determine the grade and intelligence levels where certain sound motion pictures produce optimum factual learning and thus establish a procedure and principle for increasing the educational effectiveness of motion pictures in education.

Procedure. In its scope the study included approximately 2,100 school children from grade three through grade twelve. Each of these grades was found to be of almost equal intelligence, was from the same school community, and was subject to the same school program. Each student in the study was given a test of mental ability which placed him in one of three major groups: the normal group, the below normal group, or the above normal group.

Ten sound motion pictures produced for theatrical purposes, but rated by a panel of educators as having educational value were selected. Ten objective tests, each based upon the content of one film was constructed and used. The procedure involved the administering of the pre-test, followed immediately by the film showing, after which the post-test test was administered. No comment or discussion was allowed other than the necessary minimum instructions and directions. Each film was allowed to make its own contribution to factual learning without any other aid, without any rewriting of the course of study, and without any attempt to correlate the film content with the unit being studied at that particular time.

Conclusions: 1. There are, within the scope of this study, certain grade levels where certain sound motion pictures seem to produce optimum factual learning. The procedure selected has placed the films used in certain grade areas. For increasing the educational effectiveness of the motion picture, the principle and procedure used, seems to be a valuable aid. The findings indicate a larger grade area of suitability for film materials than for most instructional materials.

2. There seems to be differences in the achieve-
ments of the three ability levels with respect to their learning from motion pictures, but those differences with respect to their amounts and directions depend upon the type of film content or material.

3. The theatrical short subjects rated as having educational value seemed to contribute substantially to factual learning at all grade and intelligence levels, and seemed to be valuable teaching aids.

4. As a rule, the higher grade and intelligence groups made the higher mean scores on both the pre-tests and post-tests.

Contributions of Study: The chief contribution of this study seems to lie in its establishment of one principle and procedure for determining the most suitable grades in which to use a certain film, one step toward increasing the educational effectiveness of motion pictures in education. As subsidiary contributions, it seems to show that certain sound motion pictures have a rather large grade area of suitability, and the results indicate that the showing of certain sound motion pictures, as used in the study, increases factual information when the films must make their own contributions without any discussions or comments from the teacher. Within the scope of this study, sound motion pictures, in terms of the time utilized in the showing have a high teaching value. The study seems to show the advisability of encouraging the motion picture industry to make this type of film available to schools.

A Critical Analysis of the Use of Educational Motion Pictures by Two Methods.

(Thesis completed 1941) by ABRAM KRASER.

Purpose of Study: To investigate (1) the relative effectiveness of the "Interruption Method" of film technique with regular size classroom groups, as compared with large size or auditorium groups, and (2) the comparative efficiency of film lessons with the "Non-Preparation Method" and film lessons with the "Preparation Method." By the Interruption Method as used here with silent films is meant the "stop-start method," allowing students to take notes, ask questions and contribute discussions during the film showing. By the "Preparation Method" as used in this study, meant a three-step method, namely, (a) a Pre-Test without any previous preparation by the group to learn what the students knew about the subject matter of the film before seeing the film, (b) a First-Showing of the film without any preparation for the study of the film and (c) a Second-Showing with preparation for the study of the film based upon a list of questions directing the students in their study of the film.

Procedure: The scope of the experiment included approximately 800 students from grades eight and nine. The films pertained to General Science. Where group comparisons were made the groups were equated social-

(Concluded on page 313)
SCHOOL MADE MOTION PICTURES

A NEW four-year program in motion picture production and writing is being offered at the Washington Square College of Arts and Science of New York University under the direction of Assistant Professor Robert Gessner. The program of studies leads to the degree of Bachelor of Arts. About three fourths of the program is made up of courses in the liberal arts and sciences and about one fourth of courses in motion picture techniques.

Of special interest to school film makers are courses which will be offered in the third and fourth years of the program: Motion Picture Production, a studio workshop course designed to acquaint students with the planning, shooting, and editing of motion pictures; Writing the Screen Play, a workshop course conducted under conditions approximating studio procedure; Advanced Screen-play Writing; Advanced Motion Picture Production; Motion Picture Photography and Lighting; and Documentary Motion Pictures, a specialized course for the student who is planning to create his documentary films.

A useful booklet for schools who are interested in the production of safety films is Making School Movies by William G. Hart and Roy Wenger (Bureau of Educational Research, Ohio State University, Columbus, 1941, 50 cents net.)

Beginning with a very convincing chapter on "Why Make School Movies" that shows how school-made safety films not only train students to assume responsibility but also influence them towards better safety behavior, the booklet gives practical suggestions for the meeting of safety film production problems in the chapters that follow.

Chapter II describes what was done in the Ohio State University Traffic Safety Film Project in

By Hardy R. Finch
Head of the English Department
Greenwich High School, Greenwich, Conn.
Member of the Committee on Standards for Motion Pictures of the National Council of Teachers of English

the development of twelve school safety films. In Chapter III, the authors discuss what kinds of films are needed in traffic safety education. Chapter IV presents an index to traffic errors which should prove invaluable to anyone who is working with the safety film problem. In the succeeding chapters one finds suggestions on planning a safety film, a scenario used by the Upper Arlington, Ohio, Schools, some technical suggestions, and reviews of twelve safety films produced by schools. The first of its kind, this booklet would be extremely helpful in the solution of school safety film problems.

"The Proceedings of the Second Conference on the Educational Production of Motion Pictures" which is edited by Dr. Edgar Dale, Bureau of Educational Research, Ohio State University, is now available at $1.25 per copy. All papers given at the conference are reprinted in the book. Practically every phase of school film production is included. In addition, scenarios of school films are reproduced.

The 147-page book is divided into three parts. Part One deals with "Film Production in Elementary and Secondary Schools," and contains a description of the Denver Project, panel discussions on public relations films and safety films, and detailed accounts of the production of two films.

Part Two, "Film Production at the College Level," includes suggestions for organization and administration, and for production of films in such fields as football, drawing, dentistry, mathematics, and biology.

Part Three gives further suggestions regarding "Film Production Techniques." This section contains specific helps for the teacher-producer and includes discussions of the use of color and sound.

The cooperation of school film makers in all parts of the United States has resulted in the collection of data on seventy-two more films. Although additional reports are expected from those who have not yet returned their check cards, the continued cooperation of all readers of EDUCATIONAL SCREEN is urged so that no school films will be overlooked. Send reports of new films to your editor today.

California

Harry H. Haworth, Supervisor of Visual Service, Pasadena Public Schools, reports six films as follows:

Scratchfoot Ranch, a first grade unit, and Junior Citrus Corporation, a third grade unit, 1 reel. The first graders "develop" a ranch, pick and sell their crop of figs. As second and third graders they found an old citrus tree in their garden which needed pruning.
spraying and fumigating. This led into a study of the citrus industry.

_We and Our Health_, 1 reel, a third grade unit, a record of a feeding experiment showing the effect of properly balanced diet upon the growth of young white rats with application to the children.

_The Story of a Wool Blanket_, 1 reel, a fourth grade unit, shows the children going through the various steps in washing, carding, spinning, and weaving of a small blanket.

_The Romance of Exploration_, 3 reels, a sixth grade unit showing the steps involved in preparing this unit. The development of language, spelling, and arithmetic. The writing and preparation of an original pageant and the record of final presentation of the pageant in the school auditorium.

_Communication_, 3 reels, a sixth grade unit of work, with special emphasis on music.

_Art in Living_, 3 reels, Junior High School, shows methods used in art education and the application of art in every day life.

Mr. Haworth states that the films may be rented under the following conditions: The borrower agrees (1) to pay film rental in advance or upon delivery, at the rate of $1.00 per reel for the first day, plus 50c for each additional day of use; (2) to pay all transportation charges both ways; (3) to be responsible for film loss or damage; (4) to return film immediately after using.

_Illinois_

With Lincoln's pioneer home as a setting and with authentic costumes of the period (1831-1837) worn by the characters, _Lincoln Group at New Salem_, was produced in the spring of 1941, by Harris High School students of Petersburg, 8mm color film was used (200 feet) under the direction of Stella Salveson, Harris High School English instructor.

_Indiana_

Central High School's Photoplay Production Club, (Evansville) has made two more unusual films. _Adventures of a Cub Reporter_, 850 feet, tells the story of a cub reporter who takes an airplane ride over the city and the school, visits the library, sees football practice, and has a happy romance. _Does My Skip Show?,_ 900 feet, is a traffic safety film with the theme: "Haste Makes Waste," according to Mrs. Mary Blackburn, the club advisor. One sequence contains the driving tests required in Indiana before a student may graduate from high school.

_New Jersey_

_Seeing State_, a 400-foot film based on life at Paterson State Teachers College is reported by William H. Hartley, who directed the project. The film is being used to acquaint parents with the activities of the college and to orient new college freshmen to the traditions and activities of the school. The class in audiovisual aids produced the film.
3 New Films showing the MEAT PACKING INDUSTRY available for exhibiting to your classes FREE!

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16 mm. 2 reel sound motion picture. The Story of Meat Packing, the Nation’s One Food Industry. Subjects pictured and explained include: why meat animals were domesticated—judging ham on the hoof—packers’ and Government inspectors’ examinations—the stockyards—the dis-assembly line—making hams, bacon and sausages—the largest beef dressing plant in the world—preparing dried beef, canned corned beef hash, and “meal-in-a-can” dishes—labelling—perfecting new recipes—your meat dealer—the part meat plays in America’s diet.

Place your bookings with YMCA Motion Picture Bureau, New York, Chicago, Dallas and San Francisco, or with Burton Holmes Films, Chicago, Illinois.

2 "A TRIP THROUGH THE STOCKYARDS" (Sound), 35 mm. slide film (18 minutes) with sound record (12-inch, 33 1/3 R.P.M.). Describes the experiences of Mary Miller and her Aunt Venetia along the visitors’ route of a large meat packing plant. Interesting and valuable for classes in commercial geography, home economics, vocational agriculture, commerce and meat merchandising—and as educational entertainment for any group of any age.

Available on free loan at any Armour Branch Office or Plant. Or write to Audio-Visual Promotion, Armour and Company, Union Stock Yards, Chicago.

3 "A TRIP THROUGH THE STOCKYARDS" (Silent Filmsstrip Kit) 35 mm. Filmsstrip...Complete with dramatic script to be read aloud by your students. Script booklets supplant the record which usually accompanies this film. The booklets contain the voice parts of the four characters in the film. Assign class members to read these parts as they stand near the screen. Provides all the effectiveness of sound projection and gives your classes training in oral reading and dramatics...opportunity to present worthwhile information on the Meat Packing Industry—in a way that is interesting and unique!

The silent version is available on free loan, only from Audio-Visual Promotion, Armour and Company, Union Stock Yards, Chicago.

ARMOUR AND COMPANY

A Library of Selected Features for Schools—16mm Talks — Abraham Lincoln — Auld Lang Syne — Cavalcade of Civilization — Symphony of Living — Jane Eyre

1908 Porterfield St. Pittsburgh, Pa.

Wisconsin

A safety film made with the cooperation of the City Council, the Police Department, and the Board of Education is noted by R. L. Swanson of Wilson Junior High School, Appleton. When Traffic Moves is a 1600-foot all-color film dealing with the reduction of pedestrian accidents.

University-Produced Color Film

The Department of Visual Instruction of the University of Iowa has produced a 16mm. color film (1140 feet) on Preschool Adventures which takes the audience into the preschool laboratories of the Iowa Child Welfare Research Station where sound principles in preschool education are demonstrated by youthful players whose naturalness is as charming as it is disarming. Here one may see children finding that there is satisfaction in belonging to a group outside their families, but we also see that the homes figure importantly at school. In an atmosphere of sympathetic understanding these young boys and girls gradually learn how to satisfy their own fundamental needs and yet get along happily with other people.

The film brings out age differences in the children’s interest in taking responsibility for themselves, in their ability to apply themselves purposefully in their learning to manipulate and manage the play material in their environment, and in their ability to get along with each other. Here we see a new little boy finding sympathetic understanding, protection against too rapid or sudden exposure to new experiences, guidance in the use of play material, and encouragement in getting acquainted with other children, until finally he, too, finds a secure place in the group.

The film pictures a wide variety of activities that anyone can observe on visiting the preschool laboratories, but it does more than just this. It also shows how major objectives in child development are reflected in various aspects of the preschool program.

Rental Rate is $3.00 plus postage; sale price, $125.00 for color or $75.00 for black and white prints.

Editor’s Note:

A new feature in the October Educational Screen will be a section devoted to the answering of questions relative to the production of school films. Godfrey Elliott, director of visual education of Mercer County, Oakvale, West Virginia, author of a number of articles on school film production and producer of several successful school films, will be in charge of the new feature. School film makers should send their questions to Mr. Elliott for possible discussion in future issues of the Screen.
Living with Chinese Children

(Concluded from page 280)

At the conclusion of a six weeks period on this unit the film had been used many times for (1) Primary information, (2) Additional data on enlarged purposes, (3) Material for demonstration work with adults, parents, and friends, (4) Art work, (5) Language activities (oral and written), (6) Reflective thinking. As a culminating experience the film was shown again for review. In the discussion following this screening the following generalizations were summarized. (Translated from children's vocabulary into adult education and sociological terms.)

1. The Chinese child is similar to the American child in basic essentials: he has his home, family and friends; he eats and sleeps and plays; he has his responsibilities (although these are heavier than those of his American contemporaries). He too has opportunities for play and laughter, and he does laugh and play frequently. He is a very human individual.

2. Practices formerly associated with the Chinese people, such as bound feet, long finger nails, no longer exist among them.

3. Chinese children and their families have problems which are both similar to ours and also those which because of their different environment and history, are different from ours.

4. To the Chinese, American ways, customs, habits are the odd, different ones.

5. The Chinese civilization is a very old one, and has made contributions which have not only influenced their own history, but have contributed to the development of mankind. For this reason they are worthy of genuine respect.

6. China is a nation predominately rural in which manual labor still prevails. Because of this condition the standard of living is extremely low.

7. A low standard of living handicaps education, health, recreation, and progressive development.

8. Happiness does not necessarily depend upon how much “One has or gets.”

The following stories were enjoyed by this fourth grade class:


Hekking, Johanna M. Pigtails—Frederick A. Stokes Co., New York, 1937.

Kirby, Mary & Elizabeth. Aunt Martha's Corner Cupboard—Arthur Whitman, Chicago, 1936.

Lattimore, Eleanor Frances. The Story of Lee Ling—New York, 1940.


Metzger, Berta. Picture Tales from the Chinese—Frederick A. Stokes, New York, 1934.
Museum Kodachrome Slide Series

The Department of Education of the American Museum of Natural History has just made available to schools and colleges a teaching series of Kodachrome lantern slides on the “Evolution of the Horse.” The set consists of twenty-five slides made up in 2 x 2 inch size, bound in glass, priced at $15.00. Dr. Walter Granger, famous palaeontologist at the American Museum, has endorsed the accuracy and fidelity of the slides which are reproductions of exhibits in the museum.

A process of duplicating Kodachrome pictures has been developed by the museum so that careful control of the color of the final slide is maintained. The original photographs of the exhibits are made on the larger Kodachrome sizes so as to retain as much detail as possible. These large pictures are then rephotographed down to the thirty-five millimeter size using an artificial light source accurately adjusted as to color temperature. A complete series of faint complementary color correction filters makes it possible to adjust the hues of the final slides to as close a duplicate of the original colors in the museum exhibit as is necessary to maintain fidelity.

The “Evolution of the Horse” series contains maps of the chief fossil deposits in the United States, pictures of the formations in which the fossils are found, a progressive series of the fossil horse skeletons, Charles R. Knight’s famous paintings of restorations of the fossil horses, and the contemporary life of each period. Slides comparing the skulls, hooves, and overall size of the earliest and modern horses complete this unusual series.

This set of slides is the first of several series which have been planned. The “Story of the Dinosaur” and “Ancient Man” will follow soon.

Tennessee Colleges to Have Visual Conferences

During the week of September 29 the Division of University Extension of the University of Tennessee will sponsor a series of one-day audio-visual conferences in five of the state colleges in Tennessee. Each conference will consist of two sessions, one in the afternoon, and one in the evening. The same speakers will travel from one conference to the next, and a stimulating program has been arranged.

Highlighting the conferences will be talks by two national authorities in the field of audio-visual education: Dr. H. A. Gray, Director of Field Studies for Erpi Classroom Films, and Roger Albright, Administrative Assistant to the Trustees of Teaching Film Custodians. Dr. Gray will speak on “The Sound Film in the Service of Education” and “The Psychology of the Sound Motion Picture.” Mr. Albright’s subject will be “See Before You Learn.” Oscar E. Sams, Jr., director of the film service of the University of Tennessee Division of University Extension, will speak on the subject, “Effective Classroom Use of Films.”

Screenings of new and effective teaching films will be interspersed throughout the programs. A great deal of
Notes

interest is being manifest by those in charge at each of the colleges, and a good attendance is expected.

The following is the itinerary for the conferences: Monday, September 29, State Teachers College, Murfreesboro; September 30, Memphis State College, Memphis; October 1, University of Tennessee Junior College, Martin; October 2, Tennessee Polytechnic Institute, Cookeville; and October 3, State Teachers College, Johnson City.

Virginia Audio-Visual Program

Beginning this fall, the public schools of Virginia will have an opportunity to obtain sound and silent films at no cost other than transportation from the film distributing center serving their particular area. The state program of audio-visual education, inaugurated the past year under the supervision of William H. Bowen, Jr., has developed steadily, resulting finally in the establishment of film libraries this fall at the State Department of Education in Richmond, at State Teachers Colleges in Madison, Farmville and Radford, and at Virginia State College for Negroes.

Virginia schools which now have or are contemplating the purchase of 16 mm equipment, are requested to get in touch with the person in charge of the film libraries in their area.

Courses in audio-visual education were given at six Virginia institutions the past summer.

Visual Aids Loaned by Illinois Museum

The Illinois State Museum at Springfield has available different types of visual aids which rural schools may borrow upon payment of express charges only. They include a series of costume dolls, each dressed authentically for the period in Illinois history which it represents; window-sill dioramas of Indian and Eskimo life; transportation models; and models of primitive homes—hogan, pueblo, tepee. A catalogue may be obtained on request.

SMPE Fall Meeting

The Fiftieth Semiannual Convention of the Society of Motion Picture Engineers will be held in New York at the Hotel Pennsylvania from October 20th through the 23rd. The Papers Committee plans to have an attractive and informative program of presentation.

Sound Films Aid in Defense Training

A series of sound films for national defense training is scheduled by the United States Office of Education to be used in the training of students in industrial skills. The films were planned by Floyd Brooker of the American Council of Education under the supervision of Dr. C. F. Klinefelter, assistant to Dr. John W. Studebaker, Commissioner of Education. Five will be ready soon. These were produced by the Calvin Company of Kansas City.

An All-Time High . . . in 16 mm ENTERTAINMENT

For the first time the famous WALTER WANGER pictures plus selected R. K. O. and PICKFORD-LASKY features are available to you in 16mm. S. O. F. Think of it, such outstanding smash hits as "BLOCKADE," "FLYING DEUCES," and "GAY DESPERADO"—yours for non-theatrical presentation without approval of contract. The finest selected films—educational and entertainment—many approved by various groups of educators are now available to your school.

Take advantage of this opportunity to provide your students with the best in film fare.

Check from the list below and order today from your favorite film supplier or write direct to us.

Flying Deuces
Laurel and Hardy

Blockade
Madeleine Carroll, Henry Fonda

Algiers
Charles Boyer, Hedy Lamarr

History Is Made At Night
Charles Boyer, Jean Arthur

You Only Live Once
Henry Fonda, Sylvia Sidney

One Rainy Afternoon
Francis Lederer, Ida Lupino

Pagliacci
Richard Tauber, Steffi Duna

Gay Desperado
Nino Martini, Ida Lupino

Stand In
Leslie Howard, Joan Blondell

52nd Street
Ian Hunter, Pat Patterson

I Met My Love Again
Joan Bennett, Henry Fonda

Edge of the World
Joan Laurie, Bell Chrystall

Love from a Stranger
Basil Rathbone, Ann Harding

Walter Wanger's Vogues
Warner Baxter, Joan Bennett

In Glorious Technicolor!

You may now have those famous lovable characters established by popular acceptance—Toonerville Trolley Folks, Felix the Cat, Molly Moo and many others. All filmed in the new three color technicolor.

Send for free illustrated catalogue of entertainment and educational films.

COMMONWEALTH PICTURES Corporation
729 Seventh Avenue New York, N Y.
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Old Hickory (Teaching Film Custodians) 17 minutes, Technicolor, 16mm sound. Apply to distributor for rental sources and prices. Produced in 1940 by Warner Brothers Pictures.

This Technicolor film is a dramatization of several events in Andrew Jackson’s career. The first sequence deals with the Battle of New Orleans and its surrounding circumstances. As Jackson plans to send his outnumbered forces into the battle, Lafitte the pirate comes to him and offers his services and those of his men. Jackson accepts and commissions him an officer. There is a reenactment of the battle and the unsuccessful charge of the British. After the victory Jackson is honored at a ball, but Jackson’s enemies circulate gossip about his wife. The fiery Jackson challenges a well-known duelist, but his wife, on her death-bed extracts his promise not to duel again. Jackson’s inauguration as President, on March 4, 1829, is reenacted, and his role as the people’s man in the White House is brought out. But he is put to test when the North and South disagree bitterly over the tariff question. Robert Hayne and Daniel Webster debate in the Senate. South Carolina threatens secession, and the country awaits a word from Jackson. At the Jefferson Day dinner, Jackson tries to remain non-committal, but when forced to talk he toasts the Union, then promises to force South Carolina to remain in it, and threatens to punish John Calhoun for his stand. As the film closes it reveals general rejoicing at Jackson’s positive stand in the matter.

COMMITTEE OPINION: An excellent film for classes in American History and for general showings, at the junior high level and above. Minor weak points, such as Calhoun’s characterization as a villainous type of person and the failure to develop with entire clearness the issues at stake, were noted, but on the whole the film is an excellent one. Costumes and settings are accurately reproduced, and the film is good in all technical aspects.

Our New Farm (Georgia Agricultural Extension Service) 28 minutes, Kodachrome, 16mm sound. Apply to producer for sale price; rental (from distributor) $1.00.

This natural color film shows how a typical Georgia farm was improved by electricity. First, there is a comparison of the older uses of water power to its modern use in furnishing power, by electricity, wherever it may be needed. Then a Georgia farm, with its people hard at work at their daily tasks, is shown. When a rural power line is run near the farm the general decision to investigate the possibilities of electric power for the farm is made. The county agent shows him ways in which electrical help may be used in the farm dairy, in poultry and stock raising, and for general uses about the farm. The boy’s mother and sister learn about electrified household aids. They decide to electrify and modernize their farm, and to institute a program of balanced farming. Many beneficial results of these changes are shown, and the film ends with further suggestions indicating the value of electricity to the farmer.

COMMITTEE OPINION: A good film for classes in agriculture in the Southern states, and for general showings and adult uses. Should be of some interest also for similar uses in other regions. The film is technically good, and its portrayal of farm life and conditions is accurate.

In All the World (Great Northern) 37 minutes, Kodachrome, 16mm sound, “Free.”

This natural color film presents a three-day tour through Glacier National Park, beginning at the southeastern entrance. After scenes in the Glacier Park Hotel, there are views of Trick Falls and Two Medicine Chalet, a boat ride on Two Medicine Lake, and Twin Falls. Blackfeet Indians conduct a ceremony for visitors. Next there is a trip north into the adjacent Waterton Lakes Park in Canada, with scenes of the Prince of Wales Hotel and a boat trip on Waterton Lake. Sunday morning church is followed by the trip back across the border. Chief Mountain, Swift Current river and lake are seen along the route. Members of the party fish and swim in the crystal-clear waters. After a hike to Josephine Lake, there is a saddle trip to Grinnell Glacier; then a coach ride to Going-to-the-Sun Mountain, Logan Pass and the Lake McDonald Hotel. The tour ends at the western entrance of the Park at Belton, Montana.

COMMITTEE OPINION—An excellent scenic film. Should be valuable for courses dealing with the geography of the Northwest, and for general showings. Photography is excellent; sound and organization are good. There is no advertising except credit titles at the beginning and end of film.

Oil From the Earth (Shell) 22 minutes, 16mm sound. Apply to distributor for rental sources.

Shows the value of petroleum products in everyday life and then explains the origin of petroleum, methods used in locating new oil fields, the drilling of oil wells, and the transportation and refining of crude oil. At the beginning of the film a pool of crude oil appears, and some of the many products obtained from it are enumerated. The theories of inorganic and organic origin of petroleum are presented, the latter being explained by animated diagrams. Further diagrams explain how oil is held in anticlines under the earth’s...
The MANSE Film Library, in adding over 50 new titles to its collection, has taken special care to see that its pictures contain suspense & dramatic interest as well as information. New films include DANIEL BOONE, RHODES OF AFRICA, SILENT BARRIERS (building of the Canadian-Pacific R.R.), WITH WORDS & MUSIC, TOMBOY & SCARLET PIMPERNEL.

MAY WE SEND YOU OUR FREE DELUXE CATALOGUE FOR your copy, write a card (giving make of your sound projector) to MANSE film library 1521 DANA AVE. CINCINNATI, OHIO

that he cannot participate in Zanger's defense at the trial. In court, a bribed judge, a jury of poor men, and an expert attorney combine against Zanger. But just as it seems that all is over, there is a disturbance at the back of the room and an old man, Alexander Hamilton, enters. Beginning with the words "My client is guilty!" he makes a dramatic one-minute speech in which he says that this is the trial of every free man, and that his client is guilty only of printing the truth; that there can be only one verdict, affirming the supreme right for all to speak and write the truth. At the end of his speech the jury returns a verdict of "Not Guilty."

In conclusion, the scene returns to the great newspaper presses of modern times as the narrator states that freedom of the press was made possible through the courage of these little-known members of the passing parade.

COMMITTEE OPINION—An excellent film for history and civics classes; should be valuable also for character education and guidance. The film is technically excellent in every way, and is suitable for use from the upper elementary level through college.

Addresses of Producers and Distributors:

Georgia Agricultural Extension Service, Athens, Georgia. Prints of film available exclusively through Division of General Extension, University System of Georgia, 223 Walton Street, N. W., Atlanta, Georgia.

Great Northern Railway, Advertising Department, St. Paul, Minnesota. For nearest source of prints of film for school use write the Association of School Film Libraries, Room 819, 9 Rockefeller Plaza, New York, N. Y.

Shell Oil Company, Public Relations Department, 50 West 50th Street, New York, N. Y. For nearest source of prints of film for school use write the Association of School Film Libraries, Room 819, 9 Rockefeller Plaza, New York, N. Y.

Teaching Film Custodians, 25 West 43rd Street, New York, N. Y.
Educational Leadership for Human Conservation

1. "Modern man is delicate. * * * The organism seems to have become more susceptible to degenerative diseases." (Carrel)
2. "Nearly one-third of the whole population (of two dozen states) is of a type to require some supervision." (Laird)
3. "Of 2,000,000 babies to be born in 1941, 738,365 will be wholly or partially wasted, 37%." (Nari Committee for Planned Parenthood)
4. "Measurable brain can be correlated with testable mind." (Waverly Researches)
5. "Thinking is as biologic as digestion." (Thornrike)
6. "Of all the psychological causes of crime, the commonest and gravest is usually alleged to be a defective mind."* (Burton)
7. "* * * gross human congenital malformations arise solely from influences which affect the germ cells prior to fertilization..." (Murphy)
8. "Eggs (fertilized ovum) are not all of equal quality, 25% are not good enough to be born as living individuals." (Streeter)
9. "It is store food which has given us store teeth." (Hooton)
10. "There is a nutritional basis for modern physical, mental and moral degeneration." (Price)

These quotations are from the text book NUTRITION AND PHYSICAL DEGENERATION: A COMPARISON OF PRIMITIVE AND MODERN DIETS AND THEIR EFFECTS by Price, published by Hoeber.

Teaching data are available in the following illustrated lectures either film strips or on glass slides (2" by 2" or 3½" by 4") with manuals:

1. Sketch of the Primitive Races Studied
2. How Primitive Races Have Prevented Tooth Decay
3. How the Races of Primitives Were More Beautiful Before than After Modernization
4. Facial Beauty Lost in One Generation and Greater Injury to Later Born Children
5. Animal Defects from Foods of Parents and Mutual Responsibility of Both Parents
6. Light from Primitive Races on how Mentally Backward and Delinquents can be prevented
7. Special Foods of Primitives for Parents-to-be and Race Regeneration by Obeying Nature's Laws of Life
8. American Indians—Primitive, Semi-Primitive and Modern

For Details with Descriptive Literature (Sale or Rent) Write:

DR. WESTON A. PRICE, DENTAL RESEARCH LABORATORIES
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OCTOBER RELEASES

New RENTAL LISTS of 16mm Super Sound Films now ready. Largest selection and Lowest rates our standard policy... 8-16mm Sound, silent; anywhere in U.S. No charge for transportation time. Send for FREE catalog specifying requirements.

MOGUL'S

61 W. 48th St.
"of Radio City" New York, N.Y.

Air Your School

(Concluded from page 283)

eration. They worked with the consciousness that each finished word would be heard by several thousand radio listeners; they wrote with a purpose, carefully and accurately. No student composition exercise this!

To those who have actually appeared on our program during the past year the value of participation has been incalculable. Students have talked and played to larger and more varied audiences than ever before; new talents have been discovered; new ambitions have been born. They have developed a confidence that many of our public figures could well use. And right here I shall make an observation that may surprise you if you have not been working with students on the air: the average high school student who approaches the mike for the first time has much more confidence and does a much better job than does the average adult. I base this conclusion upon seven years' experience—the first six of which were obtained in working with adult groups. These young broadcasters of ours are growing up with radio and learning to use it as a tool. This experience will make a real difference in the lives of some of them.

But, of course, the school received practical benefits other than those earned by those students who actually made and gave the programs. There were parents whose interests grew closer to that of our school because of these broadcasts. We also gave witness in our radio series to the profound respect that much of our youth has for the services of those who lived before them. This is truth; and our older citizens like it and value it. It may be of interest that one of the really fine persons whose life furnished inspiration for one of our broadcasts is Miss Rachel Crothers, America's foremost woman playwright and a former Bloomingtonian. It was with genuine gratification that we read her letter to us in which she expressed her personal interest in our radio activities.

And, finally, what can we do better this year than last? Well, we're ready for a little more democracy in our organization and proceedings. The students can take more responsibility; therefore they're entitled to use it. Also, we are determined to have even more listeners; a publicity committee could have helped us last year; we have one this year. Furthermore, we shall go further than last year in ferreting out potential performers—students shyly or stubbornly hiding their lights under those baskets that should have worn out long ago. Yes, steps have been taken that insure these improvements; but as each goal is approached another takes shape on the horizon. We are even now determining that our programs shall place a more open emphasis upon an exalted patriotism than they have in the past. Should this be easy?
Experimental Research in Audio-Visual Education

(Concluded from page 303)

ly, educationally, and mentally. The experimental period extended over three years. Six silent films and two sound films were used. Objective tests, each based upon the content of one film were constructed and used, first as Pre-tests and then as First-showing tests and Second-showing tests. Previous to the period of the experiment, the same films were used, after which tests were given to measure the learning.

Conclusions: 1. Within the scope of this investigation the size of the class or group being taught affects the learning achievement of the students. In every instance of this experiment, the same methodology produced a higher degree of mastery with the small, or classroom group, than with the auditorium group.

2. The Pre-tests results show the necessity of a consideration of what pupils know relative to an instructional period, if one wishes to measure the actual amount of learning due to any one methodology.

3. The educational motion picture proved to be an effective instructional device for increasing factual learning.

4. The higher ability groups achieved the greatest scores in the three steps of the instructional program.

5. In no instance in this study did the method of merely showing a film give a satisfactory learning result to warrant stopping the instructional period at this step.

6. In all instances in this experiment, the amount of time spent in Step Three of the instructional plan which directed the students’ study of the film with directing questions brought significant learning results.

Contributions of Study: This study indicates that one of the present common practices of using educational motion pictures by merely showing the film without preparation of the class for the study of the motion picture is not an efficient method. To improve the efficiency in the use of educational films one of the methods proven to be efficient is the “Preparation Method” which prepares the students for the study of the motion picture by the use of directing questions. This study further shows that by comparison the use of educational motion pictures is not as efficient with large groups in the auditorium as it is with small groups in the usual classroom.

Conclusions in the experiment are limited to the results of testing for factual knowledge.
A shot from "Arctic Thrills"

The Taj Mahal as seen in "Mystic India"

The Educational Screen

Castle Films, Inc., 30 Rockefeller Plaza, New York City, promise several innovations in their Fall film schedule, among which is a new series to be known as the Adventure Parade, represented in September releases by two subjects, namely:

Arctic Thrills—depicting the capture of polar bears alive in their natural habits, in the wide wastes of icebergs and floes. The bears camouflage themselves with their white coats, and by negotiating between them great barriers of thick ice that is impassable for the hunters' ship. When smaller boats take up the chase, the fight for escape becomes more furious. And they continue the fight even after lashes finally tighten around their necks, and they are towed to the mother ship.

The Chimp's Adventure—a comedy of a jungle chimpanzee which decides to reverse the tables and do a bit of exploring himself in the realm of man.

The Manse Film Library, 1521 Dana Avenue, Cincinnati, Ohio has considerably enlarged its film library by adding many new feature pictures especially suitable for the most progressive film users among the schools of America.


Among other worthwhile subjects are Breezing up (adapted by Breen) With Words and Music (Gilbert and Sullivan melodies), Tomboy, Son of the Navy, Transatlantic Tunnel, Chu Chin Chow (The Arabian Nights and Ali Baba and the 40 Thieves) Mutiny in the Big House (prison story with strong character values); Elephant Bay (starring Sabu) and others of equal merit; also a number of Western and action films and a new series of color cartoons. An attractive new 40-page catalog is available, listing and describing all the offerings of the Manse Library, which serves the entire country.

Nu-Art Films, Inc., 145 W. 45th St., New York City, will distribute a new series of community song films in the Fall, entitled Sing, America, Sing, containing talented performers and outstanding orchestras.

In addition to its Musical Classics produced by Hugo Riesenfeld, and Screen Traveler series, directed and narrated by Andre de la Varre, Nu-Art will add three subjects monthly to its growing series of Fireside Films. Most recent additions are Circus Days, The Office Bay, and Rio de Janeiro, one-reel editions available in either 16mm sound or silent, and 8mm.

Garrison Film Distributors, Inc., 1600 Broadway, New York City, announce that, effective September 1st all non-theatrical motion pictures released by them will be handled by Brandon Films, Inc., of 1600 Broadway. New catalogs issued by Brandon Films available now are: "The Blue List," "The Check List," "Films for Democracy."

Garrison Films will continue to produce instructional films. Some new fall feature releasings in 16mm sound include:

Mozart—story of the life and music of the immortal composer featuring excerpts from the famous operas and symphonies; with London Philharmonic Symphony.

Le Courier de Lyons (The Lyons Mail)—French film depicting one of the most famous judicial errors of history, execution of innocent man for mail-coach robbery.

The Lower Depths—French version of Gorky's famous play adapted to our own times.

Generals without Buttons—a satire on human absurdities that, on a grander scale, cause wars between nations. The warring parties are composed of children, and the whole range of militaristic method, seen in miniature, becomes material for laughter and pity.

The Eternal Mask—story of young doctor's flight to return to the real world out of his dream-world. Produced in Vienna, it is a widely approved psychological film.

Bailey Film Service, 1651 Cosmo St., Hollywood, California, have their new free film catalog, Gateway to Learning, ready for mailing to those requesting it. Especially interesting is the catalog's "quick-reference" classification of films alphabetically and by subject-matter. A special list of National Defense films is also available which will prove helpful in preparing film programs for defense training groups, clubs, teachers' and parents' meetings.

Visual Art Films, 1303 Porterfield St., Pittsburg, Pennsylvania, offer a new selection of 16mm sound classroom films on biology, travel and history for rental or sale. Among the entertainment features added to the rental library are:

Cavalcade of Civilization—5 reels, sound—an appeal for tolerance in a world of bigotry and hate, with William Farnum heading the cast.

Mutiny in the Big House—prison drama portraying efforts of understanding chaplain to rehabilitate hard-boiled prisoners.

Other offerings are Abraham Lincoln, with Walter Huston, Jane Eyre, Glory Trail, Symphony of Living, and Orphan Boy of Vienna.

Y.M.C.A. Motion Picture Bureau, 347 Madison Ave., New York City, has prepared a series of nine lists of films classified under the headings of:

Civilics and History: Fine and Industrial Arts; Health and Safety; The Sciences; Sports and Athletics; Transportation and Communications; Travel and Adventure; Vocations; Music of the Masters. In order to assist film users in locating material, the Bureau is experimenting with these classifications. In the event this type of service meets the need of the users, they will continue to issue additional lists from time to time. Copies of the entire set or individual classifications can be had upon request.

Bell & Howell Co., 1801 Larchmont Ave., Chicago, has compiled a 20-page report analyzing age-level, subject matter correlation, and quality of 1187 educational films distributed by the Filmsound library—784 of them sound films, 403 silent.

The purpose of this Educational Utilization Digest is to give a cross-index of the varied uses to which the films can be put. In the age-level analysis it is found that more films are aimed at the junior high school level than at any other, with senior high, elementary and primary following in that order. Other essential data given on the films are—number of reels, rental or service charge, sale price, whenever the film is available for outright purchase or lease.
A Recognized Source

NEWEST RELEASES!

SCHUBERT'S SERENADE
Musical romance based on life of Franz Schubert, with Lillian Harvey, and Louis Jouvet. French dialogue with English titles. 8 reels.

FISHERMAN'S WHARF
The latest Bobby Breen picture in 16 mm. centering about San Francisco's colorful waterfront. With Leo Carrillo, Henry Armetta, Lee Patrick. 8 reels.

BREAKING THE ICE
Starring Bobby Breen with Charles Ruggles and Irene Dare, world's youngest ice-skating star. 9 reels.

JOAN OF ARC
A realistic and dramatic portrayal of the heroine saint of France. Featured are famous paintings and sculptures of Joan of Arc, cleverly photographed to give the illusion of life and motion. 1 reel, sound.

WORK FOR YOUR OWN
A complete and understanding study of the life and habits of the Navajo Indians. An outstanding documentary. 2 reels in color, silent.

GUTLOHN SHORTS
Below are listed some of our films covering timely subjects:

VOCATIONAL TRAINING
Elements of Photography
Aviation Mechanics Series
Art Techniques

AVIATION
History of Aviation
Contact
Air Currents

NATIONAL DEFENSE
The Warning
Atlantic
Food Convoy
Behind the Guns

PATRIOTIC FILMS
on our Government, Flag, Way of Life and Historical Background.

FOR YOUR 16 MM. FILMS

WALTER O. GUTLOHN, Inc.

Pioneering in the development of 16 mm. sound since 1933, we attribute our leadership in the school field to carefully selected subject material. Our 2200 subjects embrace educational and entertainment films in 16 mm. sound and silent, many of which have been screened and approved by various groups of educators.

We maintain one of the largest libraries of independent features. In addition, we are now releasing Universal major features subject to advance approval. Some of these pictures are:

EAST SIDE OF HEAVEN
Bing Crosby, Joan Blondell, Mischa Auer, "Sandy"

FIRST LOVE
Deanna Durbin, Helen Parrish, Robert Stack

HOUSE OF SEVEN GABLES
George Sanders, Margaret Lindsay

LETTER OF INTRODUCTION
Adolphe Menjou, Andrea Leeds, Edgar Bergen, Charlie McCarthy

MAD ABOUT MUSIC
Deanna Durbin, Herbert Marshall, Gail Patrick

NEWSBOYS' HOME
Jackie Cooper, Edmund Lowe, Wendy Barrie, and "The Little Tough Guys"

UNEXPECTED FATHER
Baby Sandy, Shirley Ross, Dennis O'Keefe, Mischa Auer

These and Many Other Stars Appear in our Pictures:

Mickey Rooney
Charles Chaplin
Leslie Howard
Robert Donat
Charles Laughton
Douglas Fairbanks Jr.
Roland Young
Raymond Massey

Miriame Hopkins
Marlene Dietrich
Jean Parker
Ginger Rogers
Myrna Loy
Joan Bennett
Gertrude Lawrence
Merle Oberon

Send for Catalog of Entertainment and Educational subjects available for rental and sale.

WALTER O. GUTLOHN, Inc.

35 West 45th Street
Dept. E-9
New York, N. Y.
Laurel and Hardy in "Flying Deuces"

stars as Charles Boyer, Hedy Lamarr, Henry Fonda, Madeline Carroll, Leslie Howard, and Joan Blondell.

Additional releases by Commonwealth of outstanding major studio productions in 16mm include Flying Deuces, full-length Laurel and Hardy comedy feature; The Gay Desperado, starring Nino Martín and Ida Lupino; and One Rainy Afternoon, with Francis Lederer. Also several series of delightful color cartoon subjects, such as Toonerville Trolley Folks, Felix the Cat, Molly Moo—all filmed in the latest three-color Technicolor—are available.

Walter O. Guthloin, Inc., 35 W. 45th Street, New York City, announces the release of the following films:

**Work For Your Own—**2 reels in color—a portrayal of the life and habits of the Navajo Indian. Shows how Indians build their own homes, secure their food, and make their clothes from the shearing of the wool to the weaving and dyeing. Produced by Drs. Dorothea and Alexander Leighton of Johns Hopkins University.

**Joan of Arc—**2 reels, sound—dealing with the life of the heroine saint of France. Unusual camera shots of Joan of Arc portrayed in famous paintings and sculpture, give the illusion of life and motion.

**Fisherman's Wharf—**sound feature, takes as its locale San Francisco's colorful water front colony. In the cast are Bobby Breen, Leo Carrillo, Henry Armett, Lee Patrick and Slicker, the trained seal. It is a tale of father and son companionship, filled with pathos and humor.

**Critters—**1 reel, silent—how figures can be made from such materials as pipe cleaners, spools, lollipop sticks, paper, feathers, etc. Rhyming titles in Mother Goose style explain the action. Handicraft film for young children, ages 5 to 10 years.

**Hawaiian Islands—**1 reel, silent, in color—beautiful scenery and views of Island industries, principally the raising of pineapple and sugar cane.

**Mexico—**2 reels, sound, in color—including scenes of Mexico City, Tarascan Indians, Lake Taxco, and typical Mexican country life.

**Schubert's Serenade—**8 reels, sound—a musical romance based on the life of Franz Schubert. Dialogue is in French with English titles. Many of his compositions are performed by the principals, chorus, ballet and orchestra of the Paris Opera.

**Hoffberg Productions, Inc., 1600 Broadway, New York City, is releasing a new feature length production:**

**Inside Russia—**directed by Charles A. Stuart, American Engineer. Mr. Stuart, because of services rendered to the Russian Government, was given permission to photograph scenes at random. He is one of the few Americans who was accorded this privilege. The result is said to be not a propaganda film, but an impartial and informative document on conditions in Russia. Norman Brokenshire does the commentary.

**International Film Bureau, Inc., 59 E. Van Buren St., Chicago, has added a number of new 16mm French feature films to its library. Included is one which was originally released by Columbia Pictures Corporation in France, under the title "Boys School". The French version is titled:**

**Runaways of St. Agil and stars Eric von Stroheim as an eccentric professor in the school. When released in France this film won the Jean-Vigo Prize of the Academic du Film as the most unusual film, and offers a bizarre plot centered on an inseparable trio of boys, two of whom disappear in mysterious fashion. The third one turns detective and eventually with the help of others in the school solves the mystery. The story is being edited for classroom use. Copies of the complete dialog in French may be secured. Complete English screen titles translate the dialog.**

**Ideal Opens Fourth Branch Office**

Continued expansion of the services of Ideal Pictures Corporation is indicated in the announcement received from its President, Mr. Bertram Willoughby, that on September 1st an additional branch office was opened at 18 South Third Street, in Memphis. The new office is housed in the ground floor of a brand new building. The manager is Mr. Stanley Nolan, for many years connected with Ideal's Chicago headquarters, assisted by Mrs. Nolan, in charge of the booking staff. The Memphis office is equipped with prints of all the newest and best 16mm subjects, including features and shorts. It also handles projectors, commercial films and offers projection service for special exhibitions.

Mr. Donald Reed, who has been manager of Ideal's Los Angeles office, has been promoted to Special Services for the entire Ideal organization, and will devote his time equally to the four offices now existing in Chicago, New York, Los Angeles and Memphis.

Ideal Pictures Corporation inaugurates its 22nd year of service to the non-theatrical film field with a large and impressive catalog, size 8 x 11. Its 124 pages list and describe the countless subjects in the vast Ideal library—features and short subjects, educational and entertainment. There are many illustrations. The first few pages are devoted to a classified subject index which users will find most helpful, and the final 16 pages to descriptions of services and product other than films available from Ideal—16mm projectors, screens, slide andfilmstrip projectors, microphones, recorders, cameras, lenses and the various accessories and supplies necessary to the film exhibitor as well as the film-maker.

Ideal will be glad to send copy of this fine new catalog to any school interested in its services. The addresses of its offices are: Chicago, 2402 West 7th Street, Los Angeles, 18 South Third Street, Memphis, and 1600 Broadway, New York City. (address the latter office as Bertram Willoughby Pictures, Inc.)
Some Valuable Literature

"1000 AND ONE" FILM DIRECTORY

"1000 and ONE" The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

132 pp. Paper. Price 75c. (25c to E. S. subscribers)

The FILM EVALUATION SUPPLEMENTS TO "1000 and ONE"

A new, unique, outstanding service to the teaching field—authoritative film evaluations in card-index format.

The first two Supplements are ready—presenting, on 100 standard-size library cards, evaluations totaled from multiple judgments of the 100 films most widely used and scored—after actual class use—by the Judging Committee of 500 teachers under the National Film Evaluation Project. Each succeeding Supplement will carry the next 50 films to attain their quota of Score Cards from the Committee. Price per Supplement of 50 cards, with full explanations accompanying, 50 cents (postpaid if cash with order). (Sold only to owners or purchasers of current edition of "1000 and ONE Films," 16th edition).

VISUALIZING THE CURRICULUM

By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman.

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. Includes up-to-date material and provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK. (3rd Edition)

By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussions on "The Status of Visual Instruction," "Types of Visual Aids and Their Use," "Types of Audio-Visual Aids to Instruction," "Types of Sound Aids for Schools," "Organizing the Audio-Visual Service," "Source List of Materials and Equipment."


SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production date, and rental price and grade level suitability are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation.


PICTURE VALUES IN EDUCATION

By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 156 pp. Cloth. Illus. Price $1.00 (67c to E. S. subscribers)

AN ALTERNATIVE FOR REVOLUTION AND WAR

By Albert E. Osbourne

A stimulating, wide-range view of the higher potentials of visual instruction in promoting world harmony by a "more humanity-centered education." A pertinent reply to H. G. Wells' dictum that the "future is a race between education and catastrophe." 124 pp. Cloth. Price $1.25.

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lelia Trudinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.


THE EDUCATIONAL TALKING PICTURE

By Frederick L. Devereux

Presenting preliminary solutions of some of the more important problems encountered in adapting the talking picture to the service of education. The first six chapters deal with the development of fundamental bases of production, with the experimentation which has been conducted, and with suggested problems for future research. The remaining chapters discuss the effective use of the sound film in teaching.

220 pp. Cloth. Illus. Price $2.00. (20% discount to schools)

HOW TO USE THE EDUCATIONAL SOUND FILM

By M. R. Brunstetter, Ph. D.

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers' use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

175 pp. Cloth. Illus. Price $2.00. (20% discount to schools)

THE USE OF VISUAL AIDS IN TEACHING

By Ella Callista Clark, Ph. D.


HOW TO MAKE HAND-MADE LANTERN SLIDES.

By G. E. Hamilton.


THE STEREOPHOTO and LANTERN SLIDE IN EDUCATION. By G. E. Hamilton


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Educational Screen

64 E. Lake St., Chicago

I have indicated items desired and enclose check for $...

Name...

School or Street...

City... State...
Among the Producers

Keystone Units on the Americas

A special series of visual units on the Americas is announced by the Keystone View Company, Meadville, Pa. These should be used to advantage by schools that listen in on the American School of the Air.

During the coming year the Wednesday afternoon broadcasts of the American School of the Air will develop the theme "Lands of New-World Neighbors." Correlated with this series of broadcasts is the textbook just published under the same name and written by Hans Christian Adamson of the New York Museum of Natural History. For visual correlation with this series of broadcasts, subject by subject, the Keystone View Company offers a series of nineteen units of stereographs and lantern slides—some from the current Keystone Social Studies list and others entirely new.

Radiant Screen Enters Educational Field

Announcement was made last month by Radiant Manufacturing Corporation, 1540-6 W. Superior Street, Chicago, makers of Radiant "Hy-Flect" Projection Screens, of their entrance on September 1st into the educational field. In their enlarged line, Radiant is now offering a new auditorium screen, a classroom model, and a complete line of wall and ceiling type screens in all sizes up to 12 feet by 12 feet.

The most recent development brings to the market a new screen which is automatic, making for greater ease of operation. Using no set screws, spring plungers, or any other hand-operated locking devices, the new automatic Radiant screen is erected instantaneously by three simple movements. A slight pressure on a small lever opens the tripod legs; a simple turn of the screen case places it in a horizontal position automatically; an easy pull lifts and locks the screen into position. No hooks, no hanger, no fixed position is necessary. The screen is adjustable to any height from 17 to 50 inches from the floor by use of the Radiant exclusive automatic clutch. Square tubing minimizes side sway. All parts are cadmium plated and the screen housing is in attractive crackle-finish.

Bell & Howell Slide Master

Important news this month is the entry of Bell & Howell into the still projection field with its new Filmo Slide Master for the projection of glass or paper mounted 2" x 2" Kodachrome or black-and-white transparencies. The new projector is said to be light and extremely portable, is ultra modern in design, and has been carefully engineered. It is claimed to produce pictures with improved illumination and sharpness. The new unit offers a list of exclusive features.

Perhaps the most interesting feature of the Slide Master is the new "base-up" lamp, which slides easily into the lamp housing from the top and which burns with its base upward. This new projection lamp has been especially developed for use in this position, the chief advantage being that the blackening deposit formed during operation of the lamp is not deposited on the sides of the lamp, where it would reduce light transmission. The top of the lamphouse is a hinged snap-cover, which automatically breaks the electrical circuit as it is opened—thus lamps may be interchanged with perfect safety. The machine is designed to take 500, 750 or 1,000-watt base lamps. A motor-driven fan circulates a forced draft of cool air throughout the projector. The motor automatically increases speed when a 1,000-watt lamp is used, and decreases speed when lamps generating less heat are used. Filmo Slide Master is offered with a choice of 3½, 5, or 7½ inch F-4.5 lenses. All are anastigmatic, interchangeable, and may be locked in focus.

The slide carrier is of die-cast metal, with special air passages providing for circulation of free, cool air around the slide. The carrier is of the conventional two-slide type, shifting horizontally to permit change of slides while one slide is being projected. The Slide Master is finished in light brown wrinkled enamel, with chromium and lacquer trim.

For prices and further information, write to the Bell & Howell Company, 1801 Larchmont Avenue, Chicago.

Slidefilms on Art

In Sound and Color

O. J. McClure Talking Pictures, 1115 West Washington Boulevard, Chicago, is collaborating with Dr. Dudley Crafts Watson, official extension lecturer of The Art Institute of Chicago, in the production of sound slidefilms of master-piece paintings in Kodachrome. In addition to giving the lecture accompanying each painting, the well-known Dr. Watson is also doing the color photography, being a pioneer in that field.

Designed to promote art appreciation and art education in schools and colleges, the programs are forty minutes in length and contain approximately forty reproductions of paintings. They are available in 35 single frame, double frame and 2" x 2" glass slide mounts. The lectures are Victor recorded on two 12-inch records, both sides, operating at a speed of 33 1/3 r.p.m. The first program, to be completed is made up of subjects from the Chicago Art Institute—paintings by Millet, Monet, Cezanne, Van Gogh, Greuze, Stuart, Hals, Turner, Homer, Sorolla, Memling, Inness, Higgins, Sargent, Henry, and Lee. Other programs will follow at short intervals.

The McClure Company manufactures a complete line of sound slide film equipment for use with this material: combination sound and film units, sound units alone, or turntables which will play records through any kind of sound amplifier the school may have—radio, phonograph, public address or motion picture machine. Thus, schools may enjoy faithful reproductions of art.
masterpieces large enough for showing in classroom or auditorium.

Further information may be had upon request to The Society for Visual Education, 100 East Ohio Street, Chicago, who will market these programs through their dealers, or to the producers, O. J. McClure Talking Pictures.

New Eastman Camera

A new 2¼ x 3½ still camera, the Kodak Medalist, designed for exceptional flexibility of performance and fast, easy operation, is announced from Rochester by the Eastman Kodak Company. It takes 620 roll film, with easy adaptability to the use of cut sheet film, film packs and plates, plus the scope, accuracy, and refinements of a precision miniature. Its 100-mm. f/3.5 Kodak Ektar Lens is newly designed and highly corrected. All interior glass-air surfaces are treated to reduce inter-surface reflections, achieving exceptional light transmission and superior definition.

The shutter is a special model of Kodak Supermatic No. 2. It has eight apertures from f/32 to f/3.5 and nine speeds ranging from 1 to 1/400 second, plus bulb. It also has a built-in, delayed-exposure mechanism, cable release socket for remote control, and Photoflash synchronization. Built into the top of the camera is a distance scale which turns to show focus at which the lens is set. The depth of field at any distance can be read for any lens aperture selected. Kodak Medalist has a split-field range finder system operating automatically with the lens. The view finder is designed to give parallax correction automatically while the range finder eyepiece shows the central portion of the subject field.

Double exposures cannot be made unintentionally, for once the shutter has been released it will not operate again until the film has been wound into position for the next exposure, simultaneously setting the shutter. An exposure counter is located near the finder, and a large circular dial can be set to indicate the type of film with which the camera is loaded.

An Accessory Back for sheet film, film packs and plates is available for $18.50. The camera can be used also as an enlarger. The Kodak Medalist, without accessories, is priced at $165.00.

Recordings for Schools

Further news from Recorded Lectures, Inc., of Chicago, reports a summer active in the production and release of additional educational electrical transcriptions. Prominent among the material released is the series called "This is America" described as suitable for grades from four through twelve, and for the following subjects—Social Science, History, English, Speech, Dramatics, Science.

To aid the teacher in analyzing the transcription before using it with a class, Recorded Lectures, Inc. is providing a special "Transcription Analysis" sheet to accompany all records. This sheet can become permanent reference material for all future use, and will offer suggestions to those teachers who are using transcriptions for the first time. Not all programs by Recorded Lectures, are for high schools and elementary grades. Talks by eminent scientists, educators and men of wide renown are ready for colleges and universities.

For detailed information concerning all subjects now available, write to Recorded Lectures, 73N North Michigan Avenue, Chicago, Ill., or to Bell and Howell Company, 1801 Larchmont Avenue, Chicago, sales distributors.

Posthumous Honor to Herman A. DeVry

The innumerable friends of the late Herman A. DeVry, pioneer motion picture projector inventor, engineer and founder of the DeVry Corporation, will be delighted to learn that on June 2, 1941, a posthumous honor in the form of a Doctor of Science Degree was conferred upon him by Lincoln Memorial University, Harrogate, Tennessee. Mr. DeVry was accorded this high honor in recognition of his distinguished service in the field of science and invention and for his pioneering in the realm of Visual Education.

The faculty and trustees of the University had recommended this signal honor to Mr. DeVry prior to his untimely death. Accepting the recognition in his honor were Mrs. Ida B. DeVry, widow, Mrs. Emma Carlson, daughter, and Mr. E. B. DeVry, son.

Radio Recordings Series

A new series of 26 recorded programs, each of fifteen minutes duration, on the Constitution of the United States—the fourth in the "Lest We Forget" programs—is available for all radio stations. Schools may arrange with local stations to have these broadcast at a time convenient for class assembly room use. The programs present in dramatized form the backgrounds of the Constitution, the compromises which were necessary before adoption was possible, the Bill of Rights and other amendments as well as some typical Supreme Court cases interpreting this basic law of the land. The series emphasizes the fundamentals of democratic government and the liberties enjoyed by the free people of the United States. These programs are furnished to the stations and schools without charge by application to The Institute of Oral and Visual Education, Radio Division, 101 Park Avenue, New York City.
HERE THEY ARE

FILMS

Akin and Bagshaw, Inc. (3) 1425 Williams St., Denver, Colo.
Armour & Co. (2) Union Stockyards, Chicago
(Best advertisement on page 306)
Bailey Film Service (3, 4) 1651 Cosmo St., Hollywood, Cal.
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago
Boston University, Division of Teaching Aids (3) 84 Exeter St., Boston, Mass. (See advertisement on page 308)
Castle Films (3) R C A Bldg., New York City
(See advertisement on page 277)
College Film Center (3) 59 E. Van Buren St., Chicago.
Commonwealth Pictures Corp. (3) 729 Seventh Ave., New York City
(See advertisement on page 309)
DeVry School Films (3, 4) 1111 Armitage Ave., Chicago
Dudley Visual Education Service (1) 736 S. Wabash Ave., Chicago
4th Fl., Coughlin Bldg., Mankato, Minn.
Eastman Kodak Stores, Inc. (3) Kodascope Libraries 356 Madison Ave., New York City
Edited Pictures System, Inc. (3) 35 W. 42nd St., New York City
Epi Classroom Films, Inc. (2, 5) 35-11 35th St., Long Island City, N. Y.
(See advertisement on page 299)
Films, Inc. (3) 330 W. 42nd St., New York City
46 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore. (See advertisement on page 308)
Post Film Firms (1) (See advertisement on page 312)
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask. 156 King St. W., Toronto
(See advertisement on page 299)
Harvard Film Service (3, 6) Walter O. Guthlin, Inc. (3) 35 W. 45th St., New York City (See advertisement on page 315)
Harvard University, Biological Laboratories, Harvard University, Cambridge, Mass.
Hoffberg Productions, Inc. (2, 5) 1600 Broadway, New York City
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago, Ill. (See advertisement on pages 296-7)
Independent Motion Picture Exch. (2) 4726 S. Packard Ave., Cudahy, Wis.
Lewis Film Service (3) 216 E. 1st St., Wichita, Kan. (See advertisement on page 307)
Manse Film Library (3) 1351 Dana Ave., Cincinnati, O. (See advertisement on page 311)
Mogull's (3) 61 W. 48th St., New York City (See advertisement on page 312)
Nu Film (3) 145 W. 45th St., New York City (See advertisement on page 308)
Post Pictures Corp. (3) 723 Seventh Ave., New York City

DOUGLAS D. ROTHACKER
729 Seventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.
Universal Pictures Co., Inc. (5) Rockefeller Center, New York City
(See advertisement on page 311)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Vocational Guidance Films, Inc. (2) Old Colony Bldg., Des Moines, la.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.
Y.M.C.A. Motion Picture Bureau (3) 574 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.
1700 Patterson Ave., Dallas, Tex.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3) 2839 N. Western Ave., Chicago
(See advertisement on page 278)
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago
DeVry Corporation (3, 6) 1111 Armitage St., Chicago
(See advertisement on inside back cover)
Eastman Kodak Stores, Inc. (3) Kodascope Libraries 356 Madison Ave., New York City
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask. 156 King St. W., Toronto
Holmes Projector Co. (3, 6) 1813 Orchard St., Chicago
(See advertisement on page 310)
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago, Ill.
(See advertisement on page 296-7)
Jarrell-Ashe Company (3) 163 Newbury St., Boston, Mass.
RCA Manufacturing Co., Inc. (2) Camden, N. J. (See advertisement on page 312)
S. O. S. Cinema Supply Corp. (3, 6) 631 Eleventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.
Victor Animatograph Corp. (3) Davenport, Iowa
(See advertisement on page 308)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

RECORDINGS

Recorded Lectures, Inc. 737 N. Michigan Ave., Chicago (See advertisement on page 307)

SCREENS

Da Lite Screen Co. 2717 N. Crawford Ave., Chicago
(See advertisement on page 301)
Radiant Mfg. Corporation 1140-46 Superior St., Chicago
(See advertisement on page 305)

Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill. (See advertisement on outside back cover)
Williams, Brown and Earle, Inc. 918 Chestnut St., Philadelphia, Pa.

SLIDES and FILMSTRIPS

Armour & Co. (2) Union Stockyards, Chicago
(See advertisement on page 306)
Edited Pictures System, Inc. 330 W. 42nd St., New York City
Ideal Pictures Corp. 28 E. Eighth St., Chicago, Ill. (See advertisement on pages 296-7)
Keystone View Co. 302 Madison Ave., Cleveland, O. (See advertisement on page 312)
Radio-Mat Slide Co., Inc. 1819 Broadway, New York City (See advertisement on page 313)
Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill. (See advertisement on outside back cover)
The Stanley Bowman Co. 2929 Broadway, New York City
Visual Education Service 131 Clarendon St., Boston, Mass.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co. Rochester, N. Y. (See advertisement on inside front cover)
DeVry Corporation 1111 Armitage Ave., Chicago (See advertisement on inside back cover)
Eastman Kodak Stores, Inc. Kodascope Libraries 356 Madison Ave., New York City
General Films Ltd. 1924 Rose St., Regina, Sask. 156 King St. W., Toronto
(See advertisement on page 299)
Jarrell-Ashe Company 165 Newbury St., Boston, Mass.
RCA Manufacturing Co., Inc. Camden, N. J. (See advertisement on page 299)
S. O. S. Cinema Supply Corp. (3, 6) 631 Eleventh Ave., New York City
United Projector and Films Corp. (1, 4) 228 Franklin St., Buffalo, N. Y.
Victor Animatograph Corp. (3) Davenport, Iowa (See advertisement on page 308)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

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(1) Indicates 16mm silent.
(2) Indicates 16mm sound.
(3) Indicates 16mm sound and silent.
(4) Indicates 35mm silent.
(5) Indicates 35mm sound.
(6) Indicates 35mm sound and silent.

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EDUCATIONAL SCREEN

THE MAGAZINE DEVOTED TO AUDIO-VISUAL AIDS IN EDUCATION
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Among 16mm Sound MOTION PICTURE PROJECTORS

Compare THESE 11 MAJOR FEATURES NOT FOUND IN OTHER EQUIPMENT

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2. SWING OUT LENS MOUNT — Easy access to film channel and aperture plate for removal of dirt and grit. Prevents scratches and abrasions. ANOTHER VICTOR EXCLUSIVE.

3. DUAL FLEXO PAWS — This vitally important feature prevents damaging film perforations. Victor paws will "spring-over" instead of punch holes in film.

4. OFFSET FILM LOOP — Provides simplest threading, permits film to flow naturally on one side of channel—prevents "screen image wear" and makes possible Victor's exclusive single over-sized feed sprocket for still greater film protection.

5. SPIRA DRAFT LAMP HOUSE — Unmatched efficiency — long lamp life — no overheating of mechanism and projector body because of exclusive spiral draft action produced by unique lamp house and fan construction.

6. VICTOR AMPLIFIERS — Finer sound fidelity has been achieved through construction in Victor's own sound laboratories, where engineers specifically design for 16mm film requirements.

7. TWO STABILIZING FILTERS — In Victor's Sound Head construction, two separate revolving filters are used. No film speed variation can occur. Result — the World's finest sound reproduction. No additional gadgets or snubbers required.

8. NO REFOCUSING FOR COLOR — Victor's stationary Sound Drum is unique because exciter lamp can project a collimated beam through a wide angle lens that entirely eliminates necessity for making adjustments. No separate sound lens for color or reversed print. No extra cost—No added confusion.

9. PHOTO ELECTRIC CELL — Variable voltage control is vitally important because it assures high efficiency and extra long life without overload failure.

10. PICK-UPS — Simple plug-in attachments for large booster amplifiers, extra speakers, microphones and record turntables. All accessible from outside of case.

11. MULTIPLE-USE DESIGN — Exclusive extra feature. Units can be added to basic sound projector making available combinations to perfectly fit for every requirement. One projector unit serves all purposes.

VICTOR ANIMATOPHONE

The finest 16mm Projector in all History

The Victor Animatophone Sound Motion Picture Projector with its MULTIPLE-USE UNITS — EXCLUSIVE WITH VICTOR — is the ultimate in projector design. "BUILT INTO" the Animatophone are features backed by Victor's thirty-two years of experience and leadership. It incorporates every feature known to the industry plus many extra exclusive refinements.

With Victor there is NO COMPROMISE WITH QUALITY — NO PREMIUM IN PRICE.

For additional information about other features, ask for "TWENTY-SIX REASONS FOR VICTOR ANIMATOPHONE SUPREMACY" and new catalog form No. 1050.
KEYSTONE UNITS OF STEREOGRAPHS AND LANTERN SLIDES

and

THE AMERICAN SCHOOL OF THE AIR

Cooperating with governmental and private agencies that are endeavoring to promote inter-American understanding and cooperation, the Keystone View Company offers units of stereographs and lantern slides that will parallel the American School of the Air series of weekly broadcasts on “Lands of New-World Neighbors,” which begin Wednesday, October 6.

Several of these units are entirely new, being compiled from stereographic negatives made by Keystone’s special photographers during the past two years.

Following are the titles of the units referred to in the Teachers’ Manual in the section on “Lands of New-World Neighbors.”

(25 Stereographs or 25 Lantern Slides to Each Unit)

“Cuba and the West Indies”
“Mexico”
“Central America”
“Colombia and Venezuela”
“Brazil”
“The Amazon”
“Argentina, Paraguay, and Uruguay”
“Chile and Bolivia”
“Peru and Ecuador”
“Hawaii”
“Life in the Mountain and Plateau States”
“Expanding Frontiers beyond the Mississippi”
“Our Neighbors in Eastern Canada”
“The Atlantic Frontiers”
“Life in Changing New England”
“Expanding Frontiers beyond the Alleghenies”
“Life in the Pacific Coast States”
“Expanding Frontiers beyond the Rockies”
“Making a Living in our Southland”

Detailed Information Will Be Sent upon Request

KEYSTONE VIEW COMPANY

MEADVILLE, PENNA.
When *Gorilla savagei* Visits a City Classroom

TO CITY classrooms Bausch & Lomb Balopticons have brought *Gorilla savagei* and other denizens of the wilds... to dust-shrouded schools of Mid-Western plains, the rainbow-hued marvels of the Bermuda Deep... to mountain schools, the architectural wonders of spired Manhattan.

Scenes from the far corners of the earth, photographs requiring costly expeditions to acquire, specimens found once in a scientist's lifetime—are now presented for leisurely, detailed classroom study by beginner and expert alike.

All this is made possible because of the Bausch & Lomb Balopticon, a simply operated, economical still projection instrument. So universally is this projector used that the trade name "Balopticon" has become a common noun to be found in the dictionary.

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A VISUAL aid program is an added item of expense. In addition to the cost of the projector or projectors, there is the expense of films and slides. One may ask, “Can this expense be justified on the basis of educational terms?”

This can be answered in the affirmative, only when visual materials are used in correlation with other materials in the classroom. The visual lesson should be viewed by the students as a regular part of the classroom procedure, and never as a “Picture Show.” The teacher should have definite objectives or aims in mind when using the visual material. If visual materials are used merely as something to fill in the period, then, of course, the greatest portion of their value as a teaching aid is lost. Therefore, if one is to get the maximum value from the film, he must not only have definite aims and objectives in mind, but procedures and certain class activities as well. True, many worthwhile activities will be suggested by the students after viewing the film, but the teacher should be in a position to lead the class to suggest certain activities that will call for further study of certain interests brought about by the use of the film or slides.

What then is the exact procedure for the teacher who wishes to use visual materials so as to get the maximum value from them as a teaching aid? It is impossible for any one to state an exact method or procedure. However, certain facts which will be helpful to the teacher in planning a visual lesson can be suggested.

In planning to use a film the teacher should be able to answer the following questions:

1. What does the film contain?
2. Does this content correlate nicely with textbook and other reference materials studied or to be studied?
3. Is the content suited to the grade level of the class to which it is to be presented?
4. If not, what steps are necessary to bring it up, or step it down to the desired grade level?
5. What portion of the film will most likely need to be presented a second or third time?
6. Where in the unit shall the film be presented? That is, as an introduction, to give information on a certain portion, or as a rapid review of material studied.
7. What is the major aim or objective to be attained?
8. What are the specific objectives or aims?
9. What method or methods of presentation will best accomplish the stated objectives or aims?
10. What type of follow-up work or activities will secure best results?

In order to make the above suggestions more practical, consider the silent classroom film “The Old South”* from the standpoint of using it in connection with a junior class in American History. A preview of the

A pioneer woman spinning cloth

*An Eastman Teaching Film. All accompanying illustrations are from the Eastman Collection.
and a Film

The fundamentals of effective film teaching technique concretely illustrated by a complete film-lesson with a specific film.

The Waterwheel of an old sawmill.

film, or study of the manual shows that the film is divided into four parts: The Land and People, Products, Communications, Plantation Life.

Naturally, this is related to the unit of study preceding the Civil War. Since the students are rather mature, and since the film does not deal with any complicated processes, probably two showings will be sufficient. If one is to effect an economy of time in the learning processes through the use of visual aids, then this film should be used to introduce the unit.

The general objective, specific aims, approach for study, and suggestions for further use of the film will be found in the following outline:

UNIT—"The Old South"
(for American History, Junior class)

I. Brief introductory statement
   A. To give the students a better understanding and appreciation of the South as it was before the Civil War.
   B. Specific aims
      1. To give the students a better understanding of the territory included in the Old South.
      2. To learn something about agriculture in the Old South.
      3. To learn how the plantation method exploited the soil.

Dancing the polka at a mansion.

4. To learn how the plantation method drew most of the capital away from industry into agriculture.
5. To learn something of the life of the planters, and the social leaders of the South.
6. To gain a better understanding of slavery through observation of the slaves at work and at play.
7. To gain a knowledge of transportation in the South
8. To appreciate more fully the position of the poor white people in the South.
9. To learn something of the educational system of the Old South.

II. Approach for this study
   A. Reports from students covering topics suggested above.
   B. Students report on the Old South from actual observation.
   C. Music using the more familiar songs of the Southland, such as Swanee River, Old Black Joe, etc.
   D. Use of film "The Old South",
      1. General view of the South using animated map showing area
      2. Methods of transportation.
      4. Plantation life.
      5. The negro.

A Colonial schoolroom in the South.
III. Suggestions for the use of the film
A. Three specific uses.
1. To introduce unit, arouse interest.
2. To eliminate false impressions, clarify certain concepts, stimulate more interest, arouse discussion, etc.
3. To stimulate lasting interests, organize and summarize experiences.

B. Use of additional visual aids, such as:
1. The film slide.
2. The lantern slide.
3. Songs for group or solo.
4. Poems, historical novels, etc.

C. Pupil activities.
1. An imaginary tour of the South using the various methods of transportation, hotels, etc., which were common during this period.
2. Posters of slaves, auction block, or typical scenes of southern life.
3. Letters to friends in other parts of the United States.
4. A debate: Merits of the Plantation System or The Slave as an Essential Part of the Economic System of the South.
5. Dramatization, class paper, etc.

Even though the film is to be used in introducing the unit of work, this does not mean that the students need not make preparation before viewing it. The following material should be brought out, either by the reports or by the teacher before the final showing of the film. This may be fitted to the sections of the film.

1. The Land and Its People

In thinking of the people of the South it is well to think of them in two groups: the small group of slaveholders and planters, and a large group of non-slaveholding people. In this latter group there were possibly 6,800,000 whites. These people were scattered everywhere throughout the South—some of them farming, others working as overseers for the planters. To many of these people luxuries were practically unknown. Southern women played a very important part in their day-to-day lives and the way they lived. They took their place beside the men, as did the pioneer women of all sections of the United States, and helped wherever their help was necessary. It is well in our study of the South to note the distribution of the population as it was in 1860 and compare it with the distribution of the population in the North.

2. Products

One crop that was very important during the early period was peanuts. At that time they were called ground nuts and were used primarily as food for hogs. Now they are used extensively as food for human beings in the use of nuts, oils, and peanut butter. Most of the crops of the South require a much longer growing season than the crops of this section, and one finds, as shown upon an animated map, the growing region ranging from six to nine months. Each of the seasonal belts has one or more outstanding products that will be shown during this section of the film. Probably everyone realizes that one of the earliest crops of the South was tobacco. The English people learned its culture from the Indians. It was not until 1616, however, that a suitable method of curing had been devised which made the tobacco tasteful to the English. After that period it became the outstanding crop of Virginia. Virginia ranks third in the production of tobacco today, being surpassed only by North Carolina and Kentucky. This shift in tobacco production indicates how the soil fertility decreases in the tobacco areas. In the longest growing season of the South around the Gulf of Mexico sugar cane is produced. It was in the rice region of South Carolina that slavery was most deplorable. In the Carolinas rice and indigo became the leading crops. Sources of irrigation were devised in the region of the tides so that with the incoming tide water could be held behind the dikes and used for irrigation. Floods, storms, and animals, such as muskrats and alligators caused much damage to the levees and dikes. The cost of the rice in this area was consequently high. Gradually Arkansas, Texas, and Louisiana became the leading centers of rice production, so that now the rice fields of the Old South are inhabited largely by water fowl. One would hardly think of the Old South or the South today without thinking of the cotton plant. The invention of the cotton gin made the production of this plant profitable, because great quantities of it could be cleaned from the seeds in a very short period of time. It was also the introduction of the cotton gin that really fastened slavery upon the South, because, previous to its invention, many of the large slave owners had been considering plans of disposing of their slaves because they thought slaves were not profitable.

Sometimes in thinking of the great plantations of the South one thinks of the satisfactory life that must have been led by the planter and his family. He does not think of the hard labor that must have been done. The felling of trees and the moving of stumps required a great deal of labor which was supplied by the slaves. Lumbering was important in the South along the fall line where water power was plentiful.

3. Communication

Transportation in the South preceding the Civil War was about on par with transportation throughout most of the western states, with the exception, of course, that there were more railroads in the North in 1860 than there were in the South. Tobacco was moved during the summer time when roads were at their best in large hogheads, which were rigged up by axles and shafts and rolled to their destination. Hogs and cattle were driven to the slaughter houses of Baltimore, and here were the counterparts of the great cattle drives of the western plains which came in the latter part of the century. Many of the people of the South allowed these drovers to turn their hogs into their fields of ripening grain and in this way they saved the expense of harvesting, and this was the only method the small farmer had of raising cash.

Canals played a very important part in transportation in this region. Then, of course, the outstanding method of transportation was the river steamer. To the planters of the South, who were naturally the social leaders, the steamer afforded a means of escape for a few months during the year to some of the northern cities. For the other people, the arrival of the steamer at the docks was an occasion for celebration and a general holiday. It brought news of the other sections of the country, and there were always people who would entertain the crowd with stories, etc.

4. Plantation Life

No study of the South would be complete without giving a few minutes of consideration to the plantation system, which, of course, includes the way of life of the planter and his family. While it is true there were only a few thousand planters in the South, yet these people played a very important part in shaping the destiny of that section of the country. From their ranks came many of the most important men in the history of America, especially during the first period of the nineteenth century. For this reason alone, it seems that it is well to spend a little time in this study of the life of the planter's home, his form of agriculture, and entertainment.

The next major step is to plan the follow-up work. This should be done in such a way that the content of the film will be firmly fixed in the mind of the student, and the information so gained may serve as a background for further study. The questions brought up by the student should be used first. Here are a few that were asked by members of the class in which this lesson was used.

1. Were the slaves allowed to play as we see them here in this picture?
2. Were the slaves educated? What was the average cost of the slaves? Wouldn't it have been cheaper for the planter to hire labor rather than to buy and own the slaves?

(Continued on page 352)
A Filmstrip for School-Community Relations

HARRIS C. PALMER
Director of Visual Education,
Griswold High School, Jewett City, Connecticut

Interesting evidence that the Filmstrip—as well as the Motion Picture—can be effectively used for “public relations” purposes.

The student population in most high schools throughout the country includes many out of town pupils paying tuition. The school authorities are, continually seeking to promote interest in the school and to promote better relations with the nearby communities. In this respect Griswold High School is no exception, and has found the filmstrip an excellent means of accomplishing this end.

The writer, aided by several pupils, took a series of candid shots which were titled “A Visit to Griswold High School”. The series included several views of the building and grounds, students in classes and in laboratories, and student activities. The completed filmstrip contained approximately seventy-five frames about fifteen of which were descriptive titles, and the rest of which were pictures.

A few suggestions may be helpful for those teachers who might wish to try such a project. An inexpensive 35 mm. camera with an f4.5 lens and a fast film produced good results. The most popular type of picture proved to be the unposed, although it was found necessary to have some of them posed. The posed pictures should be definitely in the minority. Experience suggests that the familiar “Year Book” type of groups should be avoided. It is well to include as many classes, activities, and different pupils as possible, because every parent will be looking for his son or daughter. The sequence of pictures was arranged to suggest the normal impressions gained by a visitor to the school, beginning with the arrival of the pupils in the morning and ending after their departure in the afternoon. Titles were written for each picture and additional descriptive material was placed on separate frames. The making of enlargements and the copying on positive film was done at the W.P.A. Visual Aids Center in New Haven where excellent work is done at a nominal cost. Teachers in every state where such Centers are located should take advantage of the service which is offered. Those who are not so fortunate can interest their camera club in the work of developing, enlarging, and copying on positive film.

Filmstrips of this type are excellent for promoting interest in the senior high school, among the junior high pupils; for acquainting Parent-Teacher organizations and other groups with the senior high school activities; and for increasing the interest of the senior high school pupils in departments other than those in which they are registered. We have found this film strip excellent for better acquainting the local school board as well as the school boards from patron towns with the work that is being done in the high school.
ONE of the foremost demands imposed by the democratic way of life is that the people be informed on matters concerning personal and public welfare. The program for national defense implies far more than producing armaments and training skilled workers and fighting men. A broader definition of the defense program encompasses an educational crusade for public enlightenment. An informed populace is the democratic front line of fortifications. The urgent need is for a citizenry able to make an intelligent approach to the difficult problems of our day. American ideals cannot be safeguarded without thoughtful action. In defining and carrying out any foreign or domestic policy, our leaders must inevitably depend upon judicious popular support. Our democratic system will prevail so long as the American public is sensitive to existing conditions and has the power to improve them.

The real danger to democratic method does not lie so much in mass ignorance as in the fact that people are generally ignorant of their own ignorance. As T. R. Adam suggests, the avowed need is “to enlarge our political democracy into a wider democracy of learning.” The highest service that educators in this country can render in the present emergency is to arouse the great mass of American citizens from a lethargic state of mind to active consciousness of current social requirements. Our schools have too frequently overlooked the social aspects of life which have been left for us to find out later for ourselves, if at all. The adult education movement in this country is endeavoring to satisfy a need that has not been filled by existing institutions. Since education at the adult level has been less confined by rigid traditional practices, it affords extraordinary opportunities for developing newer techniques of learning.

*T. R. Adam, Motion Pictures in Adult Education, p. 88.

Film Forum: A Technique

A finely detailed account of reasons for and methods of the Film Forum, as actually conducted with marked success at Springfield last fall.

LOUIS S. GOODMAN
Film Advisor, Springfield, Massachusetts, Adult Education Council

For the past five centuries the printing press has remained the principal means of disseminating knowledge. In comparatively recent years, technology has contributed new media of thought communication. The motion picture, the radio, and television are gradually assuming places of educational importance alongside the press. They seem destined to open for popular consumption the great storehouse of human experience formerly reserved to scholars.

The inherent qualities embodied in the motion picture and not found in any other form of expression have made it an especially valuable medium for transmitting ideas. Because of its effectiveness as an expository device, the motion picture may well become a great new force in adult education. Lancelot Hogben has remarked that the film is capable “of stimulating interest or of conveying in a more vivid and palatable form information which is less attractive when communicated through the medium of print. What we have still to realize is that it can explain many things which many people can never understand at all if they have to rely on the printed word.”

*This development has been most disturbing to those who fear the film as a possible rival to the printed word. Cf. George Duhamel, In Defense of Letters, pp. 20-1, 75.

*Lancelot Hogben, Dangerous Thoughts, p. 260. Dr. John W. Studebaker, Commissioner of Education has stated that “there are 76,000,000 adults in this country today, 64,000,000 of whom did not finish high school, and 52,000,000 of whom did not finish the eighth grade of the common school.” Town Meeting Bulletin, IV. (March 6, 1939), p. 21.
In Adult Education

We already know that the motion picture exerts a
real influence upon our lives and our thinking. There
is no reason to believe that the cinema could not be used
to portray the living scene in its economic, political and
cultural aspects with as much dramatic effect as it
now presents the artificialities of modern life. Only
recently has the motion picture turned its attention to
real things for purposes other than for pure enter-
tainment. In presenting themes of actual life, the motion
picture departs from its traditional role of “entertain-
ement dispenser” to the American public. The film’s
ability to interpret modern problems realistically consti-
tutes a social function which—with the exception of a
few outstanding documentary productions—has not yet
been realized.

The special contribution of the motion picture to
adult education lies in its unique power of bringing
its audience face-to-face with situations in which issues
may be studied vicariously. By this method, the ob-
server is actively engaged as a critical participant in
the events transpiring on the screen. But despite its
powers of penetration, the motion picture of itself has
certain limitations. The camera can record only the
external characteristics of what it photographs. Yet
it is the meaning behind the scene—the inner meaning
—and the implications of the film as a whole that are
really important. In order to delve into the deeper
significances of the problems depicted or implied on
the screen, there must be opportunity for explanation,
interpretation, discussion and further study. These
provisions for problem analysis are the basic elements
in the Film Forum procedure.

In the spring of 1940, plans were formulated for a
fall series of ten weekly educational motion picture and
discussion programs to be known as the Film Forum.
The forum idea was not new to Springfield, Massachu-
setts, since that city had been a pioneer in the public
forum movement. The Film Forum was sponsored
jointly by the Springfield Adult Education Council and
the Bureau of Adult Education of the Springfield School
Department and represented a modification of estab-
slished forum techniques to suit film presentations of
live topics.

As is the case whenever films are involved, the pro-
ject required considerable preliminary planning. In the
first place, each of the ten programs was given a theme
based upon certain phases of American life or thought.
These topics concerned problems affecting the indi-
vidual, the home, the community, and the nation.
Following the selection of topics, the next step was to
seek out suitable film material. Near-by and distant
sources were contacted (some distributors were located
as far away as Georgia and Wisconsin). The films
were reserved in June to ensure booking dates in the
fall. Another matter requiring advance attention was
the choice of qualified discussants to assist in analyzing
and interpreting the topics. As a further aid in guiding
audience participation toward educational objectives,
program notes were prepared for distribution at each
meeting. These notes included a brief statement of
the theme of the program, film descriptions, introduc-
tory remarks regarding the discussant, and a list of
selected readings. (Arrangements were made with the
local public library for a special shelf reserved for
books listed on each Film Forum program.)

A bulletin describing the series (shown above) was
distributed amongst local and neighboring schools and
colleges, business organizations, and various clubs.
Another form of publicity consisted of press reports
on individual programs. The Film Forum series was
open to the public free of charge. To those seeking
post-graduate credit in the Springfield Evening High
School curriculum, a special course was offered in
conjunction with the Film Forum series for which
there was a registration fee of one dollar. The ten

Various races of the “Peoples of Canada” are studied in the
film released under that title by the National Film Board of
Canada. Here are two scenes from the film.
weekly meetings were held in the auditorium of the High School of Commerce. Two high school students handled the mechanical details in connection with operating the 16mm. projection equipment, the public address system, and the lighting arrangements.

Each Film Forum program lasted about an hour and thirty minutes and the procedure followed one general pattern. The time taken up by the films varied from thirty minutes for the "Human Relations" and "Contrasts in Living" programs to over an hour for the program on "Our World Neighbors." The film presentation was followed by a discussion period which occupied the remaining time. Mr. A. Abbott Kaplan, Supervisor of Adult Education in Springfield, acted as discussion chairman at most of the meetings. The discussion was launched by the chairman, who first called upon the discussant to express his own observations and interpretation of the problem. The audience was invited to comment upon or question the views depicted on the screen or held by the speaker.

Public support of the Film Forum, as measured by attendance, varied with the different programs presented. This varying response was probably due to several factors. The initial publicity as well as a human inclination to satisfy curiosity may have attracted the sizable gathering that attended the first meeting. However, announcements and reports regarding subsequent programs were given much less prominence in local newspapers. General interest in the second program, which drew the largest number for the entire series (about 800 people) is traceable, undoubtedly, to previous acclaim won by the two documentary films—"The Plow That Broke the Plains" and "The River"—which were shown on that particular evening. Because certain discussants were better known to the community than others, their greater drawing power probably influenced attendance. Another determinant was the relative popular appeal of one topic over another. It is also likely that amongst the people who did not continue to come from week to week there were some who expected results in projection comparable to those obtained by commercial moviehouses. It is known that a few individuals were disappointed by the acoustical difficulties encountered in earlier programs or by certain unavoidable mechanical interruptions (familiar to all non-theatrical film users). It would have been difficult to foresee all these factors; most of them were ascertained only after they had been experienced.

The educational possibilities of the Film Forum as observed during the course of the series are worthy of comment. For one thing, the Film Forum focused attention upon local problems. During the discussion on housing in program I ("American City Life"), a city official enlightened the audience on reasons for the repeated failure to establish a federal housing project in Springfield. He said it was due largely to public indifference toward attending hearings on the matter. Representatives of apartment house owners present at these hearings were able to oppose any action that might jeopardize their own interests notwithstanding the needs of the community. In program II ("Our Natural Resources"), the regional aspects of conservation were considered. One of the films on this program—"The River"—provided an excellent basis for discussion of problems created by the Connecticut River which flows past Springfield. Of particular concern to the group was flood control in this area and the possibility of developing the power resources of the Connecticut River. The need for public understanding and support of local problems was again emphasized.

Programs III, IV, and V dealt with relationships between people. The theme of the "Americans All" program stressed the need for tolerance and understanding. At the next two meetings in which the problems of youth and adult social relationships were considered, several of the specially edited films issued by the Commission on Human Relations of the Progressive Education Association were shown and the issues therein discussed.

A practical kind of consumer education was offered in program VI on "Getting Your Money's Worth." A vivid description of sales tricks and misleading advertising was portrayed on the screen followed by a consideration of protective measures. The subject of "Propaganda in American Life" provoked a lively discussion at the seventh meeting. Equal film footage was allotted to productions sponsored by organizations holding the viewpoints of "big business" and to films representing the attitude of labor. Among the questions discussed during the evening was one which has apparently aroused some public interest, namely whether so-called "free films" should be shown in schools. The procedure used at the Film Forum was suggested as a possible method of analyzing propagandistic film material. In employing this technique the typical outlook of each side as depicted in their own films is submitted for consideration on the same program. Thus, when this material is viewed together, "both sides of the picture" can be seen, and important omissions in the film of one side are usually offset in the presentation of the other.

The last three programs in the series concerned the relationship between our own and other contemporary civilizations. Program VIII on "Contrasts in Living," tried to indicate the vast gap that now separates one people from another. The two films presented a dramatic comparison between the simple life of primitive Berber tribesmen and the confusion of an American metropolis. An observation made during the discussion period brought out the fact that so-called "backward civilizations" sometimes foster a better spirit of cooperation that might be found in certain aspects of American life. The ninth program—"America and the War"—sought to bring the unseen arena of war closer at hand by presenting films depicting events leading to the Second World War. The March of Time productions proved excellent material for introducing a discussion on America's foreign policy. A new feature was inserted effectively in this program by using the recorded speeches of Chamberlain and Hitler as they were broadcast just before the outbreak of the War. In order to end the series on an optimistic note the theme of the final program concerned the need and value of developing good-will and mutual understanding between the peoples of all countries. The film presentation illustrated superficial differences.

(Continued on page 332)
MOTION PICTURES NOT FOR THEATRES

By ARTHUR EDWIN KROWS

ALTHOUGH apparently no public announcement of further development of this large proposal has been made, it is useful to notice the plan in this detail because it illustrates clearly the churchman's idea of what films distributors should be.

In 1922 the Reverend John E. Holley, with the pictures "of every spot mentioned in the Bible" which he had produced in the Holy Land with the backing of Albert Krippendorf of Cincinnati, was in New York seeking to arrange their distribution. He was then operating under the name Geographic Film Corporation. Naturally attracted to a fellow clergyman in the line, he had taken up temporary quarters with Isley Boone in the Masonic Temple Building. Boone had sublet desk room also to F. S. Wythe, who later arrived from the Pacific Coast with his civics pictures, and to Rowland Rogers who had left Bray.

Holley still had in his employ Larry Fowler, the one-time Thanhauser cameraman who had photographed the fifty-odd reels of material which he now possessed. Fowler's present duty was to assemble the scenes in accordance with Holley's plan. Part of that plan was to have main titles in color, photographed by the Prizma Company where Howard Stokes still sat in executive command. The backgrounds were pencil drawings especially made by Palpologue. This artist, well known in art circles of Paris and New York as "Pal," was a prince of the house of Constantine, thus conferring a truly royal touch on the field of non-theatricals.

When Fowler's work was roughly advanced there was called in to write subtitles and edit the film generally, an interesting, talented, cultured young man named John Michael Flick. He did a learned and efficient job with material which was not especially striking for, with all due respect to his dead intelligence of Dr. Holley, he lacked directorial experience. I always liked Flick. He had the purged kind of character which could have emerged only from long adversity. One day I learned what he had been through. He had been a soldier in Austria at the start of the First World War, had been captured quite early in the conflict on the Russian front. He languished from then, until the coming of peace, in a Muscovite prison. When he had completed the Holy Land Pictures they were put into circulation.

The distributing concern, especially organized, was called Krippendorf-Holley Film Libraries. As special booking representative, for awhile, was a kindly cultured gentleman, Julius C. Zeller. Dr. Zeller was a one-time minister, former president of the University of Puget Sound, and a man, Yankee born, with the extraordinary record of having been elected a State senator in Mississippi.

In a small office in the same building, not far from that in which Boone and Holley were working out their respective plans, was another minister nursing still another church film project. He was the Rev. James K. Shields, of Methodist Episcopal persuasion, and New Jersey State Superintendent of the Anti-Saloon League. On his door was the name Plymouth Pictures and a line of explanation that from here was distributed "The

Stream of Life." That six-reeler, film, "a drama of moral regeneration and faith restored," had been produced for Dr. Shields in 1919 by Plimpton Pictures Corporation, using a scenario composed by Dr. Shields, himself.

How ever much the professional picture man may have sneered at the result, the fact remained that Dr. Shields knew his customers. In this film's first ten years of service it is said to have had more than 10,000 paid showings. Its exhibition was essentially non-theatrical, but its first large pre-view, indicating a usual beginner's vain thought that a propaganda film will be snapped up by the regular playhouses, was one morning in October, 1919, at Roxy's Rialto Theater in Times Square, before an especially invited, "hand-picked" audience. I thought of that one other morning in 1940, when American newspapers hailed the English "innovation" just brought about by a church group in London that had engaged a theatre in which to present a "trade show" for the clergy.

It is not to be supposed, from the foregoing bald statement, that the distribution accomplished in question was without effort. None but James K. Shields, himself, can have a fair conception of the patient scheming, the wheeling, the haggling, the counting of pennies, the incessant pounding towards a goal but dimly seen, which it entailed. But the minister, especially the clergyman much engaged in social service, is of necessity a trained promoter. He hobnobs with wealthy persons who, in the leisure of their retirement, are disposed to bargain with God by yielding a percentage for the conduct of His work. He should see these previously tight-fisted benefactors the way and in terms which they can see. In time the hard battle reacts on the clergyman. The objects of his attention soften and eventually contribute, but in the meantime the minister, off his guard, tends to become callous and suspicious as once they were. In this hard school, James K. Shields brought up his son Wendell, and he, sitting daily in the Plymouth Pictures office, thus learned to apply the gruellng powers to a kind of record accomplishment in church distribution.

Rev. Warner Shields was never a precipitate man. He could always hide his time. But, after "The Stream of Life" had proved its capacity for success, he contemplated another production. In 1921 it appeared—another six-reeler, written by himself, but this one directed for him by William A. Wellman. "A Maker of Men" was its title, I believe. About a year later there was also a two-reeler, produced by Brotherhood. It was designed to please and tactfully to memorialize the church benefactions of an American merchant prince. It was called "The Boy John Wanamaker."

Other ministers engaged in broad aspects of social service were now looking more intently at the church opportunities for films, and from among these came forth a man we already know, the Rev. Baul Smith, nemesis of San Francisco "The Barbary Coast." Smith impressed with his experience in making "The Finger of Justice," as Wythe had been, Smith had come to New York to live temporarily with his brother, on Staten Island. Now he had persuaded the executive head of the wealthy Methodist Book Concern of the great opportunity. It was his idea to organize a production unit to tie in with the Interchurch World Movement, where H. H. Casselman already headed a so-called Graphic Department and had shown considerable interest in films. In fact, late in 1919, the Interchurch World Movement, acting in cooperation with Educational Pictures Corporation, had sent two film-making expeditions respectively east and west from America to
show the work of the foreign missions, one to photograph in North Africa and the Near East, the other to cover the Far East. The Asiatic expedition had been under the general direction of Arthur V. Casselman, Secretary of Missionary Education of the Board of Home and Foreign Missions of the Reformed Church. Smith formed the unit, indeed, obtaining $50,000 with which to start it; but its only connection with the Interchurch World Movement was through interlocking boards of directors.

The name he chose for the new concern was International Church Film Corporation. It was described as an interdenominational undertaking, ultimately to serve, it was hoped, 5,000 American churches in a great exhibition circuit. A new program was to be supplied each week, comprising a modern drama, a comedy, a mystery, and an industrial or educational film. There was also to be a weekly biblical film, which might be shown at Sunday School and at evening church service. In productions to be made by the Corporation, no players were to be starred or featured; all were to be subordinated to the message.

To begin the enterprise with the impressiveness which he believed necessary to set a standard for its development, Smith leased, about 1921, virtually the entire second floor of the celebrated old Flatiron Building at 23rd Street, where Broadway and Fifth Avenue come together. Henry Bollman, who, after leaving Community had tentatively begun a business called the Library Film Service, was taken on to manage the setup; Bronson Batchelor, who had been publicity director of the Hundred Million Dollar Red Cross campaign in 1917, was engaged to prepare a prospectus; and one Paul Marts was assigned to publicity.

With these reinforcements of his own magnetic personality, Paul Smith gained pledges, it is said, of approximately $870,000. But, of the money he actually received, the original $50,000 was reported gone in salaries, overhead and miscellaneous expenses in the first three months, and the rest in a year. At the end of the first quarter the handwriting was therefore on the wall, and that was the time when Henry Bollman left for his six-months interlude with the Educational Films Bureau of Lincoln & Parker at Boston. About all Smith had left apparently to show for his attempt, when he relinquished it, were five reels of scenarios used to illustrate the Psalms, and an animated subject made by F. A. A. Dahme, entitled "How Brooklyn Bridge is Made."

A little before Paul Smith had come East, another clergyman with film ideas had gone westward from the Atlantic seaboard. His also was an interesting personality. His name was Harwood Huntington, who about sixty, his birthplace New Haven, Connecticut. He had recently retired from a four-years service as rector of a Protestant Episcopal church at Hot Springs, Virginia, with between work as volunteer chaplain of the wartime Army camps in so the war in Florida. Before that he had been a missionary in China and Korea. His early training, in the United States and Europe, had been as a chemist, and he had won distinction also in that line. Moreover, he had studied law, and practiced as a member of the New York bar. But now, in his retirement, he had become interested in the motion picture as a means of extending the message of the church.

He felt that the chief obstacle was in not having suitable films, so he undertook to make a non-sectarian series on the Old Testament. He wanted his pictures to meet ecclesiastical requirements; at the same time he intended that they should have technical finish comparable with that of regular theatrical features. To attain these ends he formed the Sacred Films, Inc., at Burbank, California, early in 1921. For the church standards he made himself answerable; for technical excellence he enlisted the supervision of his friend, Edgar J. Banks. This distinguished archaeologist was a recognized authority on early Semitic manners and customs. He had excavated ruins of ancient Babylonia, bringing to light there that white figure which is said to be the oldest known statue in the world; he had climbed to the summit of Mt. Ararat; he had written and lectured widely in the learned places on Oriental languages and ethnology. But, above all, he brought to this new work a real enthusiasm.

They produced fifteen one-reel episodes: "The Creation," "The Migration," "Sacrifice of Isaac," "Cain and Abel," "Abraham and Lot," "Isaac and Rebeka," "Noah and the Ark," "Jacob and Rachel," "The Deluge," "Isaac the Boy," "Jacob and Esau," "Abraham and Sarah," "Ismael" and "The Return of Jacob." The work was done with dignity, adequately without lavishness, and with considerable pictorial effectiveness. Than Dr. Huntington there never was a more self-effacing film producer in Southern California. He shunned personal publicity of any sort. Consequently, when he died in January, 1923, in his Los Angeles home, he departed virtually unseen. Then the film venture, begun with so much intelligence and promise, collapsed. As far as Archaeologist Banks was concerned, though, he could not forget now that he had been inoculated with the production virus. He went to Florida, and presently was remarked as president of the Seminole Film Company.

Various applicants wishing to handle the distribution of Sacred Films appeared. But the producer's widow was rather particular and not in a position requiring haste. She insisted, in accordance with her late husband's desire, that the series be handled worthily and without the "circus" that custom decreed was necessary to a quick return on such an investment. For a long time Walter Yorke was one of the distributors permitted to serve her. When sound came in tried, vainly, with the cooperation of Walter Yorke, to arrange, through a New York educational producer, the securing of the work's winning of voice and music. That obviously needed improvement was added after other auspices in 1934, in Hollywood, with Wilfred Lucas as the off-scene speaker. The following year the series was taken over for church release by the Bell & Howell Library. And it has been presented also by the Harmon Religious Films Foundation.

If Harwood Huntington's venture was under-publicized, a 1922 church film enterprise in Philadelphia was given probably more than the usual amount of attention, and at least 100,000 dollars was subscribed, in recognition of the worthiness of the enterprise. The idea of Dr. Walter Conwell was the building of a new church on his home grounds in the near West Philadelphia. A 25,000 page magazine for members was also planned.

The church was named Temple, and it was decided to produce a conception of the Bible which would illustrate how the book is understood, and how it applies to the needs of life. Dr. Conwell was himself the lecturer, and the popularly written "The Message of the Bible" was the basis of the production. In the fall of 1922 the work began. The studio was the library of there 8 acres, formerly the home of Dr. Conwell. They had been obtained for one thousand dollars, and it was there that the work was begun.

The first week of work began with the story of Egypt, and in the autumn of 1923 the first film was released, and now, almost six months later, the third series of six films is about to appear. The series is made up of short stories, one to each film, and is called "The Message of the Bible." The series of six is complete now, and the first two have been released. The second series of six will be released in the spring, and the third series of six will be released in the fall. The first series of six was released in the spring, and the second series of six will be released in the fall.
In 1926 the Catholics became unexpectedly active in the church movement when an elaborate film was photographed at the 26th International Eucharistic Congress in Chicago. The production staff, equipment and materials were provided by Fox Film Corporation, and everything of seeming importance was recorded, from the Papal legate's departure from Rome, to and including the dispersal of the Congress. The completed subject was delivered to Cardinal Mundelein, Archbishop of Chicago, in the presence of his most illustrious visitors. It was later reprinted and presented to His Holiness, Pope Pius XI. Prints were subsequently exhibited in theaters of the larger cities, with ecclesiastical requests for priests to urge parishioners to attend.

May, 1927, brought public announcement of another Catholic film undertaking, this time the financing, by a lay group in Pittsburgh, of an expedition to photograph Our Lady of Lourdes. But what stirred Catholic interest most much more were the reports, beginning in the autumn of 1926 and gaining steady confirmation as the months went on, that Mussolini, in agreement with the Holy See, was planning to produce religious films through the newly founded Institute of Religious Art and Education at Rome. The subjects would be made on a strictly non-commercial basis, it was stated, each with authorization of Church dignitaries, and the fascist government would require the showing of one on every theatrical program in Italy as soon as they were released. A six-reeler entitled "His Holiness, Pope Pius XI," and "Treasuries of the Vatican," in five, came to America from this source early in 1927.

In the summer of 1919 it had been announced that the National Catholic Council was preparing to equip churches and schools throughout the country with projectors; but apparently that large plan became bogged down on the way to its realization. It was toward the close of the same year that a remarkable statement of the Catholic position on church films was made in the National Catholic Council Bulletin by Charles A. McMahon, chairman of the Motion Picture Committee of the Council. Referring to the large uses of the screen by "our Protestant brethren," he continued:

"It need hardly be stated here that as long as Catholics continue to be blessed with the Church, and the privilege of worshipping their Creator by assisting at the holy sacrifice of the mass, there will be no need of resorting to the sensational methods which otherwise denominations have adapted for the purpose of infusing at their audience in their churches... While Catholic pastors will never have occasion to introduce the motion picture into their churches as an integral part of the church services, it should be noted, however, that the motion picture has been used in ever-increasing measure in our Catholic parishes, schools, colleges and institutions.

Mr. McMahon remarked further that the Council knew which motion picture people were dependable, and that one group out of the lot had been chosen to serve.

A little later it became known that the National Catholic Council held a contract with the non-theatrical department of Paramount Pictures.

Work for the Doctors

No "customers" responded more vigorously to the studio fascination than leading members of the medical profession. In truth, they had a superior justification, because, in producing medical pictures—especially sequences showing details of surgery—about all that a film man can reasonably do is to set up his camera and light and then let the doctor bid him to record. No rehearsals here. No retakes. The doctor is director and co-star with the patient. The opinions that the film man may venture are all trivial. The doctor alone knows what he wants and what he can use.

The truth of this is conveniently illustrated by the case of Dr. Waldo Briggs, who with the Medical College of Physicians and Surgeons and professor of surgery there. In 1914, 1915 and 1916 he endeavored unsuccessfully to film operations. The trouble was, he averred later, the "bull-headedness" of his camera, who had insisted on "setting the stage" and consequently had blocked the view with doctors and nurses. However, in 1918, Clarence M. Black, a well known local photographer who had entered the surgical school as a student, heard about the difficulty and devised a way of restricting the camera to just the field of the given operation.

Hence the motion picture subjects which have made headway in the medical field have quite invariably been produced by the doctors themselves. In the strictest sense they have been "personal productions." But, in the instances of men in the top professional rank, where fees are often substantial, there has been no lack of proper funds. And, as far as inclination goes, your prominent medico usually lectures at short intervals before his brethren of the scalpel, nurse and interne groups, county health societies and the like, and has acquired ideas of effective presentation to his own particular audiences. He also, as a rule, cuts a social figure, hobnobbing with persons prominent in other lines where there are no such rigid prohibitions of advertising as there are in his, and he quite naturally turns with pleasure and relief to this newer, permissible instrument of expression as a way to assert his authoritative medical knowledge and, probably, to gratify the craving of his ego for credit as a benefactor of humanity.

The great pioneer in making medical films left a rather handsome record. Reference was made to him early in this history—Dr. Eugène-Louis Doyen of Paris, born in 1859 at Reims, celebrated cancer specialist—and to his sixty surgical subjects, mostly on brain tumor operations, listed in Urbin's early catalogue. Reports show that Dr. Doyen was making those films as long ago as 1897, when they were violently opposed. Then, lecturing at Edinburgh, he called the British Medical Association's attention to the cinematograph as a means of teaching surgery. The following year he gave demonstrations at Monaco and the University of Kiel, and in 1900 at the International Congress of Gynecology at Amsterdam. A twelvemonth later he was before the British Medical Association again, but this time at Cheltenham (represented by Dr. A. A. Warden), while 1902 took him on still another mission to the Photographic Museum at Moscow, and the Exhibition of Methods for Advance of Medical Science at Berlin—where he was awarded a medal. In 1903 he gave his by then well known illustrated lecture at the International Congress of Medicine in Madrid. He also demonstrated for the International Congress of Medicine at Paris. That certainly was spreading the idea.

Since Doyen's time many doctors in many different countries have produced extensive footage of operations and anatomical studies, and most of it has been brought to the United States in expectation of widespread release. To Dr. Walter Chase, of Boston, is attributed the first American production of surgical films in 1906. In subsequent years hundreds of reels have come from London, Paris, Berlin, Moscow and Rio de Janeiro, yet exceedingly few have been the subject of the lesser American county medical associations, nursing groups, hospital staffs or college students. The reason is that most of this foreign material shows operating techniques which are unacceptable to the medical authorities in this country. That explanation is rarely given formally because doctors naturally do not like to air their differences in public. The last time I recall hearing it was in March, 1924, when the owner of the American rights to films taken at the Werkheim Clinic in Vienna, sued because he had been denied a New York license and State health boards had forbidden their exhibition to local doctors and nurses. At the same time, certain foreign scenes and moving diagrams pertinent to the subject have been permitted, and, where there is a popular interest, the American professional banns have been disregarded.

Despite the barrier to foreign medical subjects, the American profession is well supplied with technical items. For one who may be interested in their nature and variety, the very diligent Oscar W. Richards, a research specialist of the Spencer Lens Company, has reported and annotated long lists in numbers of the Journal of the Biological Photographic Association, 1936-1939. In 1931, when William F. Kruse listed those he could find for patrons of the Bell & Howell 16mm. Library, he succeeded in naming 450 titles, comprising 338 reels. It has been stated that the first medical film library in America was that announced by Dr. Simon P. Goodale, of the Clinical neurology, at Columbia University, in the autumn of 1926, but I feel that this claim might be challenged successfully from several directions.

(To be continued)
Trends in Materials and Equipments

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Foreword—Boston turned on the heat for the NEA meeting in June. The speaker discarded all notes, shifted the sequence, ruthlessly cut his program, and concentrated upon a rapidfire survey of exhibits and slides. Wherefore, this paper is not published in the form in which it was presented.

We are concerned over changing trends in materials and equipments.

Things cost so much and money is so hard to get that we must be careful. Some workers leap at every new proposal. Others refuse to be budged from long established smoothly operating organizations. Some want the best so hard that they will not only make vigorous plunges into new fields, but they will find the courage to abandon the old.

I believe that no two workers have the same combination of conditions to influence their decisions. Each should keep pretty well posted on developments nationally, but he must be thoroughly up to date on the many variable factors that enter into his school situation at home. In planning for this talk, I decided to emphasize those things which I think are valuable to me in my own little puddle, to mention very briefly some other trends which interest me, and to omit other problems. Many statements are very abrupt. Time does not permit correlation with pros and cons nor any erudite theses and "high falutin figgers".

Since all our possessions may be bombed, perhaps it is foolish to spend thought on any new materials or equipment. If all our healthy young people are to be slaughtered, perhaps we should not bother to educate them. Maybe so, but I believe that the turmoil of the present world situation demands the services of the devices of visual education more forcefully than ever before.

I expect cuts in appropriations. We may hear of fads and frills again although the terminology may change. The taxpayer may froth at the mouth over physical education, guidance, shop courses, and visual education. Yet those are the very fields in which the nation is most anxious for success. Too many young men are not healthy enough to enter the army. Those who do enter must be hardened physically. We cannot cut down on our health services in

schools. Thousands are learning just enough about machine tools to go into production on simple jobs. We should not close our shop courses. Executives everywhere are in such a hurry to find people suited for many new specialized jobs. They want to use our trained counselors for personnel work. We should not cease our efforts to orient our youngasters.

Visual education is on the priority list for our national defense program. The army is using exhibits, charts, models, pictures, and movies to teach soldiers to soldiers. The U.S. Office of Education is producing movies to teach men to use machine tools. They are in such a hurry. We find motion picture projectors on the priority list; films in production; trained operators assigned to visual education duty; and theatres mushrooming up to entertain, refresh, and guide the thinking of the men. Washington is in such a hurry that it is using visual education in a big way. Our youngsters are entitled to similar facilities as we change courses and try to fit our youth for whatever lies just ahead.

We cannot afford to give up the time-saving devices of visual education in our direct teaching. There is urgent need also for us to increase our services to the community. A coordinated attack demands the use of mechanized equipment and modern materials by trained manpower under alert leadership. We want lots of material to support our many pupils of all ages and many interests who are proceeding on a united front day after day. We buy what material our budget will allow; rent some things, beg some, and make what we can't get any other way.

My guesses on trends in materials are briefly stated. 16mm. films are gaining rapidly over 35mm. 16mm. sound films are gaining over 16mm. silent. 16mm. silent films made by schools will increase. Color is gaining. It is now possible to duplicate kodachrome and to add sound if photographed at sound speed.

Large slides (3½" x 4") will probably decline as 2" x 2" slides gain. Pupil-made large slides are gaining. Double frame filmslides are gaining over single frame. Color is gaining in 2" x 2" slides.

Posters, prints, charts, graphs, and cartoons are being used increasingly. Demand is steady for objects and specimens. Interest increases in working models, dioramas, habitat groups, and specially prepared dolls. Our exhibits show some types which we have evolved.

There has been forward progress in engineering, especially in projectors for 2" x 2" slides and for 16mm. sound movies. My reactions to some types of equipment are summarized as follows:

35mm. sound projectors have high intensity arc with whiter light in the new models, and sound installations are more compact and efficient. Our chief use of these projectors and of an excellent dual portable equipment is to present entertainment which we can guar-

Indoor photography for movie-making, showing some home-made gadgets.
antee will be decent and shown under decent conditions.

16 mm. silent projectors are compact, streamlined, and rugged. We have standardized on 1600 feet reels. 16 mm. sound projectors (with Mazda lamps) are standardized on three price levels with some interchangeable parts. 1600 foot reels and both speeds are available. Many luxuries are desirable but not essential for classroom use. We have tried all three and find the medium priced models good enough for most of our situations.

Projectors for standard slides are now more convenient to handle, and optical systems have been improved. The tilting base is worth having. Cooling fan is desirable for colored slides.

Projectors for 2"x2" slides have shown great developments during the last five years. Designers have moved rapidly through higher powers of light, into specially designed optical systems, and into more rugged construction. The tri-purpose model can be used with both types of filmstrips and 2"x2" slides. Models for slides only will probably increase. We use 300 watt models for class-rooms. The double duty 750 watt projector for both 2"x2" slides and 3¼"x4" slides has a new chassis so that each set of condensers can be removed as a unit.

Opaque projectors have slightly larger apertures and size better cooling system. The chief value is for permanent placement with a single resourceful teacher, as they are quite cumbersome for frequent transfers from room to room.

There has been tremendous progress in many fields of photography. For our own production have standardized on three cameras: a Leica to make 2"x2" slides (chiefly in color) and ordinary enlargements, (lenses of great depth of focus and high speed meet most of our needs)—a Graflex with long focus lens for "hot news shots" and for negatives from which very large prints or large lantern slides are to be made—a Filmo 16 mm. motion picture camera with revolving turret and three lenses for school made movies and titling at our workshop. Interchangeable accessories, kodacrome, and fine grain film combined with the light weight Leica and efficient projectors for 2"x2" slides justify our concentrating in this type of photography.

Crystal beaded projection screens are gaining. We use flat white paint with black border on some walls. Collapsible tripods are found convenient when screens must be moved from room to room. The desirable degree of darkening is controversial. I want good color and sharp detail in a picture. Light streaks around edges are worse than a little light diffused through shade. Unless this is tolerated, wooden light traps too close to edges of shades. No fish oil is wanted in dark shades. Optometry education and visual education do not blend. Dark shades can be mounted in five-sided boxes to which two screw-eyes and loops of sash cord are attached. We transport them by truck about the city and use them in several schools for which permanent shades have not yet been provided.

We make materials which we cannot get in any other way. They are designed to meet the specific needs of our own courses of study. Our visual education project combines Federal WPA workers with school facilities and materials from city relief funds.

At Boston we showed many types of visual materials we have produced and commented on them briefly. Slides and photographs illustrated various production activities of our workers. A section of our new school movie, "Saving for a Purpose," was run to show how scenes were photographed, and the problems involved in editing it before adding a sound track. The film was made on Type A Kodakchrome, using a filter to cut out the scenes. It includes maps of Rhode Island's resources (based on research involving unpublished material from the U. S. Census Bureau and other sources), posters showing the work of our schools, dioramas presenting major problems, and costume dolls.

Our money is precious. Our potentialities are great. We try to make up for the lack of funds for new purchases and replacements by pains-taking care with what we do have. Films are inspected slowly with a film defect indicator which is far more sensitive than fingers, and a power rewind mechanism. A fractured or merely strained sprocket-hole calls for immediate surgery. Projectors are given clinical treatment as soon as they begin to show evil intentions. Discarded equipments are salvaged, rebuilt, and usually used somehow. Makeshift devices are improvised to keep us within reach of the trend of the times.

We have made many "gadgets" to supplement our modern commercial equipment. Some of these are: a 16mm. sound projector with 11 volt (instead of 50) 500 watt lamp (instead of 120) and 1600 foot reel arms (instead of 400) which serves for previews, editing, and testing in the laboratory; a public address system with impedance adjusted to match a microphone built for a different amplifier which has been traded in; an enlarger made from an antique lantern slide projector in which we use Graflex negatives; collapsible standards for photofloods; a switchbox for eight lines of 1000 watts each; a title; a contact printer for 2"x2" slides; a sink in the darkroom where no metal can touch; desks with adjustable tops for artists; printing frames; drying racks; silk screen frames; inner and outer cases for dioramas; and special shipping boxes, which we had to design, for dolls and small slides.

Assuming that the nation faces drastic upheavals in its ways of living and in the businesses which will survive, we must anticipate sudden and serious disturbances of the normal supply of materials and equipment for visual education in the schools. If my guesses are reasonably correct on the trends in our special field, we must make many adjustments.

Teachers, administrators, and visual education staffs must face a great emergency squarely. We must coordinate our efforts, work fast against time limits, abandon obsolete procedures, and concentrate our strength wherever needed in the rapidly changing conditions which confront America.

Never before have the services of visual education been rated so highly by a government. The potential usefulness of our devices and techniques is recognized in some places but will be blindly challenged elsewhere. Our equipments, material, and trained manpower can be a vital force in the dark days ahead. We must look ahead.

Visual education should lead!
More Effective Utilization of Visual Materials

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More effective utilization of visual materials depends largely upon a sincere appreciation of values to be derived and having the aids on hand at the vital time. Progress is built on earnest endeavors and active experiences, which require turning to a past that does not die but which forms a necessary foundation for all future developments. The fact that you are here proves that you have an appreciation of the values to be gained from the exchange of experiences, from the association with others, and with like interests.

In Boston public schools visual education began as early as 1910. Standard film had not yet been agreed upon, consequently, off-standard film equipment was introduced, and not until 1925 was the 16 mm silent equipment put into general use. But the acceptance was so eager that by 1930, 300 film recording shown weekly in our Boston Teachers' College under the able directorship of Mr. Joseph Hemenway, that systematically distributes almost one thousand reels of film each week as well as an almost endless supply of other aids. Eight school libraries keep film equipment, with a choice of one hundred films. This Department keeps all materials repaired and takes colored slides, Kodachromes, of completed projects which may be dismantled for future use or sent "on the road" with travelling exhibits, takes motion pictures of class activities in specific fields or school activities worthy of documentation. All these things besides the excellent delivery and pick-up service that is such a boon to the busy classroom teacher.

The effective use of visual aids has been made possible by the standardization of film programs in the lower grades, while the selection and use of aids in secondary grades is made possible by the active cooperation of the numerous Department heads of all subjects and the centralized distribution headquarters. In May of each year, mimeographed lists of all available materials, divided into grade and subject and paralleled to the courses of study are sent to each school. These lists are discussed at departmental meetings, and each teacher presents her preference list with desired dates for the coming year. Before the end of June these lists are verified at the Visual Aid Department and returned to the teacher. Duplicates are followed for each school, and the weekly distribution and pick-up service goes into effect in September without further discussion or time delays.

To allow for slow or fast classes, ten other sources of supply are available with splendid delivery systems. We may tap the extensive resources of: The Boston Public Library (books, pictures, slides, films), Boston Museum of Fine Arts (plus exhibits and lecturers), State Department of Education, Keystone View Co., Eyerage Slide Co., The U. S. Dept. of Education and W.P.A., Children's Museum, Natural History Museum, Harvard and M. I. T. extensive aids, local industrial plants, travel, railroad and shipping bureaus.

With this extensive aid delivery goes a penny postcard entitled "Educational Film Report" on which is listed: School...Film Title...No. of reels...Showing Date (s)...Total No. of pupils viewing film...Suggested uses for the film: Primary, Elementary, Intermediate, Senior...Film Evaluation: Excellent, Fair, Usual worry...Comment...Signature of teacher, return at once please.

This card is scored by the teacher using the film and tabulation of the results on these cards guides the Aid Department in the selection of the best and the elimination of the elementary material. A tabulation sheet called a "Film Score Card", suggests the characteristics which shall determine the evaluation of the sheet. Teachers evaluate the films used over a monthly period with a rating system of 1 to 8. There are twelve questions on each card: Is the film up to date? Are the subjects and scenes convincing? Is the language used for titles or sound sufficiently simple or difficult? The sheet can be checked in five minutes. The best and most commonly used films are continued until the teachers declare them inadequate. Excellent films for special group work in the courses of study are rented from commercial distributors.

The specific use of various materials in a lesson procedure may be helpful and applicable to a number of subjects. My teaching subject is art. I have classes of first, second and third grade for first-year art students to get a foundation suitable for use in other subjects; to develop skill in drawing for biology, sciences, history, geography, literature and shop work; to understand color and its application to nature and human-made things; to develop powers of observation and appreciation of nature and the fine arts with a view to realizing the endless possibilities for vocations as well as avocations in the art fields. After the first year, college students and shop students are encouraged to specialize in art and explore its vocational possibilities. They may take two or three years of the following: Advertizing Illustration with Commercial Design, Costume and Stage Design; Textile, Interior and Architectural Design, or the Cultural Art Appreciation made practical through shop work. Vocational possibilities are possible from it, such as assistants in museums, libraries, colleges, department stores and industrial plants, besides the research departments of the motion picture industry. What has this to do with visual materials and their more effective utilization? A great deal, almost all the materials available in our Art Department could be used in one or more of the other departments—history, geography, sociology, civics, health, safety, literature, etc. We have over 2500 beautiful and useful aids from all over the world that are available for loan to develop appreciation of workmanship, bow people live, work and have their leisure.

We have one of the few collections of the Carnegie Corporation Art Libraries valued at $2000 and an extensive library of slides, pictures, charts, graphs, maps and other aids.

The pupils in our school are largely of Italian extraction, with very limited financial means and fairly grim surroundings. They have the added difficulty of overcoming the fact that Italian is spoken in their homes. Therefore, it is our business to create experiences for them, let them see things outside their environment, enlarge their knowledge, yet keep their curiosity and manipulative skill, arouse their enthusiasm, prepare them for earning from high school, if they cannot be induced to go on, and lastly—Drive Them Hard And Make Them Like It to develop good work habits, ability to work independently, and to regard occupation and worthy use of leisure.

More effective use of visual aids is the most logical way to get response in learning.

We start Art Appreciation with a study of primitive people, life and art. Through the medium of motion and motion pictures or slides, we get into the primitive atmosphere. How did primitive people live? Why? What did they wear? Why? What did they eat? How was it prepared? Who made the utensils? What did they do with their leisure time? Where did they get their paints and dyes? Visual aids are used extensively to bring about as genuine an understanding as possible. Then each pupil is required to make some object in the way that the primitives did. Battle axes, arrows, dugout boats, spears, food containers, and clothing. The principle of dyeing of leather are tried. Science, history, geography, reading and manipulative skills, have a part in the lesson. Notebooks become scrapbooks, and vocabularies and verbal or written expressions show marked improvement. Whether the class discussion was "How were the cromlechs at Stonehenge made?" or in Egyptian Art "How were the pyramids built?", their curiosity and ingenuity eagerly seek the answer. Fifteen-minute reviews of fundamental facts show which pupils need additional help. It is the responsibility of the group as a whole to see that every pupil knows the facts before the next subject is taken up. The cooperation of the brighter pupils in aiding their slower companions is stimulating and keeps the level of learning as high as possible. Art aids in the notebooks of the subjects made are displayed for the inspection of the school after each art period is taken up. Visual aids are the most vital part of the lesson procedure and stimulate verbal expression and reading for leisure. Pupils are encouraged to tie up all their other subjects with the arts, and to bring to

The Educational Screen
the classes as much additional information as they can find in newspapers, books, museums, libraries, or other sources.

The common and correct use of visual aids has developed more slowly in secondary schools than in other parts of our public school system. There are several reasons for this. It seems to me that one purpose of this meeting and discussion is to determine the reasons, to examine them and to suggest a program for the development of a more complete functioning of visual education in our high schools.

Because misconceptions concerning the true meaning of visual education are not nearly so common as in the past, it is quite unnecessary before such a group as this to mention particularly and to classify all accepted visual aids. However, regardless of what we may do or say to stress the fact that the term “visual aid” refers to aids other than the motion picture, we must agree that the current appreciation of the value of visual education has been a constant progress of progress in the field of photography.

Too commonly in the past, pictures have been thought necessary and effective aids for only the very young children. Teachers in the upper grades were not at all eager to employ materials considered suitable for very small children. Yet the success of the Walt Disney pictures has proved that adults appreciate child pictures as well as the children. Perhaps, those teachers were afraid lest they make the work of pupils too easy. More recently, the power of the picture has come to be more generally appreciated; as a consequence there is no longer such hostility to its use even in the upper grades. The development of a visual education service which will result in common and correct use of visual aids in the high school is attended by more difficult problems of organization of such service in the lower grades, especially insofar as such service is concerned with the high cost of equipment which must be centrally administered and controlled.

For example, these are some of the difficulties which interfere with the effective and economical use of films and slides in city high schools:

1. The high school course of study is more inclusive than that of the elementary school; consequently, film programs cannot be so easily standardized as in the lower grades. For a given number of films on the first year's program must be made up in more and different fields than in the lower grades. The extent of the subject matter for which films are needed is such that the purchase of film prints by either school districts or school systems becomes impossible in most cases. The volume of coverage of the high school course of study by school-owned films or slides is almost out of the question.

2. The high school treatment of a particular subject is more intensive than the elementary school treatment, consequently, the number of valuable films available for high school subjects is more definitely limited. In the lower grades, because the approach to the subject may be more varied than advanced work with that subject, a wider choice of helpful films is possible.

3. The departmental organization of the high school program narrows the use of a particular film; consequently, the elementary school with its less rigid program may more easily use of a particular film with more pupils in a particular grade. In the high school the film showing must take place at a specified time determined by the school program.

4. Departmental organization of the high school program makes necessary more projection machines than in the elementary school. In the elementary school, generally, the same teacher has the same pupils all day; and in all probability she would plan her film showings on that basis; while in the high school, generally, the same teacher has classes of different pupils each period throughout the day. Therefore, it is probable that she would for this reason have more frequent need for projection equipment.

5. The departmental organization of the high school makes difficult the centralized control of visual education within a school district, because in the elementary school the emphasis on the course of study is less extensive and the control of visual education functions quite satisfactorily.

We must acknowledge that all of these difficulties present real problems for teachers who are eager to make more common use of films or other aids which are administered or employed in a manner similar to that of films. These teachers have proved their confidence in visual education by using commonly and advantageously other visual aids which have been introduced economically into their classrooms. Within school districts art students who are members of other classes have prepared posters, charts and graphs for classroom use. The evidence of the use of slides, charts, graphs and posters seems to show that if visual aids for projection are more easily available, high school teachers will use them more frequently.

Experience indicates that the following practices will offset the major obstacles interfering with common use of films in secondary schools:

1. The preparation of parallel which list approved films and slides in terms of the high school subject as they are described by the course of study. The parallels will include only those films which present subject matter suit- able for high school students.

2. The preparation of an catalogue containing descriptions of films so that teachers are selecting films for their classes may not be expected to make their choice on the basis of the film titles alone. The use of the proper film parallel together with the film catalogue should make easy the preparation of film programs by individual teachers.

3. The organization of visual education under each department head within each high school so that every film and every projector may be employed most completely and most economically. Department heads will be able to pool the requests of teachers within their departments so that only the materials desired and the machines required for their projection may be put to the greatest possible use.

4. The pre-arrangement of all film showings so that the motion picture program for a particular class may, over the whole year, more nearly reflect the objectives of the particular course as they are set down by the curriculum. The planned use of visual aids makes them a basic part of the course: their introduction into the classroom is justified for specific reasons. The incidental use of motion pictures cannot be expected to be so desirable as their planned use: the incidental introduction of films may take place too commonly without the serious consideration of the value of introducing them.

5. The preparation and use of parallel lists of visual aids other than motion pictures so that the visual education program will be properly coordinated to include those visual aids which are most effective in accomplishing the desired objectives.

6. The constant tabulation of reports received from teachers concerning the evaluation and gradation of the materials so that the parallels may list only the best of the available materials.

7. The centralization of the control of the visual education program for the whole system in a single agency so that expansion of the school-owned library of visual aids may be determined and the keeping of the needed for the whole school system, rather than in terms of the needs of a few teachers. This centralized control will also result in the economical renting of films, because the order in which different units within a subject may be treated in many high school subjects need not be rigidly prescribed; cooperative efforts of all teachers within a subject working with the central agency will result in efficiency and economy.

The correct use of any classroom aid is dependent in the final analysis upon the classroom teacher; she is entitled to the assistance and cooperation of visual education departments in her efforts to employ these aids most advantageously. All-in-all groups, such as this one, should have the patience to consider and study means of developing the efficiency of established aids. Teachers will be better satisfied with assistance that will make for better use of materials already available than they will be with information concerning aids which cannot yet be introduced into the classroom.
Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Zone VII Announces Its First Official DVI Zone Meeting

THE first State Conference of the combined Audio-Visual Aids Associations of California and the Department of Visual Instruction, Zone VII, is announced for Friday and Saturday, October 24-25, 1941, at Bakersfield under the sponsorship of Leo B. Hart, Kern County Superintendent of Schools, and the Kern County Junior Chamber of Commerce. "Audio-Visual Aids in Action" is the conference theme.

The two-day program will consist of demonstrations of the use of audio-visual aids in typical classroom situations, a radio show production demonstration, photography exhibit and documentary film showings.

A Resolution

(Unanimously passed by the Department of Visual Instruction, National Education Association, at its summer meeting in Boston, Massachusetts.)

THE present emergency calls for maximum efficiency in education. Our schools are now called upon for emergency services, as well as for their normal contribution to our national life. Motion picture and other projection equipment is necessary to enable the school to show technical training and other educational films, and to function as it should as a center for the showing of films expressing our democratic ideology. Thousands of schools, already equipped for the projection of pictures, are now co-operating in the defense training program. But thousands of other schools remain to be equipped, or are in the process of being so equipped to meet this great social task. Every government authority should foster this endeavor.

The Department of Visual Instruction of the National Education Association views with grave concern the published reports of shortage of metals and other material essential both to the military defense of our nation and to the teaching tools indispensable to its schools. While fully cognizant of the unqualified prior rights of military defense, we would respectfully point out to the Office of Production Management, and to other government authorities, that education is vitally important to our defense, and that immediately after our military defense needs are met, the requirements of the schools should be recognized. We therefore urge that manufacturers of projectors and other visual education tools be granted material priorities, next after defense priorities, in such quantities as may be necessary to complete orders for visual instruction projection equipment to be used in our schools.

William H. Gregory Retires
Max R. Klein Succeeds

THE retirement of William M. Gregory from the Directorship of the Cleveland Educational Museum was announced in September. Needless to say, the visual field will feel keenly the departure from active service of one of its eminent figures. Mr. Gregory was one of the real pioneers in the visual movement. He was a Charter Member of the National Academy of Visual Instruction founded in 1919 as the first national organization in the field. From early beginnings, he built the Cleveland Educational Museum into one of the outstanding visual institutions of the country, an institution whose influence has lasted long, spread far, and steadily strengthened. The splendid opportunity of carrying the work to still higher and wider successes now falls upon Mr. Max R. Klein, recently appointed to succeed Mr. Gregory. We are particularly glad that Mr. Gregory's retirement does not mean inactivity nor any diminution of interest in things visual. He will now be free to devote full time to a work very near his heart—the training of teachers—as Lecturer in Visual Instruction at Western Reserve University, a position he held on a part-time basis for many years. This magazine also has his welcome assurance that he will remain a member of its Editorial Advisory Board. In short, the long familiar name, "Gregory of Cleveland," will continue to be part and parcel of the visual field to which he so completely and significantly belongs.

Mr. Klein's high qualification for the task is beyond question. A partial quotation from a recent editorial in the Cleveland Press makes this very clear. Under the title, "Mr. Klein Prepared," the editorial says:

"People often do well that which they greatly desire to do. And this may turn out to be the case with Max R. Klein, just appointed by the Board of Education as Director of the Educational Museum of the Cleveland Schools. Mr. Klein's predecessor in this important position was William M. Gregory, a pioneer and probably the foremost leader in the United States in the field of visual education in the public schools. Mr. Gregory's distinguished career in the Cleveland system came to an end with his retirement at the age of 65.

"Mr. Klein is 41. But for many years he has evidently been preparing himself to take this post, for which he has cherished a special predilection. While teaching architectural drawing at East Technical High School, he found time to complete all the special kinds of preparation technically requisite for the director of the museum. The Cleveland school museum has come to be recognized as an extremely valuable educational aid since it was started by Mr. Gregory about 1925 as a division of the School of Education at Western Reserve. We hope Mr. Klein is able further to expand its usefulness."
The Specialized Field Trip

T
HE field trip ought to be one of the important techniques in the teaching of science. First, it is good for the student and the teacher to get outside of the classroom and become acquainted with the various enterprises in the community. Secondly, the school journey demonstrates the application of principles which are being studied in the classroom, and thus necessarily leads to a greater appreciation of the subject.

Yet, the majority of field trips by high school science classes are a waste of time. When the teacher announces a field trip, there is usually an outburst of joy among the students—the trip is just another school holiday. The teacher, too, "takes it easy" during a field trip; if the students do not misbehave too much, he is quite happy. As to the kind and amount of information that the student obtains, the teacher leaves that to the student's "intellectual osmosis". We might call this kind of field trip "the general field trip."

Now, the general field trip has its uses in the lower grades where it is desirable to enlarge the child's world without special emphasis on understanding. This type of school journey is also of value to those of rich background and mature experience. But we must remember at all times that the high school student is very unstable emotionally, his attention span is quite short, and his knowledge of fundamental principles very limited.

In the specialized sciences—physics, chemistry, biology, etc., another type of field trip, which I shall call "the specialized field trip", is more effective than the general one. The main feature of the specialized trip is the concentration on a single process or principle.

Several steps are necessary for the organization of a successful specialized field trip.

1. The theory or principle is taken up in the classroom in the usual manner, e.g., by means of lectures, demonstrations, laboratory tests, etc.

2. A particular application of the principle is then chosen by the teacher. A field trip is announced. The application is then briefly discussed. The students are asked to write out and hand in several questions on the application that are of interest to them.

3. Teacher visits plant several days previous to the field trip and becomes acquainted with the objective of the journey. He makes arrangements with the proper official for a definite schedule.

4. Teacher makes out questionnaire based on student's questions and his own observations. The questionnaire is mimeographed, or hectographed. A copy is sent to the plant a day or two previous to the trip.

5. The day of the trip each student receives a copy of the questionnaire.

6. At the plant the students fill out the questionnaire on the basis of their own observations, or the guide's explanations. Thus, with a pencil in one hand and a pad in the other, the student knows that he is responsible for a definite task.

7. The day following the field trip the data should be checked. Any unusual facts observed by individual students are brought out. The entire process is summarized.

8. The student is finally required to write a report of the field trip. The report is to be in ink or typewritten, with proper titles and paragraph headings, diagrams, etc. This report is to include a brief discussion of the theory, one or two general applications and a very complete discussion of the field trip with special emphasis on the application of the theory to observed data. Another alternative is to give a test.

An outline of the method used by the author in a specific instance will illustrate the organization of a typical specialized field trip.

The Centrifugal Dryer

A. Lecture - recitation—Nature of centripetal and centrifugal forces.

B. Demonstrations—Twirling an object at the end of a string. King David's sling shot. Mercury and water rotated in the same bowl.

C. Centripetal and centrifugal forces in nature—Formation of planets. Orbits of planets. Flatening of the earth at the poles.


E. Field Trip to a Laundry

1. Students submit questions, such as "What is the capacity of the dryer?" "What is the cost per pound of wash?", etc.

2. Instructor visits laundry. Watches the dryer in operation. Secures permission from manager to bring classes.

3. Questionnaire based on students' questions and instructor's observations is made out and typed by students. Copy sent to laundry.

4. Transportation problem quite simple: the laun-

HAYM KRUGLAK
Milwaukee Vocational School, Wisconsin

There has been a recent tendency to consider field trips principally from the point of view of the social studies and more particularly of local community studies. We are prone to forget that for many years, field trips have been effectively used in connection with the sciences.

As in the case of other types of visual instruction, there has been a notable development in method of employment. The procedure of careful preparation for the trip and a follow-up of classroom discussions is making of the field trip an integral part of the unit of study, rather than a somewhat isolated though pleasant experience.

This article by Mr. Kruglak is a good example of the field trip used in connection with physical science.

WILLIAM W. WATENBERG,
Chairman, Committee on Field Experiences.

(Concluded on page 355)
Travel Stories—in Hand-Made Lantern Slides

BY ANN GALE

ENCOURAGING high school students to read non-fiction travel stories is easier with hand-made lantern slides. The slides enable the teacher to present the course of the travel and to represent an interesting section of the book to the whole class at the same time.

The following slides suggest ways of presenting the material in Richard Haliburton's "Flying Carpet," Nordhoff's and Hall's "Faery Lands of the South Seas" and Carleton Beals' "Brimstone and Chile".

1. The route of the "Flying Carpet" around the world.
2. A jewel of a temple in the middle of the Arabian desert found by Haliburton and his pilot.
3. The South Sea islands visited by Nordhoff and Hall. Hall's route through the Cloud of Islands and Nordhoff's through Hervey and Cook islands are shown in the insert.
4. Hall was stranded on Rutiaro island because of a box of marble.
5. Beals' route from a clerk's desk in San Francisco to the American High School in Mexico City.
6. Beals burying his money while he was in an outdoor jail.

The simplest type of hand-made slide is made by drawing or tracing on finely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.
The Literature in Visual Instruction
A Monthly Digest

Conducted by ETTA SCHNEIDER

AUDIO-VISUAL TRENDS

The Public Arts and Democracy—Edgar Dale—High Points, 23: no. 6: 53 June 1941.

An address given before the High School Teachers Association and the High School Principals Association in N.Y.C., March 8, 1941 for the Institute of the Public Arts in Education. The public arts can perform three functions in promoting democracy: 1) to give us a clear, accurate, comprehensive picture of the world in which we live now; 2) to show what decent, honest, thoughtful, realistic people want it to be like; and 3) how to transform the world from what it is to what it might be.

One of the striking phenomena of the age in which we live is the great disparity between what we know and what we do. Why? Because we have not learned how to use our mass communication devices effectively. The radio, for example, has debased language by falsely describing what it is. The only conclusion our students and children can draw from radio advertising is that somebody is lying. If one report about cigarettes is true, the other is false. Who is it that is inducing skepticism, disbelief, cynicism except many of these advertisers themselves? Who is subverting the very foundations of language—the vehicle intended for the exchange of honest sentiments and ideas.

Nor has the motion picture given us a clear, accurate comprehension of what the world is like, what it might be like or how to make the necessary change. The industry has tried to evade the responsibility for its action by hiding beneath the euphemism of entertainment. Movie producers should be interested in finding out what the masses of people in this country need right now. They need hope, faith, . . . enlightenment. Warner Bros. and their others have already produced some films along these lines. Other films can be made for showing at times when the theatre is not being used for entertainment, for public forums.

Mass communication devices can do much in educating the large number of adults who are sixth grade or below in reading ability. They can help to promote the fundamental idea in American life—faith in the dignity and worth of all people. There are many films available to schools that demonstrate this principle. We need materials that illustrate how we are going to use rational, logical methods in solving our problems. These suggestions for using the public arts in achieving democratic goals are not complicated, not Utopian. We have done many of these things already. We need most of all merely a reorganization and refocusing of our objectives.

The Educational Use of Motion Pictures Grows Apace — Editorial—School and Society. 54: 41-2 July 19, 1941.

Among the trends which appear to indicate the growth of educational motion pictures are: a) the statement by E. C. Waggner in an article in the winter issue of Filmo Visual Review that "the unscientific haphazard use of films with little attention given to the purpose of the program . . . is being rapidly replaced by a serious effort to make the motion picture an integral part of the business in hand, with pertinent discussion and follow-up instruction a part of the technique of using the teaching film"; b) the distribution of American educational films, especially those of Filmsound throughout Brazil and other South American countries; c) the use of color motion pictures at the U. of Illinois in studying the human larynx for speech training; d) the use of unscripted talks of persons speaking for group instruction by lip-reading at Ohio State University; e) the attention given to motion pictures by the American Council on Education; f) the new books in the field; and g) the use of motion pictures by the Office of Production Management and government agencies engaged in defense training and sending out of general information.

RADIO


A description of the Cleveland radio activities by which FM wave lengths have been assigned to the Board of Education. Schools, however use both FM and standard AM broadcasts. The Cleveland FM station is on the air seven hours each school day, with programs for kindergarten to high school level. Elementary school programs are prepared at 12 "curriculum centers" or laboratory schools. Demonstration lessons from the laboratory schools present samples of new methods and techniques to other schools. An extensive "Classroom Teachers' Radio Lesson Guide" is available to the schools to indicate appropriate visual aids needed to supplement the radio lesson.

The junior high schools receive radio programs of the enrichment type. Scripts are prepared and selected from various sources by the junior-high production head and the actors are taken from the studio. The high schools have six curriculum centers, similar to the elementary laboratory schools. But the scripts are prepared by the high-school radio directors and/or teachers.

The FM stations have permission to transmit appropriate programs from any of the radio stations that reach Cleveland. Special programs for holidays, etc., are put on by the radio staff. Programs over FM for adult education must await the increased use of FM receivers by the general public.


The Radio Research Project of the Library of Congress was made possible by a special grant from the Rockefeller Foundation. It is engaged in investigating the possible uses of radio as a medium by which pertinent parts of records of American culture may be made available to the general public. Philip H. Cohen, formerly with the U.S. Office of Education Radio Project, is director and Charles T. Harrell is program editor. A staff of experienced radio writers and technicians is at work on preparation of scripts. Programs already under way are "Highs and the News," "The Ballad Hunter," and "Hidden History." The latter program will present prominent writers and poets.

SCHOOL-MADE FILMS

Evander Produces Its Own Movies—David Schneider, New York City—High Points, 23:12 Apr. 1941 (See also Education, 61:352 May, 1941).

A detailed report of the project which culminated in the production of a two-reel silent documentary film which illustrates the principles of education for all the children of all the people in a cosmopolitan high school. That the scenario was carefully planned and checked is proved in the article. The actual work was done by the high school motion picture club, and funds were contributed by the student organization. The film is partly in Kodachrome. Reviews by various educational leaders are very commendatory.

PHOTOPLAY APPRECIATION

How the United Parents Association Regards Radio and Motion Pictures as These Affect Children—Mrs. Jacob Schechter—High Points, 23: No. 7: 510 Sept. 1941.

An interesting account of the way in which the New York City parents' association is studying the available radio and film programs with a view to making constructive proposals to producers. The Board of Education and commercial exhibitors are lending their support. (Continued on page 345)
Scenes from the latest series of

FILMS FROM BRITAIN

Released by the British Library of Information in New York City

Scenes (1), (2) and (3) are from "Steel Goes to Sea"; (4), (5) and (6) from "Architects of England"; (7), (8) and (9) from "Ulster."

Photographs courtesy of the British Library of Information.
(Concluded from page 343) Group Discussion Guide, Including Photoplay and Radio Studies—Educational and Recreational Guides, Inc. $2.00 year for 10 Issues.

The following is the conclusion of the study guides which Dr. William Lewin and his committee of representatives from the Department of Secondary Education, N.E.A. have been publishing for several years. Each issue of the study guides is interestingly designed and sufficiently different from each other to find favor with movie-mad adolescents.

For each film reviewed, there is a synopsis, a listing of screen credits, and excerpts from evaluations made by the Committee. An integral part of the film guide is the set of stills. The enlarged size of the magazine permits the use of large pictures and the quality of reproduction is excellent.

NEW BOOKS


As stated in the preface by the editor, Harold Leonard, “this volume, presented as a first installment, was undertaken in an effort to organize for reference and study the highly miscellaneous written material of the motion picture.” The task was a formidable one, but an admirable and invaluable reference work is the result. The vast amount of material gathered from books, magazines and newspapers, is well organized—article and book digests are brief and informative—and the film reviews are supplemented by significant production credits.

The following facts give an idea of the comprehensiveness of the volume. There are 860 alphabetical entries, representing the work of more than 2,000 authors. Upwards of 3,000 refer to magazine articles, about 700 to books, and more than 4,000 to film reviews. 620 film craftsmen are cited. Material is arranged by subject under some 160 main classifications. The alphabetical index, comprising 76 pages, affords ready access to the volume’s listings.

Volume I is concerned mainly with the creative aspect of film making, and is divided into two parts. Part I, “History and Development,” includes general works, critical and aesthetic studies; histories of the film in America and Abroad; discussions of technique, from acting through writing; and biographical material on the film’s outstanding craftsmen. Part II, “The Film as Art,” comprises films under some 40 fictional, factual, or animated film types, and discusses these several genres. A full outline of classifications is given in the table of contents.

The many writers, researchers, editors, and sponsors involved in the project deserve all congratulations on this splendid work, which should create high interest for the two volumes yet to come.

Producing School Movies—Eleanor Child and Hardy Finch—Committee on Standards for Motion Pictures and Newspapers of the National Council of Teachers of English, Monograph No. 12, 1941, 151p. $1.50.

Since it is the teachers of English who have led the movement to produce school movies, it is reasonable to expect that the National Council of Teachers of English would sponsor a volume on this subject. The authors and their sponsors have consulted a wide range of specialists in the preparation and production of movies.

Miss Child and Mr. Finch have based their handbook on first-hand experiences in the Greenwich High School and on the experiences of many other teachers and film-enthusiasts with whom they have been in correspondence.

The handbook has been cleverly designed to make each section stand out, and to help the reader in finding information quickly. Many illustrations supplement the verbal descriptions. The chapters are arranged as follows: Organization (of a Club), Choosing the Idea, The Scenario, Buying Equipment, Using the Equipment, Filmstrip, the Picture, Advanced Techniques and Final Preparation and Showing. Each chapter is followed by a series of questions and suggested activities that could be used by a movie-making club or class. In all chapters the language is simple and non-technical.

The final chapter is especially important, since we too often assume that once a film has been completed our audience should wax enthusiastic, Showmanship in the publicizing of the film and during the actual showing are very important.

A glossary and bibliography are appended to the volume. The index is especially good and is very complete. This book will be a welcome one to those of us who want movie-making explained in one-syllable words.


This book follows the yearbook of the same organization, entitled, “Implications of the Radio in Education.” The editorial committee collectively prepared each chapter for the reasons of being a symposium of discrete sections it is a practical manual that reads smoothly. The most important chapter in the volume is that on utilization. It is especially valuable to the many school administrators and teachers who have been using films who wish to provide some diversion to their pupils. The authors especially recommend that pupils be invited to evaluate the films they see at school. Illustrative units of work have been included to show the use of films at various grade levels, in three Michigan school systems, viz., Dearborn, Ypsilanti and Battle Creek. Excellent photographs supplement the teacher reports.


A compilation of reports prepared by the science and visual aids group at the Workshop. Each student under- took to investigate the problems in “Using Visual Aids” that he was most concerned about. The result is a collection of practical essays on such topics as: Why use visual aids? evaluation; reading pictures; a visual program in a small school; in a city system; science unit using visual aids; and sources of materials and of equipment. The bulletin shows that this part of the Workshop had a profitable summer.

SOURCES OF INFORMATION

Sources of Supplementary Materials for Health Instruction—Nancy M. Miser and Arthur H. Steinhaus—Research Quarterly, 12: 266-76 May 1941.

An annotated, carefully classified listing of agencies that distribute health materials, such as pamphlets, films, slides, posters, exhibits, models. One of the most helpful compilations yet to appear.


A cumulative listing of the films and other visual materials reviewed monthly during 1940-41. The September 1941 issue represents a summary of research and practices in the use of audio-visual aids for business education.


Contains name and location of 17,500 colleges and high schools in the United States and its Possessions having movie picture and slide film facilities. Schools are classified by county and city, under each state.


A helpful compilation brought up to date. It was originally organized by Dr. Cline M. Koont. The revision has attempted to give more specific information with respect to each distributor.


List of free and inexpensive teaching aids for the shop, related and academic teachers in the vocational schools. Note especially the sample of a postcard form on which to request films. The unit for which each film or other aid can be used is indicated. Filmstrip sources are also given. A very timely extensive listing.
New Aids to Teaching

Transcriptions by Recorded Lectures, Inc.
New, vital, unduplicated supplementary material on disc records: the thoughts of today's eminent leaders; many unusual educational features for all age levels. Distributed exclusively by Bell & Howell.

Reproducing System for Transcriptions
Disc record turntable, amplifier, and speaker, complete in two cases. Price, $125. Amplifier may later be used with Filmosound, substantially reducing sound film projector cost.

Educational Films in COLOR
Filmosound Library's new series, Our Colorful World, brings beauty spots and wild life of America and the world to the school screen in full natural color. Write for film lists ... or for complete catalogs—one each on educational, recreational, and religious films.

Experimental Research
in Audio-Visual Education
By DAVID GOODMAN
New York University, New York City.

The Production and Experimental Evaluation by the Teacher of a Series of 16mm. Silent Films for Teaching Mathematics in Grade 7A as outlined in the Syllabus for the New York City Junior High Schools. (Thesis completed June 1940) by Dominick Montelbano, Ph.D.

Need For Study: The New York State Regents' Inquiry into the Character and Cost of Public Education showed the necessity for "social", "informational", and "psychological" objectives in mathematics. Stress was now put on the child as a social being. The motion picture is a visual aid in interpreting this new mathematics. Thus there arose definite need for films of the social useful type. If it can be shown that films produced with simple equipment by a teacher of mathematics, are valuable in the teaching of his subject, an incentive may be created for other teachers to do likewise in their own fields.

Purpose of Study: (1) The production of a group of teacher-planned 16mm. silent films for the teaching of 7A mathematics as outlined in the syllabus for the New York City Junior High Schools. (2) The scientific determination of the effectiveness of this group of teacher-produced films when used as a routine part of the classroom work.

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Since no standardized test was available to measure these films it was necessary to construct a test (Montelbano Experimental Test) for the purpose of measuring the "social-utility" and "informational" aspects of the Course of Study.

Any mimeographed material, bills, forms, and maps available to the experimental group were also given to the control group. The teaching in general was the same for both groups except that the experimental group used the films and the control group did not.

Each unit was given the initial and final tests by an examiner in each school who was expert in the administration of tests. Both experimental and control groups were tested at the same time and by the same examiner. School schedules and programs were rearranged so that nothing would interfere with any part of the testing program. All tests were objective.

Conclusions: (1) The group of 16mm. teacher-produced silent films appears to be definitely effective in the teaching of the "informational", and "psychological", and "social-utility" aspects of the Course of Study. (2) The group of 16mm. teacher-produced silent films shows only a slight tendency for...
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the better in the teaching of the "computational" aspects of the Course of Study.

Significance of Study: On the basis of this study it would appear that the teacher can produce effective visual aids that will be in accord with the newest trends in education. This does not necessarily mean that every teacher should or need be a producer of motion picture films. It may perhaps be more advisable for selected groups of teachers to collaborate in such undertakings. These teacher-produced films can be reproduced at very small cost and benefits extended to all pupils and teachers throughout the country. Interests may thus be created that never existed before, and there will very likely be a definite growth in the experimental background of the pupils.

The teacher will be benefited in that it will be possible for him to interpret the elements of the course of study in the light of the experiences of the best teachers in the field. The films will give him an-organized body of material that he can use to the best advantage of the teaching situation when the need arises. In order to contribute to the production of these films, he will be induced to undertake research that will augment his own experiences and make him a better equipped teacher for his job. Teacher-produced films will not solve all teaching problems; but they do hold out the prospect of definite help in that now the teacher has at his disposal a teaching aid that is interesting, vital, and meaningful.


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Procedure: During the school year, 1938-39, a questionnaire was sent to all elementary school officials in the state. The purpose of the questionnaire was to determine the frequency of use of specific types of visual-sensory aids in each elementary school system reporting; to list all visual-sensory equipment owned, or borrowed; to indicate the types of visual-sensory aids used in the various fields of educational activity; and to report the major problems relating to the elementary school system's needs in visual-sensory aids. Usable reports were received from 417 elementary school systems, representing 454,734 pupils, and 13,000 teachers. The representativeness of the data reporting may be judged by the fact that 80 percent of all elementary school systems, 86 percent of all elementary school pupils, and 85 percent of all elementary teachers were represented.

Conclusions: (1) The majority of elementary school systems were using some type or types of visual-sensory aids as materials of instruction. (2) The data indicated that some elementary school systems were using large quantities of certain types of visual-sensory aids and limited quantities of other aids. (3) Globes, maps, posters, charts, diagrams, graphs, dramatization, flat pictures, and excursions which are considered non-mechanical visual-sensory aids since they do not require electricity for operation, showed a higher relative frequency of use than the mechanical aids which include silent and sound motion pictures, stereopticons, film strips, still films, radios, and opaque projectors.

Significance of Study: The study showed that the major needs were: (1) Information describing how visual-sensory aids may be integrated as materials of instruction, (2) source lists of visual-sensory aids, (3) courses in visual-sensory aids given at conveniently located centers, (4) purchase of visual-sensory equipment on a cooperative basis with nearby schools, (5) establishment of visual-sensory aid loan departments at conveniently located centers.
Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

The Production and Experimental Evaluation by the Teacher of a Series of 16mm. Silent Films for Teaching Mathematics in Grade 7A as outlined in the Syllabus for the New York City Junior High Schools. (Thesis completed June 1940) by Dominick Montelhano, Ph.D.

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Procedure: The subject matter for the films was selected from the Course of Study and Syllabus in Mathematics for Grade 7A—and included the units: "The Home," "Savings Banks," "Geometry," and "Travel." Assuming that the logical person to make films is the one who knows thoroughly the needs and capacities of the pupils and who will use the films, the investigator interviewed experienced teachers to determine what parts of the mathematics curriculum most needed visual material. Detailed scenarios were prepared and submitted to several teachers of the grade as well as to outside agencies for examination and criticism. The photography was done with very simple equipment. Seventeen 16mm. reels were produced.

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Texas

Paul F. McRoy, director of the Central Visual Education Laboratory of the Houston Schools, has sent a report on a film that shows what service school film makers may render in a community. His description of the film follows:

"I Am Your Church" is a 1200 ft. 16mm silent film in Kodachrome produced for the First Methodist Church, Houston, Texas. It tells the story of the life of the church and shows how the church relates itself to a changing and developing personality. It also depicts the many services of the church locally and throughout the world. At its original presentation in Houston, four commentators, a hundred voice choir, and the church organ furnished the narration and accompanying music.

The script writer and director was Miss Johnnie Marie Brooks, Director of Christian Education, First Methodist Church, Houston, Texas. Mr. McRoy was technical advisor, photographer and film editor.

Your questions on any and all technical matters are cordially invited for answer in future issues. Address your questions direct to Mr. Elliott at Oakvale, W. Va.

Question Box on School Film Production

1. What are the pre-requisites for school film production?

"What do we need to produce a film in our school?" is likely to be the first question raised when the school becomes interested in film production. In terms of the barest essentials, the school must have two things: (1) a movie camera, and (2) the funds with which to purchase film stock for the number of reels contemplated.

The first and most important item is the camera. It may already be owned by the school, or it may be borrowed from some teacher, student, or from some friend outside the school. It need not be the most expensive apparatus on the market if it has been demonstrated by wide experience (even in Hollywood) that it is the planning and execution behind the camera that determines the quality of the picture.

A tripod is indispensable to the successful operation of the camera. The usual pan-and-tilt head tripod will be found generally in company with the camera. If not available there, the school may borrow any still camera tripod and use it for good results. (The average beginner would be better off if compelled to start out with a tripod which does not permit panning.)

An exposure meter is desirable for good results, especially where scenes are to be photographed in poor daylight conditions or under artificial light. Even the experienced professional cameraman acknowledges his dependence upon a good photo-electric exposure meter. If the school group is shooting color film, the meter becomes essential.

For indoor work, of course, the production unit will need lights of some sort. This equipment, if not available, can be pieced together from existing materials with amazing results, using extension cords and odd reflectors that can be collected from various parts of the school. If the regular clamp-on reflectors or tripod stands are not available the lights can be positioned and held by assistants.
After the camera and other necessary accessories are found, someone is needed to operate them. The school with an amateur film fan in its student body or faculty will have no problem here. Perhaps some adult movie maker in the community will be glad to come in and assist. Failing any of these courses, there is still no reason why the school production unit cannot start from scratch and learn as it goes. Within the last two or three years, this writer has seen examples of excellent school-made films produced by teachers and students who had no previous experience to guide them. In each case the teacher and students planned carefully, sought competent advice, read every useful reference they could find and learned by doing.

The amount of money necessary to finance the school production need not be large, especially for first attempts. Over a period of years schools have learned that it is wiser to hold most school-made movies to one-reel units. If the production is to be shot outdoors, the cost will be approximately $25 per 400-foot reel of 16mm film. If the movie involves indoor scenes or subnormal lighting conditions of any other sort, then the speedier and slightly more expensive film stocks will have to be used; this will raise the total cost to about $35. A 400-foot film in Kodachrome will cost approximately $45. In all these estimates allowances has been made for waste footage (20 percent) and for professionally-made titles ($5.00). Estimates may vary with local conditions, of course.

2. What type of film should we use for the school-made film?

The first decision probably concerns the choice between color film and black-and-white (monochrome) for the school movie. Color has much to contribute, but it also has its attendant disadvantages, especially for the inexperienced crew.

It is dangerous (or, at least unwise) to give specific advice on the use of color film for the school-made movie. As one director of a school production said, in discussing the problem of color film, “Some do, and some don’t; some can, and some can’t.” In making its decision to use color film for the production, the school group must satisfy the following conditions: (1) color must make a definite contribution to the completed film, (2) the camera crew must possess some experience with monochrome before attempting color work, in order to prevent excessive waste of film and money, (3) the organization must be prepared to pay slightly more in original cost and in duplicate costs, and (4) interior scenes must be considered carefully with a view toward the crew’s ability to provide a larger amount of lighting than is required for most types of monochrome.

If the scenario contains interior scenes, the average school crew is capable of shooting them in color with some degree of success. Lighting limitations (available power, number and mobility of reflectors) in school classrooms, stages, hallways, etc., make it difficult to balance the lighting properly for exposure and focus, except for scenes where a very restricted area is to be included. Also, in school production it must be remembered that the average indoor scene is likely to be shot during daylight hours, and that this involves the problem of mixing daylight and Mazda light. This, of course, can be solved by the use of daylight-type floods, but the producer must be aware of the problem’s existence.

If the school production unit thinks that it can solve these problems, it should be encouraged to go ahead with the use of color film. If, however, the decision is made in favor of monochrome, there still remain several additional problems before the film stock is finally chosen.

These problems will be discussed next month.

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Ten Commandments and a Film

(Continued from page 328)

3. Why didn’t the planter use fertilizer on his soils rather than clearing new strips of land for use all the time?
4. Is lumbering in the South an important industry today?
5. How fast did the steamboat travel?
6. What happened to the planter’s home as a result of the war?

In addition, one might suggest the following for further study:

1. Discuss the part played by the indentured servant upon the plantation system of the South.
2. Why were the people of the South more interested in social activities than the people of the New England States, especially in the city of Boston?
3. Contrast the educational system of New England with that of the South.
4. What was the effect of the skill developed in fox hunting upon the southern people in regard to their participation in the Civil War?
5. Contrast the position of the poor whites in the South before the Civil War with their position in the South today.
6. Make a list of the great leaders in Congress during the period of 1800-1860 and note the leaders supplied by the region south of the Mason-Dixon Line.
7. Make a list of the leaders of the North for the same period.
8. Give the views of these leaders on certain issues in Congress.
9. Justify, if possible, the views of each.
10. Do you think a real understanding of the problems of the North and South would have helped avert the war?

One might continue with a long list of other questions, but the above show how the follow-up work of the film may lead to the study of social, economic, and political differences. Obviously, lantern slides, strip films, pictures, models, maps, and many other visual aids may and should be used to supplement the film and as a basis for further study.

As stated at the beginning of this article, it is impossible for one to state an exact procedure and probably this plan, as developed here, would be modified to fit other situations, but a careful consideration of the ten points suggested should enable the interested eacher to get the maximum value from a visual lesson.

Film Forum in Adult Education

(Continued from page 332)

in habits and customs. The concluding picture—"Toward Unity" pointed out the fundamental likenesses of all peoples.

An indication of the general reaction to the Film Forum idea was obtained from questionnaires distributed at the last meeting. The questions were not devised for quantitative analysis and no attempt was made to place the responses in categories. Pertinent results of this questionnaire are indicated in the following summary:

Question 1. "Which film, or films, did you like best?"

There appeared to be no outstanding preference. "The River," "A Criminal Is Born," "The City," "Getting Your Money's Worth," and "Towards Unity" seem to have been well received.

Question 2. "What was your reaction to the discussants (speakers)?"

The comments were generally favorable. Certain speakers were mentioned as being especially capable of handling discussion. One person remarked—"The better the speaker the better I understand the films."

Question 3. "What changes would you make in the procedure?"

Some wanted more time given to discussion. Most expressed satisfaction with the method in which the programs were handled.

Question 4. "Do you think that the Film Forums ought to be continued next year?"

An affirmative answer to this question was almost unanimous.

Question 5. "State one or two topics which you would include in a new series."

Several topics in the present series, particularly those bearing on human relations and international affairs, were named again. A few of the other topics mentioned were: "Our South American Neighbors," "Family Life," "Education," "Public Health," "Highway Safety," "Unemployment," and "U. S. Defense."

(Continued on page 354)
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Write for New Catalog on the Press October 15, 1941

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(HISTORY) "Seeds of the Constitution"—1 reel
ASTRONOMY) "A Trip to the Sky"—1 reel
Send for our 1941-42 Catalogue

(Continued from page 352)

Question 6. "Have the 'Program Notes' served any useful purpose?"

Many persons said that explanatory notes gave them a clearer understanding of the problems. Some mentioned the reading lists as being especially helpful.

Question 7. "Other comments."

Several said that they thought the mechanical arrangements and the acoustical conditions were inadequate. The suggestions which were received merit consideration in planning future programs.

The Springfield Film Forum series was a trial venture towards a new approach to adult learning. The results to be obtained in using this technique will depend upon careful advance planning. If such programs are to prove attractive to an audience representing a wide range in background, the topics chosen must be of general and timely interest. Appropriate films should be selected and booked well in advance. Capable discussants must be engaged. Program notes containing a statement of theme, issues for discussion, descriptions of films, and a list of reading material should be prepared for each topic. The use of a suitable hall and projection facilities must be arranged. An important item which cannot be overlooked is publicity. Interested groups should receive circulars, posters, or special notices. Reports covering the various programs should be placed in the hands of local newspapers.

Certain factors embodied in the Film Forum technique require special consideration. Although the film presentation is an important part of each program, it should not be too long. It is desirable to devote at least half of the program time to discussion. Perhaps the most vital role in the entire procedure is performed by the discussant. His job is to set the stage for an adequate exchange of views. To prepare himself for this difficult task, he should have an opportunity to preview the films to be used on his program. He should be given access to the handbooks which accompany these films, whenever such guides are available. The program notes should serve to focus attention upon salient points for discussion. In considering most topics, it is wise to limit the number and scope of the issues involved. Those persons who want further information can refer to the reading list which should be included with the program notes.

As a contribution to adult education the advantages

See G. L. Freeman's interesting study on "Adult Preferences in Educational Film Programs," Educational Screen, XVIII (October, 1939).

Study guides greatly enhance the educational value of films. Examples of excellent discussion helps can be found in the guides furnished with "The Plow That Broke the Plains," "The River," and the films issued by the Commission on Human Relations of the Progressive Education Association.
and values of the Film Forum technique may be summarized as follows:

1. The learning pattern follows a logical psychological sequence: Impression → Expression → Discussion → Investigation. First, sensory experience is broadened through eye and ear perception. Then views are stated and opinions aired in open discussion. Finally, further inquiry through reading is encouraged.

2. This informal method of learning affords a popular avenue toward citizenship training for adults. It provides an excellent opportunity to consider vital problems of social reconstruction. Appeal can be made to a larger body of American citizenry because the film medium can be understood by persons unable to read. And for those who read much less than they should, the Film Forum can be a stimulant toward the use of available library facilities to better advantage. The series as a whole will enrich the cultural resources of a community, large or small.

3. The referability of films, i.e. the ability of anyone engaged in talking about a problem to refer to specific scenes previously shown on the screen, is particularly helpful in establishing a common basis for discussion. Well-produced factual films seem to be no less stimulating than fictional movies. By presenting problems of life concretely and realistically, such films are capable of activating the mind toward worthwhile social thinking.

The use of educational films for adult study groups appears to be increasing steadily. A concerted effort is being made to facilitate this development. At the present time there are several organizations able to offer helpful advice on arranging suitable Film Forum programs. These agencies include The American Film Center, Incorporated, 45 Rockefeller Plaza, New York City; American Council on Education (Motion Picture Project), 744 Jackson Place, Washington, D. C.; and the American Association for Adult Education, 60 East 42nd Street, New York City.

A limited number of programs and sample program notes of the Springfield Film Forum are available to anyone enclosing a stamped, addressed envelope with his request. Communications should be addressed to Louis S. Goodman, Division of Teaching Aids, Boston University School of Education, Boston, Massachusetts.

The Specialized Field Trip

(Concluded from page 341)

dry is within walking distance from school.

5. At the laundry students watch the centrifugal dryer, ask questions, listen to the guide and to the operator, and fill out the questionnaire. The entire trip takes only one period.

6. Practical problem to be included in the report: Calculate the force on 400 lbs. of wash. (Diameter and speed of dryer are part of the questionnaire).


Other field trips taken by the author's physics classes were: A Large Derrick, Refrigeration System of a Brewery, X-ray Machine in a Clinic. The method can be easily extended to high school sciences other than physics.
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Aptitudes and Occupations (Coronet) 17 minutes, 16mm sound, sale price $60.00. Teacher's guide furnished.

This film, announced as the first of a series, is designed to give an overview of the aptitudes and abilities important in vocational choices. As it begins, a vocational teacher is shown before a class, and she introduces a film within a film. This begins by explaining that strength was formerly needed for most jobs, but now other things are most needed. The various aptitudes are enumerated, and the student is advised to analyze jobs by determining the aptitudes needed, whether or not he possesses them, and whether they are present in the amounts needed for the success at which he aims. Then the aptitudes are treated in detail. First, mechanical aptitude, involving physical skills and in higher forms the interpretation of relationships by mathematics, is explained, and methods of testing for it are shown. Social aptitude, which is valuable for salesmen and others who must meet the public, is next demonstrated. Then comes clerical aptitude. Tests and try-out courses are suggested as means of discovering this ability. Musical aptitude and the tests which indicate it are next shown, and then aptitudes for art. Finally, scholastic aptitude, needed for such occupations as law and medicine, is explained; school grades, psychological tests, and progress to advanced degrees are evidences of this ability. There is a brief survey of professional workers. In conclusion, the scene returns to the teacher in class, who says that it is up to the individual to choose the occupation for which he is best suited.

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write Don White at 221 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, basis of availability, and prices of the films. They will be informed of the first open date when the Teacher Committee will review the films.

The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, WHICH MUST BE BORNE BY THE PRODUCERS.

COMMITTEE OPINION: An excellent film for vocational guidance at the junior high, senior high, and junior college levels. Unlike most other vocational guidance films, this one should be valuable for both boys and girls. Photography, organization and sound are good.

The Theory of Flight (Erpi) 11 minutes, 16 mm sound, sale price $50.00. Teacher's guide to be furnished.

This film explains the flight and control of an airplane in terms of physical laws. It begins with a brief explanation of the dynamic laws, showing how force is necessary to produce or accelerate or change the direction of motion, and how opposing forces are always present in pairs. Next it explains propeller thrust, the principal positive or forward-moving force in the airplane, and shows how negative forces tend to balance it. A wind tunnel is diagrammed, and a flat plate airfoil is first inserted to show its lift and relatively high drag. Next a curved airfoil is introduced, and the increase in lift in relation to drag is noted. The relation of air velocity to these forces is demonstrated. Next the angle of attack is progressively increased to the stalling angle, and a graph shows the resulting changes in lift and drag. In the final sequence, balance in the plane is indicated in relation to center of gravity, and the three axes are explained by means of superimposed lines. Means of control of the plane about the three axes—the rudder for the vertical axis, the elevators for the lateral, and the ailerons for the longitudinal axis—are explained by models and by scenes of planes in flight.

COMMITTEE OPINION: An excellent film for aeronautical training courses, and a good film for physics and general science classes at the junior high through adult levels. Because of its content it is recommended that at least two, and preferably three, showings be planned for each class in which the film is used. Technically, the film is above the average in every way.

Problems of Flight (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's guide to be furnished.

In this film, scenes of airplanes in flight demonstrate the use of controls and give practical instruction in aeronautics. First, it is explained that all motions of the plane are controlled by air pressure upon the control surfaces. A takeoff and climb are pictured, with emphasis upon the use of elevators. Scenes of the plane in level flight are followed by a turn made without banking, which results in the plane yawing and nosing down.

(Continued on page 358)
A new 16-mm. film presenting the story of this vitally important metal


Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.
SLIDES  
General Science, 11 rolls, $20.00
35 mm.  
Principles of Physics, 7 rolls, $12.00
F I L M  
Principles of Chemistry, 8 rolls, $14.00
Fundamentals of Biology, 6 rolls. $13.50

Write for catalog and sample strips of typical frames.

VISUAL SCIENCES, 244E Suffern, New York

(Continued from page 356)

Next there is a bank without rudder, and the plane slips off into a tailspin. These examples lead into a discussion of the need for increased lift on the turn, and a statement of the limits of banks and turns which can be made in level flight. Next climbing turns are explained, and then stalls and spins. Wind tunnel demonstrations explain stalls, and nosing down for recovery is pictured in flight scenes. Spins are further dealt with by scenes showing how a plane may be yawned into a spin. The concluding sequence deals with glides and landings. Examples of bad landings are followed by a demonstration of a good landing which reveals correct use of the controls. In closing the narrator emphasizes that knowledge, concentration and coordination are needed in flying.

COMMITTEE OPINION: An excellent film for practical instruction in flight, particularly for aeronautical training courses. Should be valuable also for general science and physics classes, at the junior high through adult levels. Photography, sound and organization are good.

Sing, America, Sing (Nu-Art) 11 minutes, 16mm sound. Apply to producer for sale price.

In this film a chorus sings several well-known songs and the audience is invited to sing with them as the words appear at the bottom of the screen.

Songs included are "The Band Played On," "Bicycle Built for Two," "Oh Susannah," "Home On the Range," "I Love Old Sweet Song," and finally, "America, the Beautiful." A leader directs chorus and audience, and in "Home on the Range" a soloist sings with the chorus.

COMMITTEE OPINION: A good film for general auditorium use; should be of value also in choral music classes. Photography and sound are adequate.

Lubrication of the Gasoline Engine (Shell) 13 minutes, 16mm sound. Apply to distributor for nearest source of prints.

In this film an explanation of the principles of friction and lubrication is followed by a complete explanation of the lubrication of gasoline engines. The film begins with a series of simple demonstrations explaining rolling, solid and fluid friction. Cohesion between solids and adhesion between solids and liquids are illustrated, and lubrication is defined as the process of substituting fluid friction for solid friction. Solid friction is further explained in greatly enlarged views representing two surfaces in contact. Following scenes mention the viscosity of lubricants, contrasting the heavy greases used for ship launching with the light oils used in bicycles and sewing machines. It is explained that automobile engines run at a speed five times that of the sewing machines and that the exploding gases in the cylinders are many times hotter than white-hot iron. A cut-away automobile engine reveals the working of the valves and pistons. The use of an oil cushion in the bearings and the working of the piston rings are shown in animation. Oils of excessively low and high viscosities are contrasted, and their defects noted. Next the film explains how lubricants are supplied to the points in the engine where they are needed. The hand pump and the splash systems are shown in the early cars in which they were used. Disadvantages of both systems are explained. The pump-and-splash system and the full-pressure system, both in modern use, are explained by diagrams. Several types of oil pumps are shown. As the film ends the narrator emphasizes the protection which lubrication provides for modern high-speed engines.

COMMITTEE OPINION: A very good film for use in shop courses in automotive mechanics and for driving instruction classes; should be valuable also in general science and physics classes, at the junior high through adult levels. Advertising is entirely unobjectionable. Technical production (by Wilding Pictures) is good in all respects.
The Technique of Tennis (Teaching Film Custodians) 9 minutes, 16mm sound. Apply to distributor for lease price and rental sources. Produced in 1939 by Columbia Pictures; released in 16mm in 1941. This film presents Lloyd Budge, well-known tennis instructor and brother of Don Budge, in demonstrations of correct tennis. He emphasizes the importance of a good swing, correct grip, and wrist position. He compares the grips for forehand and backhand shots. Next he demonstrates correct service, and slow motion scenes show the toss, the path of the racket, and footwork. Similar analyses are given of the techniques of returning; both forehand and backhand shots are demonstrated in normal and slow motion. There is further emphasis upon the value of good footwork, speed, and balance in court play, with slow motion scenes of Budge as he covers the court. Finally Budge demonstrates the techniques of volleying, and in a concluding sequence he plays against four pupils, winning the point. As the film closes the narrator emphasizes that only practice can produce good tennis players.

COMMITTEE OPINION: A good film for use in physical education classes to foster interest in the game, contribute factual information, and to illustrate correct techniques. The film should also be found valuable for general showings, to stimulate interest in tennis and other court games. Slow motion scenes, clear photography, and well-delivered narration contribute much to an understanding of the subject.

One Against The World (Teaching Film Custodians) 11 minutes, 16mm sound. Apply to distributor for rental sources and price. Produced by Metro-Goldwyn-Mayer.

A dramatization of the first major surgical operation on any human being, as performed in 1869 by Dr. Ephraim McDowell in Danville, Kentucky. Several opening scenes give an impression of the people of Danville, whose creed of life was hard work, prayer meetings, and an early bedtime. They look with suspicion upon the village doctor who sits apart and reads his thick medical books. The story is recounted that when a village boy was crushed under a wagon the doctor attempted to treat him, but was stopped by the village elders, and the boy died. For these people have never heard of operations and bone-settings, preferring their herbs, old wives' tales, and prayers. But when on Christmas Day, 1869, a townsman brings in his wife who is dying of a tumor, Dr. McDowell operates in spite of the angry mob which gathers in front of the house. They plan to hang the doctor if the woman dies, but after anxious minutes her husband opens the door and tells them that his wife will live. Then as the tired doctor comes out and walks unseen through the crowd toward the church, the narrator says that this was the first major operation without anesthesia, but that millions would later follow in his footsteps.

COMMITTEE OPINION: An excellent film to teach tolerance and to show resistance to progress. Should be valuable in guidance and history courses, as well as in public health and medical history. From artistic and technical standpoints the film is uniformly excellent.

Addresses of Producers and Distributors:

CORONET PRODUCTIONS, Glenview, Ill.

ERPI CLASSROOM FILMS, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

NUR ART FILMS, Inc., 145 West 45th Street, New York, N. Y.

SHELL OIL COMPANY, Public Relations Department, 50 West 50th Street, New York, N. Y. For nearest source of film for school use, write the Association for School Film Libraries, Room 819, No. 9 Rockefeller Plaza, New York N. Y.

TEACHING FILM CUSTODIANS, Inc., 25 West 43rd Street, New York, N. Y.
Southern Conference on Audio-Visual Education

More than a dozen nationally-known authorities in film and radio education will speak at the fifth annual Southern Conference on Audio-Visual Education, November 13-15, 1941. The Ansley Hotel in Atlanta will be the scene of this year's Conference, and a wide attendance of school principals, teachers and others is expected.

The three-day program will include an afternoon devoted to showings of new educational films; several general sessions in which talks, demonstrations and film previews will be intermingled; and an afternoon of specialized group forums in which educators will meet with technicians and experts for informal discussions of mutual problems. In addition, there will be exhibits of the latest types of projection and sound equipment, and "world premiere" showings of new educational films.

Among those slated to appear on this year's program are: Kenneth Macgowan, Director of motion picture production for the Coordinator of Inter-American Affairs, Washington; Ben H. Darrow, founder of the Ohio School of the Air; Col. A. E. McKenny, producer of training films for the U. S. Army, Fort Benning, Georgia; Keith Tyler, Director of the Evaluation of School Broadcasts, University of Chicago; Floyd Brooker, Specialist in defense film production for the U. S. Office of Education, Washington; Tommy Rishworth, Asst. Public Service Director for the National Broadcasting Company; William S. Yale, motion picture photographer for the Great Northern Railway, St. Paul, Minn.; J. E. Hansen, Executive director of Coronet Productions, Chicago; Wesley Greene, Supervisor of Distribution in U. S. for the Canadian Film Board; W. P. True, of the Smithonian Institution in Washington, producer of the radio program "The World is Yours"; Kenneth Bartlett, Director of the Syracuse University Radio Workshop; Dr. H. A. Gray of Erpi Classroom Films, Long Island City, New York; Carl F. Mahnke, President of Vocational Guidance Films, Inc., Des Moines, Ia.

No charges of any kind are made for attendance at the Southern Conference on Audio-Visual Education, and all who are interested in the advancement of this phase of education are cordially invited to attend. Copies of the printed program and any other information may be obtained from the Conference office at 223 Walton Street, N. W., Atlanta, Georgia.

District Meetings of Georgia Audio-Visual Group

Motion pictures and radio, as well as other audiovisual aids for teachers, were demonstrated and explained in the nine district meetings of the Department of Audio-Visual Instruction of the Georgia Education Association, held during the last week in September and the first three weeks in October. A staff member from Radio Station WSB in Atlanta discussed the uses of radio in education at each meeting. Others participating in the various meetings were Dr. H. A. Gray of Erpi Classroom Films in New York; J. C. Wardlaw, Don White, and C. W. Miller of the...
Notes

Division of General Extension of the University System of Georgia; and Walter S. Bell of the Atlanta Board of Education.

Iowa Visual Conference

The Second Annual Visual Instruction Conference sponsored by the University of Iowa, took place at Iowa City September 26-27, 1941. Out-of-state speakers were: F. L. Lemler, Bureau of Visual Education, University of Michigan; E. C. Waggoner, Public Schools, Elgin, Illinois; Roger Albright, Teaching Film Custodians, Inc., New York City; A. J. McClelland, Erpi Classroom Films, Inc.

The Saturday morning session featured a panel discussion, with H. L. Kooser, Iowa State College, as chairman. Questions discussed were: financing of the visual program, teacher-training, administration, what visual materials schools should own, and film projection.

Architecture of the Home Visualized

San Diego County visual education department has been, during the past three years, attempting to show the development of domestic architecture in Europe, Asia and America. Much has been written about the architecture of cathedrals and public buildings but little has been done to show the history and development of the home. After much research and thought a series of dioramas were made, building into each a house—made to scale, in natural surroundings and painted realistically.

The accompanying photograph of a Norwegian Peasant House illustrates the character of the entire series which is divided as follows: I—Prehistoric (10), II—Native Primitive Houses (17), III—Greek (1), IV—Roman (1), V—Byzantine (2), VI—Romanesque (2), VII—Gothic (7), VIII—Renaissance (13), IX—Early American (20), X—Late American (7), XI—Nationalistic (10).

Those interested in any of the series may secure them in 2”x2” Kodaslides, Film Strips or Prints by writing to J. D. Knight, Director of County Visual Education, Hall of Education, Balboa Park, San Diego, California. The American series is especially valuable and may be purchased in Kodachrome 2”x2” slides for fifty cents each.

Now! lecturers, teachers, schools—

RENT a SELECTROSLIDE

for easy-to-operate classroom and lecture room projection.

Compact! Portable!

Remote push-button and automatic control, is an important feature on all Selectroslide projection equipment. Lecturer changes slides automatically by pushing button. No assistant necessary; no errors in projection possible.

SELECTROSLIDE PROJECTS 2” x 2” GLASS SLIDES WITH 35 MM. FILM.

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Universal equipment for all projection requirements. Interchangeable magazines hold 48 slides each. Takes bulbs from 300 to 1000 watt and focal length projection lens for small classroom or large auditorium.

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Write for our RENTAL SCHEDULE and let us assist you in selecting the equipment best suited for your needs.
Current Film News

WALTER O. GUTLOHN, INC., 35 W. 45th Street, New York City, reports a number of new 16mm sound releases this month, among them the following:

**History in the Making**—a timely series of sixteen 16mm sound shorts which dramatically visualize the world problems of today—running time five minutes each. Commentator is Ted McCrory, journalist and radio news reporter. The individual titles are: *America’s Factory Front, America’s New Nobility, Battle of the Atlantic, Battle of the Mediterranean, Brother Rats, Bundies for Berlin, Gung Ho, Hitler’s Secret Weapon, Master of Timing, Mightier than Words, Night Hawks, Our Empire Is the Air, Prophet without Honor, Sea Power vs. Air Power, Swastika over South America, That Tattered Lackey, The Punctured Yellow Peril, The Secret of the Blitz, The Snuggers.*

Theatrical—9 reels—the famed French feature film that has been awarded first prize as the best foreign film of the year by the New York Critics Circle. Dialogue is in French with English titles.

Universal Shorts: 9 one-reelers of the *Stranger Than Fiction* series, with Alos Havillra as commentator; 15 of the *Universal Thursday Gung Plazee* series; and many two-reel musical comedies and one-reel cartoons.

**Music of the Masters series** may be rented at reduced rates and purchased at discounts through special arrangements with the artists and producers. Two new releases just made available are: Jose Iturbi playing three pieces by Rameau for the harpsichord, and a piano rendition of Liszt’s Eleventh Hungarian Rhapsody; Vronsky and Babin, duo-pianists, playing Polovtsian Dances from Prince Igor by Borodin.

The tenth edition of the Gutlohn Catalog of Entertainment and Educational sound and silent motion pictures is just off the press, more impressive than ever. Larger in format, with 136 pages profusely illustrated, it is said to be one of the most complete in its field. Copies can be had free of charge upon request to Gutlohn.

**Investment Bankers Assn. of America, 400 Madison Avenue, New York City, has produced a motion picture—available free to senior high schools, colleges, clubs and other thinking groups entitled:**

America Looks Ahead—20 min., 16mm sound. It is a story of achievement, telling how men, ideas and savings have been melted together in America to give a great nation. Lowell Thomas explains the American way of life. A highlight of the production is a discussion on the American system of free enterprise presented by Dr. Neil Carothers, Dean of the School of Business Administration of Lehigh University.

**Dept. Classroom Films Inc., 35-11 35th Avenue, Long Island City, New York, has completed two one-reel sound subjects which may be used in Social Studies, American History, Sociology, Economics, and Americanization classes. Titles are:**

**Kentucky Pioneers**—portraying representative aspects of the movement into Kentucky Territory in the 1780’s. The film depicts travel along the Wilderness Road, the role of the frontier forts, and the settler’s establishment of new homes. Weaving, soap-making, cooking, candle molding, carpentry, cabin construction, schooling and square dancing are shown.

**Westward Movement**—presenting, by means of animated drawings, the story of the Westward Movement from 1790 to 1890. Among the topics developed are: territorial expansion, routes of migration and transportation, increase and distribution of population, extension of settlement, admission of states to the union, and the mining, and cattle frontiers.

**Castle Films, Inc., 30 Rockefeller Plaza, New York City, announces three more additions to its series of films known as the ‘Adventure Parad:**

**Land of the Incas**—showing the majestic ruins of the mighty Inca civilization, closely akin to those of Egypt. The film travels from Indian temples to Spanish cathedrals, from llama-cluttered villages of today to plazas built years ago. Ethnological questions are aroused as the film proceeds with intimate visits with the dignified but happy Incas of today, reminiscent of the sculptured people of the Pharaohs. In costume, at work and at play, he is seen as if he were a neighbor, and an especially jovial one when shown in a fantastic dance that simulates a bull fight.

In Old Spain—presenting the actual settings of great events, as, for instance, the court where Queen Isabella came to the financial aid of Columbus, the locale of Bizet’s immortal “Carmen,” the Alhambra at Granada, the Court of Lions with its fountain-fed grounds, the famed Alcazar of ancient Seville, and its magnificent Cathedral.

**Wild Elephant Roundup**—an exciting journey with intrepid hunters deep into African wastelands where a herd of 800 wild elephants is sighted and stalked. Armed only with ropes, 20 natives under the direction of one white man, creep upon the herd, the signal is given, and a dash made for a specific animal. Trees are necessary as anchors after the noise finally encircles the animal’s legs. Brute strength is shown as massive heaves uproot these trees, but, eventually, man wears down the monster. Older, tamed elephants are brought up and placed on either side of the new captive which quiets down, believing it is back in the herd again. The capture is completed and only the training remains.

**Bailey Film Service, 1651 Cosmo Street, Hollywood, California, by special arrangement with Dr. William G. Campbell, Associate Professor of Education at the University of Southern California, is able to offer to educational groups a film in Kodachrome depicting modern Russia. Dr. Campbell, well-known lecturer and world-traveler, has made several trips to Russia to study the people and education system.**

Russia shows the principal features of the USSR today and how they differ from those of Imperial Russia of yesterday; Russian agriculture, the collective farm; the Czecho, youth training ideas, and the “Pioneers,” counterpart of our Boy Scouts; women’s place in the working world; and the city of Moscow, with a contrast between the homes of yesterday and today. It is suggested for use in Junior and Senior high school, classes in economics, history, sociology, social science, geography, and current events; for Elementary classes to show children of other lands; for club meetings and world study groups. It is offered in either color or black-and-white; for purchase or rental.

**The National Film Board of Canada, has appointed Wesley Greene supervisor of non-theatrical distribution in the United States. Mr. Greene was formerly director of the College Film Center, Chicago. A survey is to be made during the next two months of distribution in the United States of films produced by the Canadian Government, with a view to the formation of a definite program of distribution of the new productions of the National Film Board.**

**Peoples of Canada,** a 2-reel 16mm sound film directed by Stuart Legg, is the first release of the National Film Board. Originally released as a 3-reel film, this subject was re-edited in September of this year with a view to its use in junior high school and high school classes studying units on the geography and history of Canada. This film presents the contributions of all the races which settled in Canada and because of this it has been suggested that the film has value in the study of problems of immigration and unity in a democracy. Information on this film and others announced in the new catalog of the Board should be addressed to Mr. Wesley Greene, 59 East Van Buren St., Chicago, or the Film Board, Ottawa, Canada.

**Tennessee Valley Authority, Information Office, Knoxville, Tenn., has a new film which is being released for educational purposes, entitled:**

**TVA—2 reels, 16mm, sound. Transportation charges only. The picture presents the work and accomplishments of the TVA after more than seven years.**

(Concluded on page 366)
IDEAL PICTURES CORPORATION Presents

“The Story of Civilization”

in 16 mm sound films. Composed of 17 unit programs, each unit representing one phase of the subject. These units are divided into chapters of one reel each. Each unit is a complete story in itself and they can be used in any order desired. Study guides are available covering each unit. Units and chapters are:

PRIMITIVE LIFE
Chapter 1. How Animals Live
Chapter 2. The Simple Life of the Hunters
Chapter 3. Hunting In the Water

HERDSMEN AND FARMERS
Chapter 1. Wandering Herdsmen
Chapter 2. Small Farms in Central Asia
Chapter 3. On to Market
Chapter 4. The Thirsty Land

OUT OF THE EARTH
Chapter 1. Primitive Workers
Chapter 2. Coal
Chapter 3. Oil and Gas
Chapter 4. Iron and Steel

FROM FARMS TO FACTORIES
Chapter 1. Grandfather's Farm
Chapter 2. Home Life on the Farm
Chapter 3. Machinery Comes to the Farm
Chapter 4. The Business of Farming
Chapter 5. The Farm Goes to the Factory

THE STORY OF TRANSPORT AND TRAVEL
Chapter 1. In Earliest Times
Chapter 2. Pioneer Days in Our Own Country
Chapter 3. Steam
Chapter 4. Speed

STORY OF THE CITY
Chapter 1. Cities for Defense
Chapter 2. Cities for Commerce
Chapter 3. Problems of the City

STORY OF SCIENCE
Chapter 1. Through the Microscope
Chapter 2. The Story of the Telescope
Chapter 3. Lyrical Life
Chapter 4. For the Service of Man

STORY OF CULTURE
Chapter 1. Primitive Art
Chapter 2. The Spirit of Egypt
Chapter 3. The Classical Age
Chapter 4. In the Middle Ages
Chapter 5. The Modern Age
Chapter 6. Facing the Future

STORY OF THE SEA
Chapter 1. Conquest of Fear
Chapter 2. Monkeys of the Deep
Chapter 3. Achievement of Engineering
Chapter 4. Victory of Science

STORY OF THE MOUNTAINS
Chapter 1. How Volcanoes Make Mountains
Chapter 2. Animals of the Mountains
Chapter 3. Mountain People and Their Customs
Chapter 4. Mt. Everest

STORY OF THE DESERT
Chapter 1. Reclaiming the Desert
Chapter 2. An Old Civilization Built in the Desert
Chapter 3. Desert People
Chapter 4. Animals That Live in the Desert

STORY OF THE FOREST
Chapter 1. Pleasure and Health in the Forests
Chapter 2. Growing and Protecting the Forest
Chapter 3. Lumbering
Chapter 4. The Forest and Water Control

STORY OF THE JUNGLE
Chapter 1. Jungles Around the World
Chapter 2. The Deadliest Animal of the Jungle
Chapter 3. Village Life
Chapter 4. Perils of the Jungle

STORY OF THE POLAR REGIONS
Chapter 1. In Search of the North Pole
Chapter 2. People Who Live in the North
Chapter 3. Life at the Antarctic

THE CRADLE OF OUR RACE
Chapter 1. How All Things Struggle to Live
Chapter 2. How a Whole Nation Travelled in Search of Grass
Chapter 3. How Our Distant Cousins Moved into India
Chapter 4. The Beautiful Civilization Founded at Shalimar

THE LAND OF OUR FOREFATHERS
Chapter 1. The Celtic People of France
Chapter 2. The Teutonic People of Germany
Chapter 3. The Land from Which Comes Our Language
Chapter 4. The Slavic People of Russia

OUR OWN COUNTRY
Chapter 1. Before the White Man Came
Chapter 2. Landing of the Pilgrims
Chapter 3. Into the Mountains
Chapter 4. Over the Prairies

Our low rental rates per unit program are still further reduced when entire series is booked in advance.

IDEAL PICTURES CORPORATION
28 East Eighth Street
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Stevens—Ideal, 89 Cone Street, N. W., Atlanta, Georgia

Bertram Willoughby Pictures Inc., 1600 Broadway, New York City
Among the Producers Where the commercial firms announce new products and developments of interest to the field.

Victor Arc Lamp Projector

The Victor Model "E" High Intensity Arc Lamp Projector has just been announced by the Victor Animatograph Corporation. This model has been especially designed for heavy-duty service and to fulfill a demand for a projector that will produce ultra brilliance of screen images in large auditoriums and outdoor areas, retaining the other fine features that characterize Victor models.

Complete unit consists of projector with projection lens 2" high speed F1.6 standard equipment, sound unit, amplifier, two high fidelity type speakers, are

Victor Model "E" Projector.

Spanish Filmstrips

The Society for Visual Education, Inc., 100 East Ohio Street, Chicago, is offering a new set of filmstrips on introductory Spanish, consisting of ten rolls, compiled and edited by a Spanish teacher. The units of the set are titled as follows: "How to Understand Complete Thoughts," "How to Discover the Meaning of New Words," "Some Rudiments of Elementary Construction," Peons," and "Dances and Music."


Ampro's New Catalogue

A new 16-page illustrated catalogue showing their full line of 8 and 16mm. silent and sound motion picture projectors, has been released by Ampro Corporation. General fundamental features and all accessories pertaining to the line are pictorially described. A complete check-chart contained therein should be of material value to those interested in motion picture equipment. Copies may be secured by addressing Ampro Corporation, 2839 North Western Avenue, Chicago, Illinois.

Armour Slidefilm Presentation

Armour and Company, nationally known packing firm, has produced a unique 18-minute film strip, "A Trip Through the Stock Yards", in which members of the class or audience actually take the voice parts of the characters on the screen. This affords good student training in oral reading and dramatics.

Experiments made in this type of presentation during the spring and summer were so successful that kits have been prepared containing the silent 35mm. slide film, six script booklets, two pamphlets on the meat-packing industry for the instructor, a return shipping label and a stamped addressed report card.

The film describes the experiences of Mary Miller and her Aunt as they accompany the Guide over the Visitors' Route of a large meat packing plant. It is suitable for classes in commercial geography, home economics, vocational agriculture, commerce and meat merchandising.

Deft fingers packing strips of bacon. with a 12-inch record (33-1/3 RPM). The material can be obtained by writing Audio-Visual Promotion, Armour and Company, U. S. Yards, Chicago.

(Concluded on page 366)

RCA Album of English Lyric Verse

Ellsworth C. Dent, RCA Educational Director, has announced a new addition to the Victor Masterpiece series, "Anthology of English Lyric Verse", recorded by Cornelina Otis Skinner. The album covers the widest scope in content, ranging from the Elizabethans to the literary greats of today. Some of outstanding works included are: Shakespeare's "Two Sonnets, and Full Fathom Five"; Milton's "On His Blindness"; Wordsworth's "The Solitary Reaper—The World" (Sonnet); Shelley's "Night"; Byron's "We'll Go No More A-Roving"; Keats "Ode To A Grecian Urn"; Browning's "Meeting At Night"; Tennyson's "Crossing The Bar"; Elizabeth Browning's "A Musical Instrument"; Masefield's "Sea Fever"; Brooke's "The Soldier"; Millay's "Requiem"; Sandburg's "Grass". "The album," Mr. Dent said, "is a valuable aid in the teaching of correct English speech, and the appreciation of great literary works. The beautiful and impressive verses are enhanced by Miss Skinner's expressive voice and remarkable interpretation."

This album in the Victor Masterpiece series is designated as Album M-810.
The new Amprosound has been specially designed so that a youngster can operate it as easily as an ordinary radio. Threading is so simplified that the film finds its proper position almost automatically. On Model UA, here illustrated, reel arms are permanently attached so that they swivel into position for instant use. Operating controls are centralized on one illuminated panel.

Model UA offers complete mixing of sound from film, microphone and phonograph... sound and silent speeds... reverse picture operation... still pictures... 750-watt illumination... automatic rewind... pilot and dial lamps... up and down tilt... and numerous other features.

SEND FOR AMPRO CATALOG giving full details, descriptions, prices, on the complete line of Ampro 16mm. projectors.
Minicolor Prints

With the announcement of Kodak Minicolor Prints from miniature Kodachrome transparencies by the Eastern Kodak Laboratory at the National Photographic Convention in Chicago, the camera fans' dream has been realized. Kodak Minicolor Prints are enlarged from either 35 mm. or Bantam size Kodachrome transparencies by a standardized process in the Eastern Kodak Laboratory in Rochester. They are made only from Kodachromes in 2 x 2-inch mounts with the standard central openings. Enlargements are available in two sizes. The "2X" size is about 2 1/4 x 3 1/4 inches. On these the corners are rounded and there are no margins. The larger size "SX" affords a print 3 x 4 1/4 inches, and prints are returned in mounts—for horizontals 8 3/4 x 10 1/2 inches and for verticals 8 3/4 x 11 9/16 inches; the picture opening, or area, measuring 5 x 7 3/4 inches. The "2X", 2 1/4 x 3 1/4 inch Minicolor prints are seventy-five cents each, and the larger "SX" size, $3.50, including mounts. The quality of the Minicolor print naturally depends on the quality of the Kodachrome transparency from which it is made. Kodak Minicolor Prints contain dyes which may in time, according to the Eastern Kodak Laboratory, change. These Prints, therefore, will not be replaced or otherwise warranted against any change in color. The dyes used are stated by Eastman Kodak Company to be as stable as possible consistent with their other requirements. The "feel" of a Kodak Minicolor Print, particularly in the smaller size, is that of an unusually fine playing card, strong, attractive, and resilient. The print support, or base, however, is not paper or card, but pigmented cellulose acetate.

DeVry Processing Formula

DeVry Films and Laboratories, 1111 Armitage Avenue, Chicago, Illinois, are now taking orders for FILM PROCESSING. The new DeVry processing formula is called Sante-Kote and it is reported that films processed with it last longer, give clearer and sharper images and are protected against dirt, wear, scratches and climate. DeVry offers to process free, a sample 400 ft. reel to prove its claims.

Slidefilms for Defense Training

Announcement of a set of ten new educational slidefilms designed to speed bench work training in defense training, high schools, technical and vocational schools, has just been released by the Jam Handy Organization, Detroit. By showing each progressive step in fundamental bench work operations, the films enable the student to see and practice each step until he becomes proficient. The first film shows the proper use and care of hand and power saws, layout tools and measuring instruments. The remaining films cover specific projects, one film to each. They are: drills and drilling; reaming; tapping and threading; finishing rough castings; scraping; rivets and riveting; and layout work. All the films are of the reading or lecture type, allowing the instructor to use them at the speed best suited for his class. The kit-set is a "magic blackboard" of hundreds of photographs, diagrams, wash drawings and cross-sectional views, carefully organized in sequence and accompanied by explanatory captions.

Shades for Darkening Classrooms

For the darkening of classrooms and auditoriums, necessary for the successful projection of pictures, the Luther O. Draper Shade Company, Spiceland, Indiana, recommend their X-L Window Shading Unit in black Dratex fabric, made especially for this purpose. This shade is said to absorb light, retain its color under strong light, and to be opaque and long-wearing. It may be installed to operate over shades used for the customary lighting requirements.

Where darkening window curtains are to be used in more than one room, the DeVry mountable Eclipse "A" Folding Shade is quite efficient. For multiple or wide windows that cannot be shaded satisfactorily with a single shade, the X-L steel Shield is the answer. This is an L-shaped steel shield, in any required number of sections that telescope on each other, supporting as many shades as needed for shading any width window. Each shade is overlapping and operates independently, thus admitting the exact amount of light desired. L-shaped brackets provide rigid support for the shades and reinforce the Shield. A complete set of roller window shades is included with each X-L Window Shading unit.

Catalog of Electrical Transcriptions

Recorded Lectures Inc., 737 N. Michigan Avenue, Chicago, have prepared a catalogue of their educational transcriptions produced to date and those in preparation. A summary of the subject matter of each transcription is given, along with a list of the locations in which each is made (designated by numbers 1 to 28). Grade level and subject matter is also indicated. An especially welcome feature of the catalogue is the inclusion of a complete chart on the inside back cover, presenting in concise form information on 36 programs as to grade level and subject matter for quick reference. These recordings are distributed exclusively by Bell & Howell Co., 1801 Larchmont Street, Chicago.

Current Film News

(Concluded from page 362)

The Educational Screen

progress towards the unified development of the Tennessee Valley. It shows the multipurpose dams operating to help control floods, to aid navigation, and to produce power. The film also shows other activities of the Authority including agricultural work, rural electrification, research and reforestation. How the program fits into national defense is described.

International Geographic Pictures, 52 Vanderbilt Avenue, New York City, have published Study Guides for their film, Territorial Possessions of the United States, that are similar in nature to the Guides for their preceding subject, Territorial Expansion of the United States From 1783 to 1853.

The new guides were prepared by Miss Leonie Brandon, of the Department of History of the New Field level, Teachers' College, and Mr. Donald Eldridge, Director of Audio-Visual Education of the New Haven Public Schools. The Guides are divided into two sections, a Teachers' Guide and a Students' Guide. Each contains an introduction and summary of the film, questions on the film, suggested activities, teacher's comments, and New York Regents questions. Thumb-nail Biographies, as well as additional material. The guides result from actual use of the film in the classroom, with many types and classes of students, and it is believed they will provide a basis for the study of Territorial Possessions which will be stimulating for students and teachers alike.

Post Pictures Corporation, 723 Seventh Avenue, New York City, has just issued a new edition of its 16mm. sound film catalog, which includes many new additions and greater diversity in subject matter. It is generously illustrated and the description of each subject indicates its type, character and classification. In addition to strictly entertainment films, the Post releases include many meritorious educational subjects—Travel, Documentary, Natural Science, Sports, etc. Copy of the catalog will be sent on request to those interested.

William J. Ganz Company, 19 E. 47th Street, New York City, is distributing the following free sound film in color, sponsored by Hat Style Council:

Hi, Slouch, which emphasizes to students the advantages of correct dress, better posture and general well-groomed appearance. The ten-minute picture is based at DeVry College, and the characters involved are two couples, one of whom is known as Slouch because of his carelessness in dress. When a salesman tells the history of the hat down through the ages, and explains the process by which they are made, Slouch gets interested and discovers for himself how the right hat can improve appearance.
Some Valuable Literature —

“1000 AND ONE” FILM DIRECTORY

“1000 and One” The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 155 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c to E. S. subscribers)

FILM EVALUATION SUPPLEMENTS TO “1000 and ONE” under—The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 300 teachers, are listed in the use of the films with classes. Each Supplement consists of 50 standard-size library cards carrying detailed evaluations of 50 films, based on combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid if cash with order).

VISUALIZING THE CURRICULUM
By C. F. Hoban, C. F. Hoban, Jr., and S. B. Zisman

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative charts, photographs, reports of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK. (3rd Edition)
By Ellsworth C. Dent

Presents in convenient form, practical information for those interested in applying visual and audio-visual aids to instruction. The six chapters include discussion on “The Status of Visual Instruction,” “Types of Visual Aids and Their Use,” “Types of Audio-Visual Aids to Instruction,” “Types of Sound Aids for Schools,” “Organizing the Audio-Visual Service,” “Source List of Materials and Equipment.”


SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part 1 gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American civilization. Title of film, length, whether sound or silent, production date, producer, sale and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation. 272 pp. Cloth. Price 75c.

PICTURE VALUES IN EDUCATION
By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 150 pp. Cloth. Illus. Price $1.00 (67c to E. S. subscribers)

AN ALTERNATIVE FOR REVOLUTION AND WAR
By Albert E. Osborne

A stimulating, wide-range view of the higher potentials of visual instruction in promoting world harmony by a “more humanity-centered education.” A pertinent reply to H. G. Wells’ dictum that the “future is a race between education and catastrophe.” 124 pp. Cloth. Price 1.25.

EVALUATION OF STILL PICTURES FOR INSTRUCTIONAL USE. By Lela Trolinger

A full presentation of the latest piece of research on determination of teaching values of pictures. Development of the Score Card and elaborate experiment in use of same. Full documentation, tabulation of results, and appendices. The latest, most complete and scholarly investigation of a problem in the visual teaching field that has long needed such a solution.


PRODUCING SCHOOL MOVIES
By Eleanor Child and Hardy R. Finch

Based on first-hand experiences of the authors and those of many other teachers and movie enthusiasts, Chapters are “Organization (of a Club): Choosing the Idea; The Scenario; Buying Equipment; Using the Equipment; Filming the Picture; Advanced Techniques; Final Preparation and Showing.” A welcome book to those who want movie-making explained in simple terms.


HOW TO USE THE EDUCATIONAL SOUND FILM
By M. R. Brunstetter, Ph. D.

Discusses the utilization of the educational sound film, and lists and illustrates techniques for placing the film into effective service in the classroom. The procedures suggested are based upon extended experience in studying teachers’ use of sound films and in helping to organize programs of audio visual instruction in school systems. Two valuable Appendices and a full index.

175 pp. Cloth. Illus. Price $2.00. (20% discount to schools)

THE USE OF VISUAL AIDS IN TEACHING
By Ella Callista Clark, Ph. D.


HOW TO MAKE HAND-MADE LANTERN SLIDES.
By G. E. Hamilton.


THE STEREOGRAPH AND LANTERN SLIDE IN EDUCATION
By G. E. Hamilton.


TO ORDER, Check Material Desired and Fill in Blank Below

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U. S. 1 year, $2.00 □ 2 years, $3.00 □
Foreign 1 year, $3.00 □ 2 years, $5.00 □
Canada 1 year, $2.50 □ 2 years, $4.00 □

Educational Screen
64 E. Lake St., Chicago

I have indicated items desired and enclose check for $........

Name

School or Street

City ................... State .............
HERE THEY ARE

A Trade Directory for the Visual Field

**FILMS**

Akin and Bagshaw, Inc. (3) 1425 Williams St., Denver, Colo.
Balley Film Service (3, 4) 103 Cochran St., Hollywood, Cal. (See advertisement on page 358)
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago (See advertisement on page 346)
Brandon Films (3) 1600 Broadway, New York City (See advertisement on page 352)
Cast Film Co. (3) R C A Bldg., New York City (See advertisement on page 324)
College Film Center (3, 5) 59 E. Van Buren St., Chicago (See advertisement on page 354)
Commonwealth Pictures Corp. (3) 729 Seventh Ave., New York City (See advertisement on page 368)
DeVry School Films (3, 4) 1111 Armitage Ave., Chicago
Dudley Visual Education Service (1) 736 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg. Mankato, Minn.
Eastman Kodak Co. (3) Teaching Films Division Rochester, N. Y. (See advertisement on page 357)
Eastman Kodak Stores, Inc. (3) Kodascope Libraries 356 Madison Ave., New York City
Eastman Kodak Stores, Inc. (3) 1020 Chestnut St., Philadelphia, Pa. 606 Wood St., Pittsburgh, Pa. (See advertisement on page 368)
Edited Pictures System, Inc. (3) 330 W. 42nd St., New York City
Eripi Classroom Films, Inc. (2, 5) 35-11 35th Ave., Long Island City, N. Y. (See advertisement on page 355)
Films, Inc. (3) 330 W. 42nd St., New York City
64 E. Lake St., Chicago
316 S. Ninth Ave., Portland, Ore.
French Film Exchange (2) 1725 Broadway, New York City (See advertisement on page 369)
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask.
156 King St., W. Toronto
Walter O. Gutlohn, Inc. (3) 35 W. 45th St., New York City (See advertisement on page 359)
Harvard Film Service (3, 6) Biological Laboratories, Harvard University, Cambridge, Mass.
Health Film Service (3) First Nat'l Bank Bldg., Salem, Ore. (See advertisement on page 359)
Heidenkamp Nature Pictures (1) 538 Glen Arden Dr., Pittsburgh, Pa. (See advertisement on page 359)
Hoffberg Productions, Inc. (2, 5) 1600 Broadway, New York City
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago, Ill. (See advertisement on page 363)
Independent Motion Picture Exch. (2) 4726 S. Packard Ave., Cudahy, Wis.
International Geographic Pictures (2, 5) 52 Vandemark Ave., Bay View, Wis. (See advertisement on page 359)
Lewis Film Service (3) 216 E. 1st St., Wichita, Kan. (See advertisement on page 350)

Manse Film Library (3) 1521 Dana Ave., Cincinnati, O. (See advertisement on page 352)
Moguls (3) 61 W. 48th St., New York City (See advertisement on page 358)
Post Pictures Corp. (3) 723 Seventh Ave., New York City
Douglas D. Rothacker 729 Seventh Ave., New York City
Universal Pictures Co., Inc. (5) Rockefeller Center, New York City (See advertisement on page 368)
Visual Art Films (3) 1303 Porterfield St., Pittsburgh, Pa. (See advertisement on page 354)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Vocational Guidance Films, Inc. (2) Old Colony Bldg., Des Moines, la.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.
Y.M.C.A. Motion Picture Bureau (3) 347 Madison Ave., New York City
19 S. La Salle St., Chicago
351 Turk St., San Francisco, Cal. 1700 Patterson Ave., Dallas, Tex.

**MOTION PICTURE MACHINES and SUPPLIES**

The Ampro Corporation (3) 2839 N. Western Ave., Chicago (See advertisement on page 368)
Bell & Howell Co. (3) 1815 Larchmont Ave., Chicago (See advertisement on page 346)
DeVry Corporation (3, 6) 1111 Armitage St., Chicago
(See advertisement on inside back cover)
Eastman Kodak Stores, Inc. (3) Kodascope Libraries 356 Madison Ave., New York City
General Films, Ltd. (3, 6) 1924 Rose St., Regina, Sask.
156 King St., W. Toronto
Holmes Projector Co. (3, 6) 1813 Orchard St., Chicago (See advertisement on page 348)
Ideal Pictures Corp. (3, 6) 28 E. Eighth St., Chicago
RCA Manufacturing Co., Inc. (2) Camden, N. J. (See advertisement on page 355)
S. O. S. Cinema Supply Corp. (3, 6) 530 Eleventh Ave., New York City
Victor Animatograph Corp. (3) Davenport, Iowa. (See advertisement on inside front cover)
Visual Education Service (3) 131 Clarendon St., Boston, Mass.
Williams, Brown and Earle, Inc. (3, 6) 918 Chestnut St., Philadelphia, Pa.

**RECORDINGS**

Recorded Lectures, Inc. (3) 737 N. Michigan Ave., Chicago (See advertisement on page 351)
De Lite Screen Co. (3) 2171 N. Crawford Ave., Chicago (See advertisement on page 369)

Radiant Mfg. Corporation 1140-46 Superior St., Chicago (See advertisement on page 347)
Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill. (See advertisement outside back cover)
Williams, Brown and Earle, Inc. 918 Chestnut St., Philadelphia, Pa.

**SLIDES and FILMSTRIPS**

Edited Pictures System, Inc. 330 W. 42nd St., New York City
Ideal Pictures Corp. 28 E. Eighth St., Chicago, Ill. (See advertisement on page 368)
Keystone View Co. Meadville, Pa. (See advertisement on page 321)
Radio-Mat Slide Co., Inc. 1819 Broadway, New York City (See advertisement on page 358)
Society for Visual Education, Inc. 100 E. Ohio St., Chicago, Ill. (See advertisement on outside back cover)
Spindler & Sauppe Inc. 86 Third St., San Francisco, Cal. (See advertisement on page 361)
The Stanley Bowman Co. 2929 Broadway, New York City

Visual Education Service 131 Clarendon St., Boston, Mass.

Visual Sciences Suffern, New York (See advertisement on page 358)
Williams, Brown and Earle, Inc. 918 Chestnut St., Philadelphia, Pa.

**STEREOTYPICOS and OPAQUE PROJECTORS**

Bausch and Lomb Optical Co. Rochester, N. Y. (See advertisement on page 322)
DeVry Corporation 1111 Armitage Ave., Chicago (See advertisement on inside back cover)
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**SCREENS**

De Lite Screen Co. (3) 2171 N. Crawford Ave., Chicago (See advertisement on page 369)

**REFERENCE NUMBERS**

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) indicates 35mm sound and silent.

Continuous insertions under one heading $2.00 per issue; additional listings under other headings, $1.00 each.
Today's BIGGEST BARGAINS in
16mm. SOUND CLASSROOM FILMS
only $1.00 per reel for two days

Filmsets ON WORLD GEOGRAPHY
One of the greatest forward strides in Visual Education. A complete library of 48-16mm. film subjects to be owned by individual schools for classroom use. Devised to TEACH STUDENTS TO THINK. Teachers' Manual of 112 pages, with 672 illustrations taken from the films and steel film filing cabinets complete the unit. The cost is moderate. Descriptive literature gladly sent.

DE VRY 16mm. sound and silent classroom teaching films are being used by accredited schools everywhere. Complete with Lesson Plans prepared by eminent authorities, these films will enhance the teaching of Geography, Science, History, Literature, Nature Study, etc.

"Only $1.00 per Reel for 2 Days Rental when 20 or More Subjects Are Selected for Extended Program.

Here are Just a Few Superb Films from the De Vry School Film Library

ARCTIC THRILLS—A great adventure picture. Beautiful sea and ice scenes. Actual portrayal of the capture of a giant polar bear.

ANIMAL BABIES—The young of rabbits, cats, possum, goats, llamas, bison, yak, kangaroo, skunks, hippopotamus, prairie dog, etc. Superb.

WILD ELEPHANT ROUND-UP—The year's greatest adventure picture. See how a wild elephant is actually cut off from the herd and captured.

THE HYDROZOA—Simple water animals and jelly fish. Excellent animations of bodily functions.

AMOeba & VORTICella—Life cycle of these organisms, animations of reproduction and other bodily habits.

THE EARTHWORM—Life cycle of the earthworm. Animate studies of different bodily functions.

GARDEN SPIDERS—Intimate film study of the common spider. Life cycle, habits, mating, etc.


PLANT LIFE—How plants grow, development of root, stem and flower. How plans feed.

EROSION—Effect of wind, water and weather upon the surface of the earth, Grand Canyon and Bryce Canyon as examples.

OUR GOVERNMENT—Depicts the history of the formation of the U. S. Government, explains functions of each branch as a system of balance and counter-balance.

THE PIONEERS—Portrays life of early pioneers, Candle melting, pewter pouring, log cabins, fireplaces, tanning hides, wheelwrights, etc. Authentic scenes from priceless master prints.

LIFELINE OF THE BRITISH EMPIRE—Suez, Malta, Gibraltar, Canal scenes. Port Said, the part this strategic Canal and Gibraltar play in defense of British Empire.

GOLD RUSH—Discovery of gold at Sutter's Mill, California, early mining methods, modern mining equipment and methods of extracting gold.

RAFFLES AND RUBBER—Mighty, Singapore. Views of city, natives gathering rubber, inland scenes.

SEA GOING THRILL—Trip by Clipper ship from New York around Cape Horn, up west coast of South America into the harbor at San Francisco.

CZECHOSLOVAKIA—Before the German Invasion of 1939. Pictures people, carefree and happy. Film will perhaps have historical significance.

FILM CATALOG FREE ON REQUEST

DEFENSE TRAINING FILMS
Schools participating in defense training, in which a knowledge of electricity is needed, are eligible to acquire the six film subjects below with funds provided by Appropriation Act 144 of 77th Congress. Contact your State Director of Vocational Training. Films were screened by U. S. Office of Education and are in its reference list.

Principles of Magnets
Principles of Electromagnetism
Principles of Electrical Measurement
Principles of Electrical Electricity
Principles of Electrastics
Principles of Current Generation

16mm. sound or silent
SCREENING PRIVILEGES!
FULL DETAILS ON REQUEST

DeVry 16mm. Sound Projectors
DeVry builds 16mm. projectors for every school need. Each is precision made for long lasting dependable service by the same skilled craftsmen who build the 16mm. DeVry 35mm. Theatre Sound Projectors, each of which over 400 were ordered by the U. S. Navy. Descriptive literature gladly sent.

PROTECT Your Films
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SPECIAL FILM TREATMENT
At a cost of but a FRACTION OF A CENT PER FOOT, your black and white or color films if processed with DeVry "Save-Kote" will last longer, give clearer projection and be protected against scratches, dirt, wear, climate and finger marks.

Free Trial Offer! To prove "SAVE-KOTE" is all we say it is, we'll process a 400 ft. reel of film FREE!

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DE VRY FILMS AND LABORATORIES
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1941's GREATEST HEADLINES IN CASTLE FILMS'

These world-shattering events live again on your home screen!

- U. S. IN ICELAND!
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- BALKANS INVADED!
- SYRIA AND IRAQ CAPTURED!
- CANADIANS SMASH SPITZBERGEN!
- ROOSEVELT-CHURCHILL MEET!
- FRANCE'S TRAGIC FATE!
- U. S. DEFENSE GROWS!
- HISTORIC SEA BATTLES!
- Other Events that Made 1941 History!

For every projector owner a priceless chronicle now and for the years to come.

NEVER BEFORE has there been a year like this one! Here is destiny filmed when it happened...where it happened...as it happened—an authentic, living, moving record of a mighty era.

Castle Films' "NEWS PARADE OF THE YEAR" preserves for all time the mounting pace of events, month by month, through an epic year in world history! It is the only complete and authentic Home Movie Review of the entire year!

For less than the cost of unexposed movie film, you can own this astounding record of a world in turmoil. Don't wait. SEND THIS HANDY ORDER FORM TO YOUR PHOTO DEALER TODAY...NOW!

Please send Castle Films' "NEWS PARADE OF THE YEAR" (1941) in the size and edition checked below.

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- Headline $1.75
- Complete $5.50

16 mm.
- Headline $2.75
- Complete $8.75

Sound $17.50

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The EDUCATIONAL SCREEN

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(Courtesy Wisconsin Conservation Department)

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Audio-Visual Aids to Elementary Instruction in a Small City

The worthwhile use of audio-visual aids for classroom instruction in a small city brings new problems to school executives. The small budget limits purchases and makes it impossible to provide a skilled teacher for the necessary initial work of definite organization of materials. The small budget makes it difficult to furnish the leadership needed in giving teachers the necessary working techniques. In the small school system the critical problem is the organization of audio-visual aids so these tools implement instruction and function in the classroom. The satisfactory solution of this problem is a wise expenditure of time and money.

The tools that a small city system can use to advantage in a planned program of instruction are: Organized sets of mounted pictures; classroom lantern slides of diagrams, pictures, and maps; organized lessons with educational films; raw materials, exhibits, and specimens; and the planned and integrated field trips.

Practical difficulties as viewed by a school executive are: (1) small budget, (2) the high cost of slides which are old or lack educational value, (3) the transient and irrevelant character of many motion picture films, (4) the low educational value of much free material, (5) the scarcity and poor quality of local illustrative materials, (6) no definite integration and selection of materials for instructional units, (7) lack of skillful leaders who might organize materials to be available at the opportune time and pertinent to the class unit, (8) indifferent technique of the teacher with educational films.

The above difficulties can be eliminated in part by discrimination in the selection of materials, by planned units with basic illustrative materials, by use of trained leaders, by attention to the development of new techniques and by use of the small budget for the purchase of the basic tools required by teachers.

The first essential is a well planned curriculum taking full cognizance of selected and tested modern aids. The planning should be a determined effort to bring the required tools into the best possible functioning situation for class use.

The mechanical equipment is the second essential and it should be, at the least, one room in each building equipped as a visual instruction room, provided with (1) dark curtains, (2) a good screen, (3) lantern slide projector, (4) lantern slides in small unit sets in cases, (5) time and subject scheduling charts for the different classes from each room, (6) clear and accessible indices of all material on hand or to be available in future, (7) a 16mm sound projector or 16mm silent projector, (8) definite files of booklets relative to slides and films, (9) easily accessible filing cases for mounted and indexed pictures, (10) direction and test
sheets for the units in various subjects as presented by different aids, (11) records for films that have been used showing sources, subjects, reels, grade, cost, etc., (12) portable display cases with lesson outline for various types of exhibits, specimens, etc.

Again calling attention to the importance of making a worthwhile adjustment of each aid to learning, the initial beginning is in the course of study which makes clear provisions for the use of the ideas as presented by the tool. Such a course of study should be translated into action by the use of those tools which best bring ideas and attitudes to the pupil.

The school executive outlines the modern requirements to guide the working committees of teachers who plan for the modern presentation of the ideas of the curriculum. Lists of films, catalogues of slides, special notices of pictures and other references are beginnings but it is better still to have the best tool ready to use in each unit as indicated in the curriculum. There should be clear directions as to the teacher's technique in using these tools. A few definite tools ready to use are better than those that may not materialize at the time wanted.

For practical methods of integrating these modern tools with classroom instruction, attention is directed to the schools in Lakewood, Ohio, which is a small city with a population of 69,056; with a school enrollment of 8,545 pupils; eleven elementary buildings; 350 teachers; and an operating budget of $1,284,075 yearly.

The recently organized core programs of unit studies for the Lakewood upper elementary grades deserves attention. In this school system the core program idea is applied to geography, science and history. English, both oral and written, is applied continuously to the core subjects and is functional in character.

For each of the core subjects, definite units are formulated. Each unit is some definite phase of the core idea to be taught and the audio-visual aid to be used is indicated along with text references under each unit. This program clearly recognizes that learning proceeds from the ideas obtained from the audio-visual materials which are provided for that purpose at the opportune time.

The Lakewood idea that pupils should know their community has resulted in field study trips. These Lakewood field trips are essentially different from those in many school systems. Each field trip has a definite and regular place in instruction. It is used in the classroom to promote the understanding of community activities and to provide clear ideas for core subjects.

In the Fifth B grade in the geography core unit of the Southeastern United States, where winter fruits and vegetables are studied, a special bus trip is taken to the Northern Ohio Food Terminal which is the receiving center for fresh foods for northern Ohio. This trip is organized before starting by a planned outline for the teacher so that she knows the functions of a food terminal. Each place to be visited by the class is explained for the benefit of the teacher and suggestions are made to make the trip a worthwhile study. The second part of the field trip material is a guide sheet which is supplied to all pupils and taken by them on the trip. The items on this sheet are checked as they are observed. The pupils spend enough time in each food department to get ideas for class discussions.

Objective tests form a third part of the technique for these field trips. These tests check the observations of this trip. Various graphs are used to show the amount of fruit and vegetables received at the terminal. These simple graphs aid pupils in getting ideas of the quantities of fruits and vegetables received and incidentally furnish the initial training in the use of graphs.

Another field trip in the Fifth grade is taken when the industries of the Great Lakes is the core unit of study. The pupils go in a large bus to the Cuyahoga Flats, which is the industrial center of this area. Each teacher has for her use a guide sheet with full directions and explanations which enable her to know the facts concerning each of the places visited. Each pupil has a map and check sheet to check various items as they are observed. On this check sheet the first observations are made by pupils from the Clark Avenue Bridge as follows:

"Check the following that you observe: — blast furnace, — stoves, — ore bridges, — ore unloaders, — piles of iron ore, — piles of limestone, — pig iron, —
slag pit, — coke ovens, — coke quenchers, — lake freighter, — skip. — Otis Steel Company, — Republic Steel Company."

There are many others items on this pupils' check sheet which serve to focus attention, help recognition, and form clearer ideas. This field trip is followed by class discussion, then objective tests, and the use of simple graphs for the iron ore receipts. This is a first hand method of getting basic ideas of industries in the lower lake region.

Field trip experiences are supplemented by lantern slides. In connection with the Cuyahoga Valley trip, the following slides are provided: (17) Cleveland coal docks (18) Cleveland inner harbor (19) Cleveland ore storage yards (20) Cleveland blast furnaces (21) Cleveland oil refineries. (The numbers refer to slides in unit set in each school.)

Accompanying these slides are booklets giving the accurate factual statements and questions concerning the items in each slide. Such material helps in pointing the instruction in a profitable direction. For example the lantern slide (17) entitled "Cleveland coal docks and outer harbor" has the following description:

"These coal docks are in Cleveland's outer harbor on Lake Erie. The docks are located on railroad tracks. The railroad cars are loaded with coal. The three tall structures at the end of the pier are the coal loading machines. These loaders pick up a car of coal, tip it over, and dump the coal into the lake freighters. Does the picture suggest why Cleveland has become an important coal shipping port on the Great Lakes? List the reasons.

Questions: (1) How does the coal reach these docks? (2) From what part of the country may this coal have come? (3) How will much of the coal leave this dock? (4) What are the three tall structures at the end of the pier called?"

This slide is only one of several closely related to the core unit entitled "The Industries of the Great Lakes." The above lantern slides were selected with discrimination and adjusted to the field trips and class use. All slides are provided with help that the teacher and pupils need for their interpretation. These geography lantern slides are provided for each building, each set housed in a simple carrying case and are ready at the opportune time. Such slides are inexpensive in proportion to their value. In addition to this definite local material, it is necessary to select closely related supplementary slides to cover a larger area of the industries of the Great Lakes. This plan uses a few basal slides to form the core ideas of the unit and are always ready for use.

Cleveland's industries as part of the industries of the Great Lakes are presented by sets of mounted pictures (11 x 14) that are fully documented, indexed and filed so as to be always ready to use.

The daily use of selected tools does not lengthen the program but brings definite raw materials to develop clear ideas in each unit. The use of these modern tools is a process of integration rather an addition.

Further in the Lakewood course for the Fifth A grade in the core unit of the geography of the Northeastern United States, attention is given to coal, iron ore, making steel and manufacturing slides, mounted pictures and silent motion pictures are used to bring action and reality to the ideas. Some of the silent motion pictures that aid in this presentation are "Transportation on the Great Lakes", "Iron Ore to Pig Iron", "Iron to Steel", and others closely related to the industrial activities mentioned above.

This core unit is six weeks in length, during which time there are used some twenty-three silent motion pictures which are secured from the Ohio State Department of Education, Visual Instruction Division. These films extend the ideas of pupils beyond their own horizon. The former work done in the field trips

(Continued on page 394)
TRAINING of the younger child in development of satisfactory habits and standards of motion picture appreciation has long been a major problem of parents and teachers. One of the stumbling blocks in the way of those who either distribute or make use of films for such purposes is the lack of guides for satisfactory selection of items to be used in the "children's program." For the classroom film, designed to teach a specific lesson and made definitely for the use of children, the problem is not so great, for such a film may be measured by teaching experts in terms of the degree to which it accomplishes the specific purpose for which it was designed. Art appreciation—of which motion picture appreciation is a most important type because of the tremendous social force exerted by this particular art—is so much a matter of individual taste and is so thoroughly complicated by varying opinions as to what is suited to children that evaluation forms designed for use in rating classroom films are not entirely satisfactory. Because of the fact that an appreciation program’s success is measured by the free choice of children rather than by the opinion of his elders, a different basis of selection and evaluation must be devised.

From the standpoint of eventual success in training the child for satisfactory selection of his own film fare, the first standard of a good film for the children's program must be, "Is this film interesting to children?" The answer to the question will depend upon three things: 1) the nature of, the subject; 2) the way in which the subject is treated both in story structure and presentation; and 3) the technical excellence of the film. The answer to the question may vary with differences in the ages of the children, although many subjects are of equal interest to children whether they are five, nine, or twelve years of age. Tastes of boys and girls also vary in some respects, while in other respects they tend to agree.

Though the tastes of children must be considered, that is not to say that any film which any child wishes to see is necessarily a good choice for the one who arranges the program. Some children have at an early age developed tastes which have been corrupted by bad theater attendance habits and experiences. Even children who have never attended films may evidence taste affected by morbid curiosity born of thwarted desire to attend films and fed by the glowing reports of companions who are permitted to attend theaters indiscriminately. The natural tastes of a normal, healthy child not already badly trained in motion picture appreciation standards is wholesome and at least as worthy of consideration as is the taste of the average adult. This taste, however, must be curbed and guided by a second consideration, "Is this film stimulating to growth in the ability to understand and cope with life?" Here we must have the opinion of adults who understand the child's need for adventure and new experiences but who are wise in understanding of what values underly those experiences and what effects the experience will have upon him.

* Distributed in 16mm by Films, Incorporated.
Excellent guidance to those concerned with the planning and evaluation of film programs for children of various age levels.

A final question must be considered by the program planner, "What films are available?" Even in the commercial theater we are limited in our selection of children's films, for the majority of films are produced and theater exhibition plans are established upon the tastes and opinions of adults. Furthermore, films have a very brief life in the commercial theater, so that we must seize upon the motion picture opportunity at the moment it arises or forego that particular film entirely. Because of the speed with which films are released and distributed, it is not always possible to know ahead of time which films are particularly suitable to children in general or to any special group of children in particular.

For the commercial theater programs, however, there are reliable general evaluation guides available in the form of preview estimates made by such groups as Parent-Teacher Associations, Federated Women's Clubs, Associated University Women, Daughters of American Revolution, and Council of Church Women. A combination of the opinions of representatives of these groups as to the audience suitability (adult, mature, family, or juvenile) of a film and of its quality (superior, good, fair, or mediocre) gives a reliable general guide in selection of theater entertainment.

Because of the fact that the distributors of films for special children's programs are usually not the same as the distributors to the commercial theater, and because the product of the major producers is usually tied up in contracts to theaters and is therefore not available for programs in community centers and schools, the establishment of some evaluation system is a real need for those who would establish programs designed especially for children.

The personnel of a committee set up for the previewing of films for children's programs must be even more carefully set up than is that of the women's groups who furnish our general previews of unbiased opinions. Because of the fact that the films must be both interesting to children and suited to them, every member of such a committee should be a person who has had long and sympathetic relationship with children, preferably children of both sexes. Parents, teachers, children's recreation directors, and leaders of such groups as Scouts and Camp Fire offer excellent possibilities.

Tolerance and a constructive viewpoint are the first personality qualifications which should be required of a committee member. Anyone who considers his own taste a final judgment as to a film’s quality is automatically unfit for committee membership. If, in addition, one considers any experience which is innocuous and inoffensive as "good for children" he has a second insurmountable handicap. Respect for the child’s individuality and understanding of his need to stretch his mind, heart and soul are prime qualifications of the person who would serve as that child's guide by passing judgment upon the suitability of children's movies.

Within the committee there should be a variety of types represented: the conservative, the broad-minded, and the person with a wide variety of cultural background. By making sure that each type is represented we have a fair representation of the public as a whole and an assurance that no significant detail of importance to any one of these groups will be overlooked in the final report. Since it is likely that the members of the group will be women—men not often having the time to devote to this type of public service—it is important that one at least of the members should look at life from the boy’s standpoint. If it is possible to have as chairman a person who has a broad appreciation of all of these viewpoints, she should be appointed at all costs. Variations in the committee will then probably not do any great harm to the character of the reviews. Too large a committee is not advisable because of the difficulty of assembling them.

A satisfactory technique for the assembling of the various opinions of such a committee is to have each member record his ratings separately, with comments giving reasons for the high or low ratings given. The chairman may assemble the ratings, or they may be assembled by the group as a whole, striking an average for the ratings given and writing up a review combining the comments of the entire committee.

In recording ratings of a film, separate ratings should be made for at least three different aspects of a film: its subject matter (interest and suitability); its continuity or story; and its technique

(Continued on page 396)
In the past, much has been said and done in regard to the value, need and use of visual aids in public education. In this work we have been concerned primarily with helping out the students in a learning situation. Little, or perhaps I should say, not very much has been done in the way of educating the general public as to the activities taking place within our schools from the standpoint of student life. To be sure Johnny or Mary tell their parents a great deal about their school activities, and many parents learn much about their public schools through Parent Teacher Associations, school social functions, open house activities etc. However, the majority of parents, or better let us say the general public is not informed regarding its schools. Speeches, social functions, and other devices are not comprehensive enough in scope to tell the story of our schools to the public. We must tell our story in an entertaining manner, and at the same time present the authentic and realistic work and play that goes on within our schools. I believe the answer to this problem of educating the public lies in the field of visual education—specifically motion pictures.

Here at North Senior High School, we feel that we have an outstanding program and a fine student body. Naturally, we are anxious to inform our community concerning our school and the many activities which it embraces. Early this year it was decided to make a movie of school life to be presented at our regular mid-year commencement. Needless to say we were literally waiting for this opportunity to show and to sell our school to the public through the medium of a motion picture.

The planning of such a movie and the working out of the many technical details connected with the actual shooting were very interesting, and may be of some help to those of you who hope to make a similar movie some day.

Students and teachers alike worked on our movie which we appropriately titled “Dawn to Dusk.” The main purpose was to show the activities of our students from early morning until late afternoon. In order to cover the variety of courses and activities available in our school, it was necessary to select four students as leading characters, each pursuing a different course of study and engaged in a different group of extra-curricular activities. We decided to start our movie by picking up our characters leaving their homes in the morning and then following each through his or her school day. With this theme in mind, we proceeded to lay out our movie according to scenes. A list was made of all classes and activities that we wished to include. Then the required scenes were numbered and a scenario or script worked out.

We planned to have our movie run for forty minutes. This meant a maximum edited footage of a thousand feet of 16 millimeter film. At this point we also decided that we would use oral narration with the finished film, rather than sacrifice any footage on titles. Next we proceeded to allot a definite shooting time to each scene, keeping in mind the relative importance of the scene to the movie as a whole. Of course, this required some preliminary rehearsal, and even with this it was necessary to make changes on location due to miscalculation and unforeseen circumstances. On the whole, this practice of apportioning definite times to each scene is to be recommended, since it saves valuable time and costly retakes.

Our final step in planning “Dawn to Dusk” was to set up a shooting or production schedule. This was laid out so that the movie would be completely filmed in three days time. Particular attention was given to scenes which were to be taken on a definite location to make certain that the proper shooting sequence was arranged. For example in one sequence we planned to take two close-ups, a medium shot, and a three-quarter shot, all on the same location. Naturally we wished to shoot these according to the script so to avoid later cutting and splicing. By exercising a little extra care in our production planning we saved much time and trouble later at the editing bench.

Finally we were ready to start the actual filming. It was decided to use a fast reversible film rather
than regular stock. Our equipment consisted of a 16 millimeter camera equipped with a single F 1.9 lens, a tripod of a heavy metallic structure equipped with a pan and tilting head, a Weston exposure meter, and a Bool's cine fader.

Because we were filming students in their regular daily activities, excessive direction was unnecessary. We merely ran through a rehearsal immediately before the scene was shot. Since the movie was silent, additional directions were given as needed during the actual filming.

There wasn't sufficient daylight illumination for most of the shooting, so it was necessary to use either blue filter floods or regular white flood lamps. The white floods of the reflector type were chosen. These lights were easy to handle and worked out quite satisfactorily. A 45-degree lighting setup was used as often as possible because this unbalanced lighting yields rich pictures giving a third dimensional effect. Flat lighting in black and white work results in lifeless pictures and should be avoided. The main thing to keep in mind in regard to lighting, is to have a basic source of illumination for modeling plus auxiliary lights and reflectors to light up the shadow portions of the scene.

The exposure meter was used constantly to determine exposures. Since reversible film has a narrow exposure latitude our exposure had to be nearly perfect. We experimented with exposure on our first roll or two, and with this experience as a background we encountered little trouble with exposure for the remainder of the shooting.

After the scenario was filmed, we proceeded to make the necessary titles, which were few in number. No titles were used in the movie proper except to indicate the period of the day during which the action was taking place. A 16 millimeter editor and splicer was used to edit the finished film. Naturally the scenes were not in the proper order but since each scene had a number as planned in the original script, the editing was a simple procedure. First the scene was cut from the film, then a straight pin which held a piece of paper with the number of the scene on it was placed through one end of the film and the pin stuck into the edge of a cardboard box. The remainder of the film was dropped into the box. Following this the scenes were spliced together according to the scenario laid out in the script.

The completely edited film was returned to the processing laboratory where a duplicate print was made. All that remained to be done was to select suitable background music for the film, and to train the student who was to present the oral narration to be given with the film. We planned to have the narration add to the film rather than merely repeat something that the film was already clearly showing. Four complete showings were required to obtain satisfactory

(Concluded on page 397)
A Visual and Sound Section for a College General Extension Division

With distressingly few exceptions, visual and sound work in colleges is scattered through the various component schools rather than concentrated in a smoothly-functioning unit. The principal objection to such consolidation is probably the inertia of formal college educational methods. This inertia must be overcome by the merit of better organization and more efficient operation.

A proof that knowledge is imparted quickly and effectively by visual and sound methods is the extensive use made of such methods in training the United States Army. In this training, the Army has no time for theories of education; the problem is to impart facts quickly and accurately to adult groups. That is also the problem of general extension in most colleges.

A plan for a visual and sound section in the general extension division of a college or university, which would result in a unit almost completely self-supporting, might include the following functions:

1. To supplement the written work of the correspondence courses with visual aids, such as photographic copies of pictures.
2. To make a photographic record and exhibit of college events and accomplishments and to obtain the best distribution of these records and exhibits for educational, publishing, and other uses.
3. To collect and to distribute photographs, filmstrips, and motion pictures of an educational nature.
4. To prepare and to distribute traveling and fixed exhibits of an educational type. This includes operating an exhibits studio. Posters, dioramas, and charts would be prepared.
5. To act as a service branch for other courses, divisions, and schools in making photographs, enlargements, art work, and other usual visual aids. This includes the operation of a photographic laboratory.
6. To make and to distribute motion pictures, filmstrips, and still pictures of educational type for other units of the college.
7. To collect, to make, and to distribute sound recordings. This includes speech recordings as an aid in teaching languages.
8. To arrange showings and to project on screens all types of pictures for other courses, divisions, and schools for a service fee, competent projectionists to be supplied.
9. To operate a news-reel theatre, showing news subjects only, for laboratory fees to be paid by student spectators.
10. To develop and to maintain a central photographic file for historical use and for service to student publications.

The personnel required to begin a visual and sound program of the type outlined would include a competent director and assistants as needed. An initial organization might be as follows:

1. Visual and Sound Director. A man with a number of years of professional experience in visual and sound work; an executive; a good writer; a photography director, both still and motion; an exhibit man; a sound recording director; a teacher with college experience; a working knowledge of photographic and sound laboratory practice; some training in picture services, filing photographs, publishing and information work, and the distribution of visual aids.
2. Laboratory Photographer. A man experienced in photographic laboratory methods for both still and motion pictures with some knowledge of sound recording and equipment building.
3. Field Photographer. A man experienced in field photography in both still and motion pictures in color and black and white.
4. Artist. A man or woman skilled in layouts, retouching photographs, lettering titles, and preparing posters and exhibits.
5. Clerk. A girl to keep records and photographic files, handle distribution schedules, and to type letters.
6. Projectionists. College students, boys or girls employed part time, to operate lanterns and motion picture equipment, and to make sound recordings.

The initial cost of such a program would probably be somewhat as follows:

<table>
<thead>
<tr>
<th>Salaries</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director ..................$ 3,600</td>
<td>Motion pictures ...$1,000</td>
</tr>
<tr>
<td>Photographer, laboratory</td>
<td>Photographic, still and copying .... 500</td>
</tr>
<tr>
<td>1,800</td>
<td>Artist ...........1,800</td>
</tr>
<tr>
<td>1,600</td>
<td>Clerk ............1,200</td>
</tr>
<tr>
<td>1,200</td>
<td>Projectionists ....(Fees)</td>
</tr>
</tbody>
</table>

$10,000  $2,000

Budget operating expenses for 1st year ....$12,000

Equipment purchases can be spread over a number of years and there is a possibility of obtaining some loan equipment. For the first year the following equipment expenditure is approximate:

| Photographic, field .................$ 500 |
| Photographic, laboratory ........... 500 |
| Miscellaneous ....................... 500 |
|........................................1,500 |

Total budget for the 1st year ............$13,500

The income including both internal and external sources should exceed the operating costs. Service charges to other divisions and schools involve only a bookkeeping exchange of credits. Work being sent outside contractors may be done to advantage by the Section. Charges for the use of exhibits, films, photographs, and recordings would be on a cost plus an overhead basis. Fees from the news-reel theatre would amount to a substantial income.

In the beginning, an annual appropriation of $5,000 added to the internal and external service charges probably would be sufficient.
MOTION PICTURES—NOT FOR THEATRES

By ARTHUR EDWIN KROWS

The imagination of our native medical men was really stirred to their own film opportunities in October, 1916, when Dr. S. William Schapira, member of the New York Academy of Medicine, lectured at Fordham University, in New York, with films, made under his direction by Pathé cameramen, covering thirteen genito-urinary operations. But there were in all probability other current, or more or less current, efforts at clinical theatre film-making which were not conspicuously presented, for many doctors preferred then, as now, to limit their experiments to private view, and, having made their films, would not permit them out of hand. As a matter of fact, in July, 1916, even while Dr. Schapira was producing his significant subjects, Dr. Russell S. Fowler performed two operations under cameras at the German Hospital in Brooklyn, New York, and word spread through the professional motion picture industry that a company had been formed in New York expressly to produce surgical films.

The entire motion picture field was quite new then, and rumors of specializing groups here or there received scant attention. Reporters dismissed this new rumored project as "just another of those things." Looking backward with the perspective supplied by intervening years, I suppose that the company in question was actually the one called Clinical Films—and, rather curiously, there is a link between Clinical Films and Charles Urban, first film industry friend of the doctors.

The connection was Albin Mariner, the Austrian cameraman with the colorful experience who had come to America to serve Kinemacolor. American Kinemacolor had gambled and lost, and Mariner was out of employment. He had become known in the industry here, however, and only a short time afterward was approached by two men who were trying to promote a new film business and needed a trained photographer. Their respective patronymics were Strauss and Fox. Their other names are out of recollection, but it is remembered that the latter was a lawyer practicing in New York. Their project was, of all things, the production of talking motion pictures! The voice was to be on phonograph records, the time limit of each of which would permit the corresponding picture to run effectively for only 200 feet. Through particular contacts with distinguished surgeons, Carrel, Erdmann, Squier and others of that upper rank, they had arranged to produce an operating-room series. Mariner was agreeable, went to work, and ultimately photographed about 250.

Although the subjects were necessarily short ones, the total number represented a heavy, and, as it turned out, an unsupported expense to the partners. As usual in such circumstances, the negatives were held by the film laboratory as security for its own payment. The laboratory, in Jersey City, was that which was long operated by Houdini, brother of Houdini, the "handcuff king," and later the successor, in vaudeville, of that amazing performer. When a reasonable time had elapsed, unpaid storage charges had mounted critically, the Clinical Film series was put up at auction, the price a mere song.

Albin Mariner has covered the non-theatrical range in time as he has in variety. He began his career in the London employ of Charles Urban.

In the meantime, Harry J. Elkan, former manager of the industrial films department of Pathé, had returned from an intervening war service (incidentally with the rank of major), and was looking about for something to occupy him profitably in civil life. He knew the authenticity of those films because his father had been engaged in trying to sell them, and his non-theatrical experience at Pathé gave him reason to believe that he could find proper distribution for them. So he and his father bought them in. To handle them efficiently he needed office space, storage and projection facilities, and he obtained these in association with Frank A. Tichenor at Eastern Film Corporation. However, non-theatrical distribution was no more organized in the medical line than in any other, and, after a year or two, the arrangement was ended by mutual consent. It is said that many of the negatives were lost subsequently in a laboratory fire in New Jersey.

While Major Elkan was trying to book the series, he found a seeming need of additional material to make the list complete, so he obtained a camera and photographed the required operations himself. The results are said to have been adequate to the immediate needs, but somewhat short of the standards set by Mariner. I have no opinion in the matter, although I had many opportunities to see the subjects projected. Films of that sort are clearly not for me. I have tried repeatedly to view them with a detached eye, but the most I have been able to withstand has been half a reel of a caesarean section. After that I staggered out of the projection room for air.

When the First World War began and America joined the Allies, Mariner was called to the colors. But Dr. J. Bentley Squier, who was to serve through the war as Major of the Medical Reserve Corps and to originate the Columbia War Hospital and necessarily had some influence with the Army authorities even then, determined that a cameraman with so specialized a knowledge should not be wasted in the trenches. So he pulled wires to have the young man assigned to his service. There, as a soldier of Uncle Sam, Mariner continued the production of medical films. In time of war the world's knowledge of medicine and surgery is always vastly increased through opportunities to study and treat the casualties, and now, in this conflict, there was the added advantage of being able to make film records. Hence many reels of great importance were shot in the military hospitals at this time, and ultimately deposited in the Army Medical Museum at Washington. Several reels of negative in that rich supply were destroyed in a fire there, July 8, 1935.

The negligible money profit in Frank Tichenor's experience with Clinical Films did not by any means dampen his awakened enthusiasm for motion pictures in that line. Indeed, he was more interested in the good they might do. He had long had many friends eminent in the medical profession, and, apart from his own definite convictions, he had their ready assurance that such productions, presented under proper auspices, could have an honorable, definitely useful place. Committee to make the ideal arrangement possible waited on him at irregular intervals almost to the last month of his continuance in the film business.

One surgeon who saw Tichenor's vision
Dr. Colton, reputedly the first to use laughing gas in dentistry, demonstrated for one of Edison's very earliest motion pictures in 1893.

The Benevolent Groups

No customer class was more eager to set up its own production units than that which embraced the volunteer reform groups, for, in most instances, their essential business was the spread of ideas—propaganda, in other words. Very early in the annals of the film industry had occurred their screen appeals for votes for women, end of Demon Rum, means of combating disease, support of the Boy and Girl Scouts, and so on into the various especial interests. Thoroughly alive to the dangers of misunderstood propaganda, the leaders of the film mass kept extraordinarily close to every production step. To all intents and purposes, therefore, they actually produced their own pictures, although they tried earnestly enough to keep the major responsibility in the hands of the producers who had been hired nominally to do the work. The chief obstacle to their becoming producers themselves, in the full sense of the word, was probably that, as semi-public institutions, they feared criticism which inevitably would arise if they stepped, even in a small way, out of their known characters. Instead of having regular production staffs, their custom was to require, for each new picture undertaken, a separate, fresh appropriation and competitive bids to see who would do the job cheapest.

The development of "customer" production has been a characteristic outstanding in a certain period of time, but, in these social service departments, especial circumstances now and then interfered with what otherwise might be called a natural course of events. Thus, the passage of a constitutional equal suffrage amendment made unnecessary further American films on votes for women; the Eighteenth Amendment rendered pointless for fourteen years, or until Repeal, the old cry of the Anti-Saloon League; the quantity of material, evoked by the World War emergency for use of the American National Red Cross, worked against the expansion of the picture schedule of that splendid organization in the first years of peace.

The nature of the American National Red Cross, founded in 1881, won it a whole-hearted public support, which, in the case of films, meant donations not only of money with which to produce whole productions built to specifications. When the First World War was gaining its first momentum, these efforts appeared from many sources. In June, 1917, the Whartons, well known theatrical film producers of the day, were making a picture to be sold as a sale of the Red Cross, in their studios at Ithaca, New York, and whom, do you suppose, was the director? Why, George Eastman, the Kodak pioneer!

In September, 1917, a seven-reeler Red Cross "pageant" was being made under three directors, Joseph Lindon Smith, Thomas Wood Smith, and Lindon Smith, at the head of the Red Cross Motion Picture Division. Evans, by the way, was proprietor of the Moffat photographic studios in Chicago. October, 1918, the studios of the Norma Talmadge Film Corporation were completing scenes for a three-reeler to be sold as the coming Red Cross "roll call," under title "For All Humanity." That picture was intended to show all America what had been done with the money lately subscribed to the cause. And at the Famous Players-Lasky Studios in Hollywood, in 1919, I witnessed the final shooting under direction of Edward Josè,
of an elaborate subject for the same great program. There were many others of the same sort. General Film released most of the early ones to the theatres.

The offices of the Red Cross "Bureau of Pictures" were in space sublet from FilmService in the Chandler Building, New York, with executives named respectively Waddell and Kelly in charge. To that place came many reels of film from field representatives. One of those agents was Lieutenant N. C. Travis, who filmed the Red Cross Mission in Russia in 1914. Lieutenant Mme. La Voy, who had been assigned to photograph likely material in Constantinople and the Balkans. In 1919 he sent to the New York office upwards of 8,000 feet. This particular footage was cut and edited for release through Educational Films Corporation. But, after the tragic emergency had ended with the Armistice, although the Red Cross sent out occasional films from its Washington headquarters, this branch of its activity became relatively small, not to be stirred greatly again until the opening of World War II.

Joining the Red Cross in endorsing "The Red Cross Seal," produced by the Edison Company in 1910, the National Tuberculosis Association had early shown its interest in uses of film propaganda, but various productions provided by voluntary organizations which may be recalled as "The Invisible Enemy," produced by Emma K. Oswald of Los Angeles before 1916, postponed the necessity of more direct action. In the nineteen-twenties, however, the New York Tuberculosis Association, the best supported local group in that line, entered upon a busy schedule of its own picture production. Funds for the purpose were scant, but they were in all events there, and there was also intelligence in presentation of the plan. Most of the outstanding silent subjects produced under this aegis were written and directed by Carlyle Ellis. The national association was excited by all this to produce a film or two, but of course, it had access to all which was turned out by the New York group, and that made it unnecessary to do much further in that branch of service.

Interest in motion pictures on health was stimulated by efforts of the special committee appointed in the early nineteen-twenties by the National Health Council. Its purpose, when meeting monthly save during the summer, was to review and to criticize constructively all objectionable material with public health, and, if requested, to render freely helpful opinion on scenarios for proposed productions. Committee membership, under chairmanship of the greatly liked Thomas C. Edwards, executive officer of the Council, comprised representatives of the American Social Hygiene Association, American Red Cross, American Child Health Association, American Society for the Control of Cancer, Connecticut State Department of Health, New York State Department of Health, Massachusetts Institute of Technology and the National Tuberculosis Association. Advisory members, providing viewpoints on various divisions of practical service, were A. J. Lanza, M. D., Carlyle Ellis, Rita Hoehheimer, H. E. Kleinschmidt, M. D., Walter Storey and Edward Stewart.

In 1922 the Council compiled—and distributed—graph film produced in thirty-five cents a copy, later reduced to twenty cents—a list of approximately 250 known and available films dealing with health. In 1924 the list was revised, and this time it was printed in an edition of 2,000. In 1925 the Metropolitan Life Insurance Company of New York, under advice of the Council, undertook to prepare and print a still more complete list, which was made available on request to responsible persons. Part of the labor involved was sending and sorting nearly 2,000 questionnaires in search of information on all types of visual aids applicable to health education.

Whenever local benevolent groups with broad identity of aim followed the example of Big Business and formed a national association, the league headquarters naturally tried to arrogate to itself a strong centralized authority, and a motion picture program often became part of the plan. Powerful member groups, however, as in the case of the New York Tuberculosis and Health Association, usually supplied the actual productions for general distribution. Nevertheless, there were occasional instances where some successful work in local national organizations actually produced, and, although they complained, as a rule, about the tyranny of too many masters, the results they obtained amply justified their taking the initiative. The local area in itself rarely is able to make the proper return on even a good motion picture, which necessarily costs a sizeable sum; but with several groups contributing their shares of the cost for joint service, centralized production becomes a reasonable matter.

An experience which will bear close study in this regard, was that of the late George F. Oxley, who was long director of publicity for the National Electric Light Association. The Association membership, when film work began, was approximately 13,000, covering virtually all branches of the electric light and power industry. Officers and the executive committee discussed pros and cons long and earnestly before it was decided to produce the first Association film, "Flack of the Button." Then the completed subject was previewed by the 1921 convention of the N. E. L. A., where general approval led to the making of sixty-two prints for regional exhibition by members.

The advertising director of one of the largest member companies, however, violently opposed use of the film on the ground that it would arouse public resentment because the light and power utilities for trying to "put across" propaganda. He was persuaded to test the picture before a representative audience, and he found the reaction so favorable that he himself subsequently arranged showings to nearly half a million persons in his own area, and became one of the most ardent supporters of the plan.

Oxley, of course, as an expert in public relations, had been exceedingly careful in preparing the picture’s content. In later years Oxley devoted much attention to films promoting public safety.

One who may be really interested in this phase will be enabled to reach interesting and valuable conclusions by studying film programs of the Iron and Steel Institute of Pittsburgh, which had a film on the Gary steel plant as early as 1910; of the Asphalt Institute of New York City, and of the Petroleum Safety Council of Houston, Texas, formed by several oil producing concerns of that State about 1923.

The American Society for the Control of Cancer, organized in New York City in 1913, also ventured into film production in the nineteen-twenties, mainly for the purpose of supplying its traveling lecturers with illustrative material. It took the form generally of popular reassurance, and advice to take all suspected cases to reputable physicians for examination. A more difficult theme calling for popular education and in which films were particularly useful, was sexual disease. In the post-war period that work was successfully undertaken by the American Social Hygiene Association of New York City, founded in 1914. During the War, of course, there had been many films of this type circulated in the Army camps and canteens, including those produced by George E. Stone of Monterey. In 1921 the American Social Hygiene Association had in its available list several carefully produced subjects, including the four reel "Gift of Life," intended for use in high schools, colleges, parent-teacher associations and the like.

(To be continued)
History and Geography Integrated through a Study Travel Workshop Course

As an experiment in teaching techniques, the History and Geography Departments of the State Teachers College at Indiana, Pennsylvania, have made plans for a combined "study-travel-workshop" course on the Geography of Pennsylvania and History of Pennsylvania for teachers and others who desire to see the "arsenal of America" in action. A student may elect either course for three semester hours' credit.

As planned, the course consisted of three parts. During the first week, classes were held on the campus, each making a preliminary survey of the field selected, securing a factual background for the rest of the course, and developing techniques necessary for the work of the next two weeks. On Saturday, in the College bus, the two classes started on a 1200 mile circle tour of the State, carefully planned to cover the chief places of geographical, historical, industrial and recreational interest of the Commonwealth. Returning to the campus the classes again separated and engaged in classifying and studying the materials and information gathered on the trip. It is believed that the course gave the students a living, vital knowledge of these areas of learning that cannot be secured by the more orthodox class procedure.

The tour itself was so organized as to give all who take it a panoramic view of the Commonwealth. Leaving Indiana in the College bus, the group travelled the first day to Gettysburg via Duncanville, Bedford, and Chambersburg. Numerous historic spots were studied en route (as was done on the following days), and the

Field trips are as valuable for teachers as they are for pupils. The trip arranged by Mr. Emmert for Pennsylvania teachers is especially interesting for several reasons. For one thing, the "teacher-students" used the field trip for preparing motion pictures slides and other visual aids to use in their classrooms. One can see the great interest which children would have in seeing slides which represented the actual experiences of their teachers. Secondly, the study-travel-workshop represented co-operation between two different departments; the preliminary and follow-up work is in those departments; on the trip the work is integrated. Thirdly, whereas on many trips the lectures concerning things seen are dependent upon local people or the instructor of the course, in this case the preparation of such lectures is a student research project, which must have proved very stimulating to all concerned.

Not only does this description have much of value for the summer session faculties of teachers colleges, but there is in it much which can be used in planning trips for high school groups.

WILLIAM W. WATENBERG, Chairman Committee on Field Experiences

major geographic factors observed. Prior to the trip students made specific, prepared "lectures" to be given at the major study-stops on the trip. Chambersburg, for example, is located in the heart of Pennsylvania's greatest apple orchard section. And here, while in the orchards, the "apple lecture" was given.

Gettysburg National Military Park was visited the second morning of the tour, a spot which might be considered one of the greatest National Shrines of the United States. A registered, official Gettysburg Guide boarded the college bus and gave his regular lecture about the battlefield as the bus toured the whole park area. Sufficient time was spent here to give the students ample opportunity to study the "Battle of Gettysburg."

Our State Capitol at Harrisburg was then visited and the second night stop made. Thence to Lancaster in the picturesque Pennsylvania "Dutch" section, via Hershey, Cornwall and Ephrata. From Lancaster (night stop) to Philadelphia the route traversed a beautiful countryside dotted with Pennsylvania field-stone houses and huge barns still bearing the "Hex" signs of the "Pennsylvania Dutch," lovely old Colonial houses; and exquisite landscaped estates. Coatesville, Chadds Ford of Revolutionary War fame, and the site of the early Swedish settlement at present-day Essington were visited. A night stop was made in Philadelphia.

After visiting the numerous State and National shrines, and the industrial centers of Philadelphia, the group went to Valley Forge. From Valley Forge the tour traversed the scenic highway No. 611 to Easton. From Easton to Stroudsburg the route went through the famous Delaware Water Gap, thence into the Pocono Region replete with waterfalls, lakes and forests—Pennsylvania's recreational area—and into the Anthracite region around Scranton. Following the Roosevelt Highway the tour continued north-westward to Wellsboro, where an overnight stop was made. Near Wellsboro is Pennsylvania's "Grand Canyon," a gorge which runs about fifty miles and is 5,000 feet deep in some places. This spot should be a "Mecca" for geograph-

(Concluded on page 405)
FORGING A SUIT OF PLATE ARMOR IN THE THIRTEENTH CENTURY

From the Series of Teaching Pictures on "Knighthood—Life in Medieval Times," produced by Informative Classroom Picture Publishers
The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

AUDIO-VISUAL TRENDS


The developments which the author believes have done most to advance visual instruction in the past fifteen years are: 1) the development of new cameras for stills and movies, with fast lenses at nominal prices; 2) dependable photoelectric exposure meters; 3) lighting accessories that make indoor photography practical; 4) fast film that permits photography under adverse light conditions; 5) the development of natural color for films and lantern slides; and 6) more efficient projection equipment and improved screens.

At Pennsylvania State College's Division of Agricultural Extension there are a large number of agricultural agents and demonstration agents out in the field to be served. Subject-matter specialists from the College travel to assist these county workers and visual aids are used widely.

The 2"x2" lantern slide has made possible the acquisition of four times as many color slides in four years as standard black and white slides in twenty years. All of this in view of the fact that 2"x2" slides entailed the purchase of new projectors. Motion pictures have also increased in number. The College has 173 reels of locally-produced films, half in color. Beaded screens are used in all counties to help with color projection.

There is an extensive laboratory of photographic equipment for the agricultural workers. The miniature camera has become the most popular size. Exposure meters, tripods, floodlight units and motion picture cameras have grown apace.

The proof of the pudding is in the eating, says the author. This increase in equipment has resulted in the use of visual aids at almost every meeting. There are 100 meetings daily during the winter months with a total attendance of almost 500,000. Workers are encouraged to produce their own visual aids so that these visualized demonstrations have local significance. The 2"x2" color slide has taken the lead in type of material produced. These demonstration agents find that a good meeting can be carried on with a good 16mm. silent film reel in length, and 20 to 30 color slides.

STILL PICTURES


Here is a timely and valuable piece of research. The author does not indicate how “scientific” his study was, nor for what purpose it was made (thesis, dissertation?) However, there is no denying the importance of the questions it raises and the evidence it presents.

Regardless of the quality of the pictures, the author points out, it is still true that a great deal of interpretation of the pictures depends upon the observer's background, mental set, environment and imagination. The teacher must not assume that every child derives the same information and interpretation from a picture. Children need guidance in reading pictures, and skills in the use and understanding of pictures should be made a part of the study of geography. A survey was made of the interpretations given by children to pictures found in textbooks regularly used in grades four to seven. The questions to be answered in the study were:

1. With what degree of accuracy do children interpret geography textbook pictures? 2. Do children grow in ability to interpret geographical information as they proceed from grade to grade? 3. What facts do children recognize in and what interpretation do they give to information contained in certain geography pictures? 4. What are some misconceptions children have about certain geography pictures? 5. What are the probable causes of the misconceptions as indicated by incorrect responses to questions about certain geography pictures?

The thirty-two pictures used were contained in the series of geography books by William R. McConnell. Criteria for selection were: a) the picture had to be clear and distinct; b) it had to be thought-provoking; c) it showed geographic features, but not too many of them in one picture; d) it showed only geographic features, if possible; e) it showed relationships between natural environment and human activity; and f) it did not depend upon the legend or description for conveying information, but rather the picture was clear in and of itself. All pictures represented a wide variety of subject matter.

Questions were drawn up for each picture, to find out factual information and interpretative information. The children were given mimeographed questions and the pictures. Incorrect responses, or blanks, were attributed to the fact that many children could not express themselves in writing, or they had insufficient geographical background information. Some errors were due to the fact that children had been taught generalizations about geographical facts and could not make the connection with specific questions. Most misconceptions came from verbalistic learning. The author points out other common causes of error, most important of which, to the author, is the fact that teachers have not helped children to read pictures intelligently.

Reverting to the original five questions, the author concludes that:

1. The children were able to answer 66% of all questions correctly; they answered 70% of the factual questions correctly and 61% of the interpretative questions correctly.

2. Children did seem to grow in their ability to read pictures as they went from grade to grade. A small decrease in the fifth grade was attributed to the fact that the pictures for that grade were inferior.

3. The concepts and misconceptions of children's picture reading were discussed in detail throughout the article.

This article is a welcome addition to our literature.

ADMINISTRATION

Visual Aids Club: Serves Youth and School (Practical Experience in Democracy)—Don G. Williams, Great Falls, Montana High School—The Clearing House, 10:77 Oct. 1941

The Projectors Club at the Great Falls High School, for five years old. There has been no damage to the machines and less film damage than when teachers use films. There are 35 members in the club, made up of boys who would not be happier at social, athletic or academic club work. There are three heads—a chief operator, a chief mechanic and a chief inspector. Each has a crew working under him. The chief operator, with the largest crew, has an assistant and six shift operators. He finds out when films are to be shown, notifies teachers after the film arrives, and arranges for rehearsals. Each shift operator can then plan for his crew. All boys go through a period of apprenticeship, and then they are eligible for a set of examinations before the director and chiefs.

Boys interested in the mechanics of the machines take care of them. They keep a chart of repairs, oiling, replacements, etc. Film inspectors must return films to owners in proper cans and in good condition. Their records provide a good check on operators and on the rental libraries.

Teachers fill in a report slip on the showings as a check on the boys and on
the club activities. Operators get punch marks for poor reports, possibly leading to dismissal.

This club has been a great influence on the boys concerned, especially since many of them were unsuited to other school activities. It has also organized the visual aid program to run smoothly and efficiently.

There's No Excuse for not Using Visual Aids!—Charles T. Smith, Cooperative Film Library, Syracuse University, New York—School Executive 01:24-26 Sept. 1941

A summary breaze of resources that most schools have and can have, with many good illustrations.

ADULT EDUCATION


Most discussions hold great promise for adult education because a movie is a way of giving the members of a group an experience in common. It provides the group with concrete events and situations and puts them into a common mood.

A committee of representatives from the American Library Association, the American Association for Adult Education, the American Association for Applied Psychology and the American Film Center has been carrying on film forums during the past year. They find that there is a scarcity of good films to serve as vehicles for adult education. There is just as much need for good discussion leaders in a film discussion as in a verbal discussion alone. The committee also finds that the showing of a film, followed by meaningful discussion, is an extremely effective way of presenting ideas.

EQUIPMENT


This document is too important to be dismissed with a summarized account. It represents many months of careful study by an outstanding group of technicians. Each film meets a very real need and there is just as much need for more discussion leaders in a film discussion as in a verbal discussion alone. The committee also finds that the showing of a film, followed by meaningful discussion, is an extremely effective way of presenting ideas.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of The Educational Screen, published monthly except July and August, at Pontiac, Ill., for October 1, 1941, State of Illinois, County of Cook, m.

Before me, a notary public in and for the State of Illinois and county of Cook, personally appeared Nelson L. Greene, who, having been duly sworn according to law, deposes and says that he is the stockholder, managing editor, and business manager of the said The Educational Screen, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of Congress of August 24, 1912, and as amended by the Act of March 5, 1933, embodied in section 537, Postal Laws and Regulations, as follows:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The Educational Screen, 64 E. Lake Street, Chicago, Ill.; Editor, Nelson L. Greene, 64 E. Lake Street, Chicago, Ill.

2. That the owner is: The Educational Screen, Inc., 64 E. Lake Street, Chicago, Ill. Katherine Slanich, 6137 South Dorchester Ave., Chicago; Nelson L. Greene, 5836 Stony Island Ave., Chicago; Estate of Frederick J. Lane, 6456 Kenwood Ave., Chicago; Margarette Orndoff, 1617 Central Ave., Indianapolis, Ind.; Frank Greene, Oshkosh, Wis.; Marie Craig, Ranger, Me.; Estate of J. J. Weber, Bay City, Texas.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, no state, None)

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the names and addresses of the owners, but also the names and addresses of the bondholders, mortgagees, and other security holders who do not appear upon the books of the company as trustee or in any other fiduciary relation, the name of the company or corporation for whom such trustee is acting, in given; also that the said two paragraphs contain statements embracing the affiant's full knowledge and belief as to the circumstances and conditions under which the above-named persons are security holders, if any. But the affiant has no reason to believe that any such person, association, or corporation has any interest direct or indirect in the said bonds or other securities than as stated by him.

NELSON L. GREENE, Publisher.

Sworn to and subscribed before me this 30th day of September, 1941.

JOSEPHINE HOFFMAN.

(My commission expires June 21, 1945.)
The Story of the Pilgrims—In Hand-Made Lantern Slides

By Ann Gale

IN NOVEMBER the Pilgrims are always interesting to elementary school children. During these days particularly the story of their heroic determination to live and worship according to their own ideals is timely.

The following six slides can form the background for telling their story.

1. The Puritans meeting secretly for worship in Scrooby.
2. The Pilgrims in Holland where they stayed for twelve years.
3. The Mayflower sets sail from Plymouth, England on September 6, 1620.
4. Sixty-four days later, November 21st, the Mayflower lands at Provincetown.
5. After a month of exploring the Mayflower lands at Plymouth December 21st where the settlement is located.
6. Our first Thanksgiving celebrated by the Pilgrims and the Indians a year later in December, 1621.

The simplest type of hand-made slide is made by drawing or tracing on firely finished etched glass with ordinary medium lead pencil. Color, by special crayons or inks, enhances the slides greatly. Fine effects are obtained by blending with crayons. About one-third inch margin should be left all around the slide. The slide is readily cleaned with soap or washing powder to receive a new picture.
Among Ourselves

Department of Visual Instruction of the National Education Association.

NOTE TO ZONE PRESIDENTS:

The new zonal organization of the DVI should make "Among Ourselves" an interesting column. To do this we must have information as to the activities of each zone. Accordingly will you please send me each month, preferably by the tenth, any information you may have concerning the activities in your zone. "Among Ourselves" is your column, and let's make it a good one!

J. D. F.

The Zonal Organization

The new organizations are well underway, and plans are being made for zone meetings and other zone activities.

Presidents of the zones are:

James R. Brewster, Harvard University, Zone I
E. Winifred Crawford, Montclair Schools, Zone II
Ford L. Lemler, University of Michigan, Zone III
L. W. Cochran, University of Iowa, Zone IV
Ella Callista Clark, Winona State College, Zone V
U. S. Burt, Oregon State College, Zone VI
B. B. Rakestraw, University of California, Zone VII
Lelia Trolinger, University of Colorado, Zone VIII
W. T. Powell, El Paso City Schools, Zone IX
Charles F. Milner, University of North Carolina, Zone X

H. J. Daily, National Secretary-Treasurer, is working hard trying to get the ten zone secretaries started out on a uniform system of membership records and accounts. At present, this is one of the largest jobs in the DVI. Mimeographed forms have been sent out to all the secretaries, and Daily is also supplying each secretary with 3 x 5 cards containing members' names and other data.

Zone Activities

President Ella Callista Clark reports that plans are going ahead for the first meeting of Zone V. The Fargo, North Dakota-Moorhead, Minnesota district is being considered for the meeting place. The two towns, representing two states in the zone, are not over a mile apart, and there is a good deal of interest in visual instruction in this locality. Plans are also being made to circularize about two thousand superintendents in the zone, asking them to nominate someone in each school to receive a special invitation to attend the regional meeting. This idea of inviting interested persons is particularly good because it not only will build up attendance but also will add a certain dignity to the meeting. The Executive Committee of Zone V is operating on the basic philosophy that if a group of leaders is developed in the zone, these leaders will return to their communities and do active work in the field of audio-visual education.

L. W. Cochran reports from Zone IV that their membership drive got underway in August. Cochran sent each member of the Executive Committee and officers of the zone a long two-page letter asking them to begin active work on the drive by September 1 at the latest. The committees that were appointed to assist in the membership drive for Zone IV are as follows:

Illinois—Alvin B. Roberts, Gilson; E. C. Waggner, Elgin; Lewis V. Peterson, Urbana.
Wisconsin—Harold Watson, Oshkosh; Miss Ella Marquardt, University of Wisconsin.
Missouri—Rupert Peters, Kansas City.
Iowa—H. L. Kooser, Ames; Edward R. Lorenz, Dubuque.

The limit set on the membership drive is October 1, and while no reports have been received yet, it looks as if the zonal plan was going well in Zone IV.

The Executive Committee of Zone IV is also considering the possibility of holding the zone meeting in connection with the Midwest Forum on Visual Aids held in Chicago in the spring. If this objective is accomplished, the Committee feels that they will have a very large attendance.

George M. Jamieson, Jr., Secretary-Treasurer of Zone VII, sent out a mimeographed letter to all interested persons in Zone VII, announcing the first meeting of the zone in Bakersfield, California, on Friday and Saturday, October 24-25. The final program of the meeting was a dinner at which the topic was "How to Develop a Sure-Fire Audio-Visual Program." Jamieson stressed in his letter the importance of members contributing the names of possible new members.

The membership drive for Zone VIII was started off at a meeting at the Visual Instruction Section of the Eastern Division of the Colorado Education Association. The new departmental leaflets were distributed along with a mimeographed announcement prepared by the zone secretary. Miss Lelia Trolinger, President of Zone VIII, has been distributing more of this material through mail channels from the University of Colorado's Bureau of Visual Instruction. Additional quantities of the leaflet and mimeographed announcement were sent to every member of the zone's Executive Committee for distribution at state and regional meetings.

The first annual meeting of Zone VIII will be held at the University of Colorado December 29 and 30. A questionnaire is being prepared on possible program material to be sent out to members of the Executive Committee. The program will be drawn up from suggestions received from this questionnaire.
Experimental Research in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title of Thesis
Problems in the Use of Instructional Films.
Thesis completed 1940 for the degree of Master of Science, Kansas State Teachers College, Pittsburgh, Kansas.

Investigator: ERVIN EARL KIRKPATRICK

Purpose of Study
1. To describe administrative procedures for an instructional film program.
2. To enumerate recommended methods for classroom use of films.

Procedure
Three means of securing information were used: (a) the reading of all available literature on the administration and classroom use of instructional films, (b) personal visits to certain schools which have film programs, and (c) the send-in of questionnaires to other schools which also have film programs. The schools visited personally were: Tulsa, Oklahoma; Kansas City, Missouri; Iola, Kansas; and Pittsburgh, Kansas. Questionnaires were received from a total of thirty-eight directors of visual education and sixty-two teachers in forty-four schools in different parts of the United States.

General Conclusions
1. Instructional films are a valuable teaching aid, yet many teachers have not learned how to make the best use of them.
2. Teachers must learn to use films wisely as supplementary aids rather than as primary teaching devices if films are to grow in importance in the field of education.
3. The cost of a film program is prohibitive for some schools and causes others to resort to free films, which are often difficult to integrate with regular school work.

Specific Conclusions and Recommendations

ADMINISTRATIVE PROBLEMS

Department of Visual Education. The success of the visual aids program hinges largely upon the organization of the department of visual education under the direction of a competent and trained director of visual aids, who is given the authority and financial support which will enable him to develop a program which has definite objectives and which strives earnestly to fulfill those objectives.

Director of Visual Education. The director of visual education should be freed from other duties sufficiently to enable him to give adequate thought and time to the visual education program.

Projection Equipment. Excellent projection equipment is available, which will give satisfaction if purchased new and in a size adequate for the school situation. Beaded screens and opaque shades are desirable equipment to secure clear pictures, and to conserve pupil eyesight. Both are worth the cost.

Securing Films. The most satisfactory means of financing the visual education program is through funds included in the annual school budget by a board of education which is familiar with, and sold on, the advantages of the use of instructional films. School ownership of instructional films would be the ideal situation if cost were not a factor. Even in large school systems however, a compromise must be reached by purchasing frequently-used films and renting others. The planning of the yearly film program should be a cooperative affair in which all concerned from pupils to superintendent have a voice.

Film Library and Service. Some kind of film circulating library closer to the individual school than the state university seems to be a present need among the smaller schools. Free Films. The small schools make greater use of free films than of rental films because of the cost factor of the program. Free industrial films can be improved by the exclusion of all advertising material, the producer relying altogether upon his company's signature as a means of in-
creasing goodwill and creating some sales. The Federal Government is to be commended for the work it is doing in the production of free films. The pictures it is producing fill a real need in the program of those schools which are largely dependent on free films.

Operation. Trained pupil operators are satisfactory in almost every way, and the experience can be a valuable part of the boy’s education.

Teacher Training. Present use of instructional films is partially ineffective because of the unfamiliarity of the ordinary teacher with the best ways of using such films. The final solution to the problem of teacher preparation in the use of instructional films and other visual aids lies in a type of instruction in which the required technical and methodological knowledge is integrated with other training in methods courses in each subject-matter field. Until the time comes that such training is possible, the next best solution lies in college courses in which technical training in projection equipment is combined with instruction in classroom procedures.

In the absence of opportunities for college training in the use of instructional films, there is need for provision for in-service training of teachers under the direction of an able director of visual education.

Teaching Techniques

Physical Features of Presentation. In the small or medium sized school, the special projection room is the best place for showing instructional films because it solves the problems of darkening, ventilation, and housing of equipment. In the large city system, the classroom will probably continue to be the place for projecting classroom films in spite of certain advantages of the special projection room.

Study Guides. Study guides are such desirable aids in the use of instructional films that schools should purchase them outright and place them in the school library for purposes of teacher preparation.

Individual Methods of Use. Although no definite rules can be laid down concerning the best technique to use in presenting any one film, nevertheless teachers should be familiar with several methods in order that they may use each film wisely according to their best judgment.

The practice of stopping films for “stills” is of doubtful educational value. Teachers should be alert to develop newer and better ways of using films. Instructional films can to a large extent be made to replace school trips and excursions.

Follow-up Procedures. Follow-up procedures should be vital and creative in order to get the best use out of classroom films.

Film Evaluation. Directors and teachers should make a careful evaluation of all films used in order to improve the future film program.

A thorough integration of instructional films with other methods of teaching will be impossible as long as schools are forced through lack of funds to include on their visual education program large numbers of free industrial films, the objectives of which are different from the objectives of education. Even a partial or inadequate integration of instructional films with other methods of instruction, however, is better from an educational standpoint than no instructional films at all. This conclusion is admission of the great value of visual education.

Specific Uses for Educational Films. The subjects of English, social studies, science, and the teaching of attitudes, guidance, and physical education offer specific opportunities for the worthwhile use of specialized films.

The School-Made Film. The school-made film offers interesting possibilities for meaningful activities in improvement of speech, motivation, of literature, study of posture and athletic form, and in selling the school to the public.

A Caution. Instructional films can become a passing fad and fancy—an educational luxury—unless teachers always bear in mind that such films

(1) are merely a supplementary teaching aid,
(2) will not teach by themselves,
(3) require as much effort on the part of teachers as any other teaching method,
(4) must be integrated with regular school work.
Audio-Visual Aids in a Small City
(Continued from page 377)

followed by the lantern slides and the mounted pictures give pupils an understanding basis for those industries remote from their immediate vicinity. This method of preparing classes for the use of the motion picture film appears to be a successful technique.

Another illustration may be taken from the Fifth B geography of the Western United States. Under the unit, "Man's Use and Abuse of Forests" are the following lantern slides which give the basal ideas: (3) Logging and lumbering in the West, (4) Oregon Forest of Western hemlock, (5) Lumbermen ready to fell a Douglas fir, (6) Transporting fir logs to a sawmill, (7) Sawmill and log boom, (8) Loading lumber at seaport. These slides are accompanied by full explanatory helps for teacher and pupil. This material is always at hand in each building when required.

In the same core unit under "Farming in the West" the following lantern slides are provided: (12) Harvesting wheat with combine, (13) Apple Orchards, Mt. Hood, (14) Grapes drying in California Vineyard, (15) Citrus Groves, Los Angeles County, (16) Lettuce Fields, Imperial Valley.

For this same Fifth B geography unit on "Western Farming" mounted pictures are as follows: (1) Orange groves, (2) Washing oranges, (3) Shipping oranges, (4) Prune orchard, (5) Drying prunes, (6) Raising raisins, (7) Raisin drying.

This material furnishes some of the basal observations for discussion of farming in the West.

In connection with above two units from the core topics of "Farming in the West", certain silent films are used. These films are as follows: (1) Oregon Country, (2) Irrigation Farming, (3) The Orange Groves, (4) The Arid Southwest. Several other closely related silent motion pictures were the basis of class lessons. The purpose is to give action to ideas that have been acquired from still pictures. The results of using motion pictures according to this well organized plan "seems to interest pupils and to direct his learning into worthwhile channels."

The cost of the audio-visual program is of vital importance in a small system. Lakewood's expense for one year was about thirty-four cents per pupil or a total of $1,253.00. This includes items for wall maps, desk maps, purchase of slides and projectors. (Some of these equipment items could be apportioned over a five year period.) The operating expense, rentals, express, repair and breakage is about $641 or half of the total expense. Of this latter amount $531.00 is for a motion picture operator. This might be done by the teachers concerned and the money spent for materials.

Lakewood's audio-visual program of spending thirty-four cents per pupil should soon provide the necessary equipment after which there will be more funds for classroom materials. Cleveland spends seventeen cents per pupil and Pittsburgh spends one dollar per pupil of which more than one half is for classroom aids.

It is important when an audio-visual project is established, that the expenditure for aids is greater than for personnel and miscellaneous equipment. A small
but regular budget yields better results than large spasmodic expenditures.

The question may be raised as to the cost of getting an average school of 515 pupils ready to use modern aids to instruction. Hayes School, Lakewood, is used for illustration. This school equipped a visual instruction room as follows: Screen, $22.00; Lantern, $70.00; Balopticon, $100.00; Sound Motion Picture Projector (16mm), $313.00.

This is permanent equipment that should be apportioned over a five to ten year period. The same comment applies to the following changes and equipment in the visual room: Electrical Outlet, $15.00; Window Shades, $18.00; Steel Files, $35.00; Extension Cords, $3.00; Cases for Slides, $25.00—Total, $96.00.

For the visual instruction room the school shop built the following: Shelves, $4.00; Projection Table, $8.00; 2 Bulletin Boards, $8.00—Total, $20.00.

The basic visual material ready for daily use in Hayes School is: 6 Units of geography lantern slides (300); 4 Units of Science (200); 2 Units of safety slides (100); 1 Unit of map slides (50). Mounted Picture Sets: 1 Primary Set, 1 Upper Elementary Set.

The unit sets of lantern slides were used more than other items as teachers found the slides basic aids to instruction and were always ready. The films were supplemental aids as they could not be adjusted as closely to class work. During the Fall semester (1940) Hayes School used fifty-one films, both sound and silent, which were shown in connection with 100 lessons. The cost was low since films were supplied free from the Ohio State Bureau of Visual Instruction at Columbus.

The instructional value of the audio-visual plan in the Lakewood elementary course of instruction may be summarized as follows:

1. The definitely organized course of instruction includes as basic study material the ideas derived from the use of selected audio-visual aids.

2. The fundamental ideas of community life are derived from field studies, local pictures, local slides, and maps. These local studies are basic to the advanced studies in geography and civics.

3. The careful selection and organization of basic aids both as to ideas and type of aid to be used have aided teachers and pupils.

4. A clear and definite effort to implement instruction of pupils by providing the correct audio-visual tools at the time needed yields educational results.

5. The Lakewood plan shows a balance as to the basic mounted pictures, the lantern slides and supplemental films.

6. The policy of providing low cost basic aids that are dependable has proved superior to the common practice of considering aids as extra supplementary enrichment to be procured by the individual effort of the teacher.
Selected Films for Children’s Programs
(Continued from page 379)

(photography and sound). Separate ratings should also be given for each of three age groups: five to eight years, nine to eleven, and twelve to fourteen. Some mathematical scale might be assumed as the basis for recording of ratings—0 for a worthless film and 10 for a perfect one. Each film would then be placed by each reviewer at some point between 0 and 10 representing his judgment of the value of the film in that respect (subject, continuity, or technique) at that age level (5-8, 9-11, or 12-14). The averaging of figures plus a running comment clarifying the ratings should give schools and community groups a reliable guide for selection of films which will make up programs interesting to children and stimulating to their growth in ability to choose their own film entertainment satisfactorily.

Sample Programs for Children
(5 to 8 years)

For the child of this age group, feature pictures are not advisable. A program of several short subjects, one of which may be 30 minutes long, should center around some theme, such as wild animals, birds, fairy tales, or life in far away lands. Such a program, centered around bears, is listed as a first choice program for the small child. A second program, with a feature picture, is listed for use in groups where large numbers of small children are present but the demand for feature length film so great that a program of short subjects would fail to hold interest for the rest of the audience.


(9 to 11 years)

The feature film is not too long for children of this age, but programs of short subjects may be used for variation. One program of each type is given.

Feature Film Program: (length, 114 min.) “Redskin Blues” (cartoon), “Ruggles of Red Gap.” Other recommended features: “Arkansas Traveler,” “The Buccaneer,” “The Great Victor Herbert,” “It’s a Date,” “Mississippi,” “One Hundred Men and a Girl,” “Two Bright Boys,” “The Underpup.”

Short Subjects Program: (length, 81 min.) “In the Zoo” (cartoon), “Sporting Pals” (Grantland Rice Sportlight), “Four Smart Dogs,” “Swans,” “Song Birds of the North Woods,” “Death Valley Thrills.”

(12 to 14 years)

Feature films are the preferred entertainment at this age. An occasional program of short subjects of high quality may be used for variety.

Feature Film Program: (length, 114 min.) “Trouble in Davy Jones’ Locker” (cartoon), “Lives of a Bengal

Short Subjects Program: (length, 81 min.) "Pandora," "Technocracked" (cartoons), "Easy on Ice" (skating), "Gypsy Revels" (folk music and dancing), "Yankee Doodle Rhapsody" (American songs), "Swans," "Sugar Wind" (sugar-making time in the Barbadoes), "Symphony in Black" (with Duke Ellington).

School Movies to Educate the Public
(Concluded from page 381)

synchronization of the background music and the oral narration of film screening.

Finally, six weeks after work had begun on our movie, "Dawn to Dusk", it was ready for its premier showing. It was received enthusiastically by its first audience of over 1500 persons attending the mid-year commencement exercises of our school. Since this first showing, over 3500 people have seen the film over a period of 4 months. The audience consisted of service organizations, church groups, and many other social organizations within our community. In the future thousands more will view our school movie. Our vocational counselor, Mr. Raymond Jarvis, projects the movie and presents the oral narration at all out of school showings.

A very important use of such a movie aside from educating the public as to the functions of the school, is as an aid in vocational guidance for counselors in the junior high schools. Students who plan to attend our high school, view "Dawn to Dusk" long before they leave their junior high school, and so receive a good idea of our school and what goes on here.

Since "Dawn to Dusk" has been out in circulation telling our story, we have heard many favorable comments concerning our school, coming from people who have never been within its walls. This is a definite proof to us that "Dawn to Dusk" as a movie of school life is educating or perhaps we should say informing the citizens of our community concerning one of its finest high schools, which they might easily have overlooked or underestimated.

Again, as in my opening statements, I repeat that many schools have splendid visual programs for use in the classroom, but few have even scratched the surface in this field of educating or informing the public. New courses, sports programs, vocational guidance, health programs etc. may be publicized by means of motion pictures. Through such a practice the citizens (taxpayers) come to realize the importance of visual aids in the school and will support our school when new equipment is desired for expanding your visual education program.

Next time you wish to obtain public support for a new school idea or wish to show your community what your school is doing, make a movie. You will be exceedingly grateful for the splendid and efficient job it will perform for your cause in your community.
SCHOOL MADE MOTION PICTURES

Frequently educators are faced with the problem of forming a camera club that may devote its time to film production and other activities. H. A. Henderson, lecturer in visual instruction, Butler University, Indianapolis, offers the following helpful suggestions for the formation and conducting of a camera club:

The membership can well include students and patrons who own cameras and are interested. The club should be organized with well chosen officers. Members or committees should be selected to lead in discussions on such subjects as:

1. Types of commercial cameras. (Catalogues may be obtained from any dealer.)
2. How a camera is made. Make a pin-hole camera. Take a camera apart and learn the names.
3. Have each member bring a sample of his work and explain the conditions under which he took the picture. Criticisms and suggestions would be in place here.
4. Developing is not a difficult matter and in most any club there will be members who would take pride in explaining and demonstrating the process.
5. Various sizes, purposes, technical and trade names of lenses, light meters, photo-floods and other accessories.
6. Mechanism, care and operation of the various projectors—stereopticon or glass slide, picturol or film slide, opaque or reflectoscope, silent motion pictures, and sound units in motion pictures (35mm, 16mm, 8mm).
7. Light wattage, voltage, effects of light and shadows and distance of projection.
8. Screens.
9. Student Operation of Visual Instruction Equipment. (See article by H. W. Malstrom, June, 1941, Educational Screen.)

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HOLMES AMPLIFIERS AND SPEAKERS

By HARDY R. FINCH
Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by

GODFREY ELLIOTT, Oakvale, West Virginia.

A course in “The Production of School Made Films” is being offered this year by the Hartley School of Film Making, 20 West 47th Street, New York City. The course, which promises to be of great value to educators, has been granted alertness credit by the New York State Department of Education. According to the school’s prospectus, “The course is designed to meet the demands of advanced students who have already had essential technical training and also of students with less specific qualifications and amateurs who wish to increase their acquaintance of film techniques.”

The classes will be conducted in the motion picture and sound recording studios of Hartley Productions, a company actively engaged in the production of non-theatrical motion pictures. Included in the course of study are the following: The motion picture camera and principles; Film emulsions; Exposure and exposure meters; Filters; Preparation of a script; Direction; Exterior filming; Lighting; Interior filming; Cutting and editing; Titling; Post recording; Cutting and matching sound track; Direct recording and re-recording; and Film showing.

What films should be made in the schools? is a question that is asked by almost every school production group. At present, the Committee on Motion Pictures of the National Council of Teachers of English is asking high school English teachers what films they would like to have available in their classrooms. As the reports are being tabulated, a number of the suggested film topics seem to be worthwhile suggestions for school film makers as well as commercial producers. Do the English teachers in your school have any suggestions that might be useful for school film makers? If they do, a note to this editor would be appreciated.

Film Reports

California

What is believed to be the first teaching film in the field of English grammar has been produced by the Westwood Junior-Senior High School. In 400 feet, the film deals with the “big primary grammatical relations as recommended in a recent study,” Stuart Mitchell, principal, reports. “Subject-Verb-Object uses color in titles to symbolize meanings, and its reading speed and vocabulary difficulty level have been adjusted for grade four. This allows a margin of comprehension for difficult concepts, meaningful scenes, and organization, since the film is planned for use in grade six or higher, where this subject matter is customarily
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presented. It also may be used for review, or as a supplementary teaching device on other grade levels, or for remedial work."

**Iowa**

Iowa State College, Ames, has made three more films: *Engineering at Iowa State* (800 feet), *Agriculture at Iowa State* (800), and *Home Economics* (1200). The films are used for publicity purposes and were produced by H. L. Kooser of the Visual Instruction Service and his staff.

Ames Senior High School, Ames, has a new film, *Basketball as Played at Ames High School* (300 feet). John Harms was the cameraman.

**Massachusetts**

Agawam High School, reports Allan M. Hadley, has made a film showing laboratory techniques in chemistry (800 feet). In production is a documentary film of contemporary life in Agawam, which is being made as a school project with all departments contributing (approx. 2500 feet).

**Michigan**

A film on traffic safety practices is near completion at Flint. A student committee representing two high schools is making the film, George Stracke, visual education chairman, states.

Used as a substitute for a graduation speaker at the eighth grade commencement exercises was the film, *Montpelier Elementary School*, 600 feet of school activities. William S. Wagner, principal of the school, was the supervisor of the production.

**Ohio**

Of particular interest to welfare and institutional study groups is a film completed in July by William Hart and Roy Wenger of the Bureau of Educational Research, Ohio State University. Titled *Life at the Ohio Soldiers’ and Sailors’ Orphans’ Home*, it shows the activities of a typical day at the home—cottage life, school life, work, and recreation. (500 feet)
Question Box on School Film Production
(Continued from last month)

In selecting black-and-white stock, the school has a choice between reversal film and negative stock. The negative-positive process is patterned after the standard procedure of the 35 mm. field. There are several types of 16mm. negative stock available for amateurs who want to use this method.

Advantages of the negative-positive process for the schools are: (1) at no increase in film cost, it permits the original to be preserved, and (2) it permits the printing of additional copies of the film at about half the cost of reversal dupes.

For the average school production, however, the disadvantages will weigh much heavier: (1) the negative is extremely difficult for the amateur to edit, and (2) it has a slight greater tendency toward graininess than does reversal films.

Unless the school is fairly certain that a large number of copies will be made from the completed film, I recommend reversal stock. Ease in editing, aside from any other consideration, may dictate the use of reversal stock.

Every film stock has a rated speed, referred to here in terms of its Weston classification. The school production unit must beware of two things: (1) that it does not attempt the indoor use of a film too slow in emulsion speed, and (2) that it does not waste money by using a high speed film where high speed is not useful.

Kodachrome and the ordinary types of orthochromatic 16mm films have daylight emulsion speeds ranging from 8 to 15 Weston. Such speeds suffice for outdoor use, except in subnormal light.

Panchromatic film is manufactured in three major daylight speed groups: 16-24, 32, and 100. Generally speaking, the speedier the film, the greater the cost. "Express" speed film (Weston 100) is desirable for indoor scenes. It is not, however, recommended for average outdoor use, since its extreme speed is only wasted outdoors in normal or near-normal light.

One last caution in the selection of a film stock. School units will do well to steer clear of film that is advertised at cut-rate prices, and claiming to perform miracles in photography. Such film is often nothing more than positive stock, spooled and sold under fancy names. Adhere to the use of standard brands, at least until actual use and screen comparison have demonstrated the performance of such film.

2. All references caution us against mixing daylight and mazda when shooting Kodachrome. What shall we do about shooting interior scenes in color?

Three mistakes are commonly made in shooting interior scenes in Kodachrome: (1) using Kodachrome Regular in the presence of mazda light. (2) using Kodachrome B in the presence of daylight. Both of these actions distort color values out of all proportion. The third mistake is trying to do the filming at night with Kodachrome B and photo-floods. This action not only makes production difficult, but also gives black window areas which give an unreal sense to any classroom scene that is attempted to stage.

The most logical solution is to shoot interior scenes in daytime, using Kodachrome Regular film, and depending upon the daylight-blue photo-floods to build up the light values where needed. Such floods are sold by all manufacturers of photographic lamps.

3. What advice can you give us on shooting scenes involving writing on blackboards?

Amateurs shooting in the classroom for the first time are always surprised to learn that blackboard areas will pick up hot spots from the lighting reflectors. If care is taken to see that chalkdust is washed from the pores of the blackboard, some of this difficulty can be overcome, but the main the problem demands extreme care in the placement of lighting units. Blackboard areas often can be troublesome as glass in reflecting hot spots.

The greatest difficulty in filming writing on the blackboard is to determine the correct exposure. White chalk on a
blackboard represents only black and white—no intermediate tones—a condition for which ordinary exposure meters are not designed. Any meter reading taken directly from the backboard results in a grey blackboard surface with overexposed writing.

One recommended solution is to take the meter reading from a 12-inch square of neutral grey cardboard which is held against the blackboard. Another trick is to use an old copying technique: take the meter reading from a sheet of white typewriter paper held at the desired point, divide the meter reading by eight, and use this latter figure as the light reading in determining the exposure setting.

4. Why is an exposure meter necessary, when lamp manufacturers issue tables of exposures for their photoflood lamps?

Such tables require the accurate placement of lighting units according to data given in the tables—a difficult feat in figuring fairly large areas and groups. Tables of exposures for photoflood lamps are compiled under the assumption that the lamp is new and in perfect condition. They do not (can not) take into consideration the fact that photofloods diminish rapidly in efficiency. Thus, a table that may give correct exposure during the first hour of the lamp's life, will cause serious underexposure if followed during the third or fourth hour of lamp life. Unfortunately, there is no accurate and simple basis for interpolating the table for decrease in lamp life. Consequently, the school crew is advised to secure and use a reliable photo-electric meter for calculating exposure under artificial light.

5. Are there any reference books especially written for school movie makers?

Yes, indeed! Three excellent publications which meet this purpose have been reviewed in the columns of the SCREEN within the past few months:

(a) Making School Movies, by William G. Hart and Roy Wenger. Published by the Bureau of Educational Research, Ohio State University, Columbus, 56 pp. $0.50.

(b) Students Make Motion Pictures, by Floyde E. Brooker and Eugene H. Herrington. Published by the American Council on Education, 744 Jackson Place, Washington, D.C., 142 pp. $1.00.

(c) Producing School Movies, by Eleanor Child and Hardy Finch. Published by the National Council of Teachers of English, 211 West 68th Street, Chicago. 150 pp. $1.50.

G. E.

Fifth School Broadcast Conference

December 3-5 are the dates set for the fifth annual meeting of the School Broadcast Conference in Chicago at the Congress Hotel. These conferences have grown from year to year as more teachers are realizing the part radio can play in education.

A Teachers Panel on "How We Use Radio" will start the proceedings Wednesday morning. Classroom demonstrations on the utilization of the radio programs, and discussions by work study groups, will be features of the program.

Awards and citations for outstanding examples of the use of radio programs will be given again this year. This second annual classroom-use-of-radio contest closed November 1. The winning 1940 entries have been published under the title, Utilization Procedures as Reported by the Classroom Teacher. This booklet may be obtained for 50c from the School Broadcast Conference office at 228 N. LaSalle Street, Chicago.
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Power and the Land (U. S. Department of Agriculture)
3 reels, 16mm sound, “free.” Apply to producer for nearest source of prints. Produced in 1940 by Joris Ivens for the Rural Electrification Administration. Narrative written and spoken by Stephen Vincent Benet. 35mm distribution through RKO Radio Pictures.

This new documentary film shows the case of one farm family as a forceful example of the need for electricity on the farm, and how the need is being met by the program of the Rural Electrification Administration. Bill Parkinson’s farm at St. Clairsville, Ohio, is the scene of the picture. In the first part, the camera follows the farmer and his family throughout their day of work, beginning with the milking of the cows before dawn and ending with work in the evening. Scenes and narration combine to show how badly the farmer and his wife need electricity to furnish light, power for running water, heat for cooking, and power for assistance with various other farm and household chores. Bill Parkinson and his neighbors hold a meeting to discuss need for electricity, and they form a cooperative to distribute electricity in their vicinity. In the last part of the film the scene returns to the Parkinson farm as its electrification is completed. Again the camera follows the family through their day, showing the many ways in which electricity makes their lives better and easier. Electric lighting, an electric pump for running water, an electric stove, a washing machine, radio, and various other farm helps powered by a portable motor are shown. The film closes with emphasis upon the increased benefits in human living on the farm which result from electrification.

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write Don White at 223 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, basis of availability, and prices of the films. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, WHICH MUST BE BORNE BY THE PRODUCERS.

Committee Opinion: An excellent documentation of the need for farm electrification and modernization. A genuine note of simplicity in photography and narration contributes much to the effectiveness of the presentation. It is an excellent film for use in agriculture and social science classes, as well as for general showings. The film is technically and artistically excellent in every way.

America First in the Air (Curtis-Wright) 22 minutes, 16mm sound, “free.” Produced by Audio Productions; narrated by Lowell Thomas.

Produced in popular vein, this film gives an overview of the important processes in the manufacture of Curtiss electrically-controlled propellers for aircraft. The film begins with scenes of the dedication of the company’s new propeller plant at Caldwell, New Jersey. It is explained that the old standard-pitch propellers have been replaced by new automatic variable-pitch propellers. New features available on the Curtiss propellers, such as full-feather and reverse pitch, are mentioned. The narrator emphasizes that infinite care and entire reliability must be exercised to ensure compliance with the rigid standards and close tolerances allowed in propeller manufacture. Subtitles divide the remaining parts of the film into sequences explaining the production of the three important components of the finished propeller. First, the hubs are shown; each begins as a 375-pound forging and is carefully machined down to a final weight of 56 pounds. Next, the assembly of the electric power unit, including the power gear, speed reducing gears, and the electric motor and switches, is shown in detail. The following sequence shows how the blades are made, including a brief explanation of the manufacture of solid dural blades and an extended explanation of the manufacture of hollow-steel blades. The importance of exact balance is emphasized throughout all these processes. Then the final assembly of the complete propellers is shown, and their packing for shipment. The closing sequence of the film is subtitled “Propellers in Action.” It shows various makes and models of planes which depend upon Curtiss electric propellers for the utilization of the power produced in their engines.

Committee Opinion: A good film for classes at the junior high through adult levels in machine shop work, for ground-school classes in flight training groups, and for general showings. The film presents an overview rather than a detailed analysis of the manufacturing and assembly processes. Photography and sound are good.

(Continued on page 404)
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Accurate ... Authentic—The pictures are accurate...authentic. They conform to the best methods in machine shop practice. They were supervised by old line experts. Leading American industries cooperated in their making. Those who have seen them call them one of the greatest contributions ever made to American visual education.

Low Cost—These instructional films are being sold at the lowest possible cost to give them the widest possible use. Your cost is less than $9.00 per reel! All subjects are available in 16mm Sound On Film. Eighteen titles are now ready. Every training school, every factory, every plant maintaining machine shop activities needs these great teaching aids!

FREE CATALOGUE! Send today for free catalogue describing each film listed at the left. We will gladly put you on our mailing list for information about future releases. Address all inquiries to:

CASTLE FILMS
Distributors for
THE UNITED STATES OFFICE OF EDUCATION

These 18 films immediately available:
5 ON THE ENGINE LATHE
1. Rough Turning between Centers
2. Turning Work of 2 Diameters
3. Cutting a Taper With the Compound Rest and With the Taper Attachment
4. Drilling, Boring and Reaming Work Held in Chuck
5. Cutting an External National Fine Thread

5 ON THE MILLING MACHINE
A. The Milling Machine
1. Cutting Keyways
2. Straddle and Surface Milling to Close Tolerances
3. Straddle Milling
4. Plain Indexing and Cutting a Spur Gear

3 ON THE VERTICAL BORING MILL
1. Rough Facing, Turning and Drilling on a Vertical Turret Lathe
2. Rough Facing and Boring and Turning a Shoulder on a Vertical Turret Lathe
3. Facing, Turning, Boring, Grooving, Chamfering on a Vertical Turret Lathe Using 2 Heads

5 ON PRECISION MEASURING
1. The Steel Scale
2. The Micrometer
3. Fixed Gages
4. Vernier Scale
5. Height Gages and Standard Indicators

These 32 titles will be released soon:
3 On the Shaper
2 On the Lathe
2 On the Radial Drill
1 On the Sensitive Drill
5 On Bench Work
2 On the Vertical Drill
5 On Bench Work and Centering
10 On SHIPBUILDING
2 On Action of Single-Point Cutting Tools
BRING THE GREAT MUSEUMS INTO YOUR SCHOOL

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Official Extension Lecturer. The Art Institute of Chicago. America's most eminent lecturer on the fine arts. This is the latest and most advanced aid to the teaching of art, and to art appreciation.

Forty paintings in each program. Running time forty minutes. Can be run in four ten-minute sections. Cost is much less than having Dr. Watson for a personal appearance.

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We manufacture the most complete line of Sound Slidefilm Equipment on the market, ideally adapted to school use. Several models with dual speed. Several with public address facilities. Can be supplied with or without projectors.

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O. J. McClure Talking Pictures

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Chicago

“Call of the Wilderness”

Wild life story of U. S. National Parks.

16mm S.O.F.

Write Dept. ES for free catalog of sound or silent films.

LEWIS Film SERVICE

216 E. First St. — Wichita, Kansas

BARGAINS IN S.O.F.

Outstanding Projector SALE! $595 Victor 246; only $279! Ampro $657 model $379! Mogull-Duplex was $655, now $365! DaVry $495 at $279! Bell & Howell $195 at $339! $650 model, $425! TWIN! $1094.50, outfit complete, only $747.50! FILMOARC $365! All units like new, fully guaranteed, List Free. Small down payments; small monthly installments. Trades accepted. Schools, Orgs., others, buy on budget. Save 25% on Film Rental!

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61 W. 48th St.

“Of Radio City

New York, N. Y.

FILMS FOR SPORTS

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BAILEY FILM SERVICE

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Hollywood, Calif.

“Educational Films of Merit”

SOUND AND SILENT CLASSROOM FILMS

SLIDES

General Science, 11 rolls. $20.00

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FILM

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VISUAL SCIENCES

264E Suffern, New York

“KNOW YOUR BIRDS”

NEW - 16mm Color Film of Wild Bird Life

SERIES NO. 1 . . . ROBIN, BLUEBIRD, WOOD-THROUGH SERIES NO. 2 . . . STUDYHOUSE, CHICKADEE, NUTHATCH

labeled for your visual education program. Clear, large titles. Meaningful new techniques. Mr. Geo. F. King, Audubon Society, says, “High level of photographic acuity makes these pictures a pure delight.”

Write for descriptive folder and special school price.

HEIDENKAMP NATURE PICTURES

FITCHBURG, MASS.

16 MM RELIGIOUS FILMS

Don Bosco — Ambassadors of Christ

10 reels

Miracle of Faith (Lourdes) — Glory of Faith (Little Flower)

8 reels

Rental or Sale

8 reels

FRENCH FILM EXCHANGE. 1775 Broadway, New York, N. Y.

(Continued from page 402)

Home Nursing (Erpi) 11 minutes, 16mm sound. Sale price $50.00. Teacher’s guide to be furnished. Apply to producer for rental sources.

This film exemplifies correct procedures in home nursing. Ruth Edwards, who is ill of pneumonia, is under the care of her sister, June. The doctor calls in a public health nurse who teaches June the correct methods in home nursing. These are pointed out by the narrator as June cares for her sister. First, methods of making the bed are shown, including how to substitute blankets without exposing the critically ill patient to chill. Next she demonstrates how to turn the patient from side to side, and other ways of increasing the patient’s comfort. Two weeks elapse; Ruth has passed the crisis, and is recovering. But the work of the home nurse in helping speed convalescence is still important. June shows the morning care of the patient: brushing the teeth, washing the face and arms, and then a sponge bath and alcohol rub. Then June shows the ways in which she helps the doctor, by taking and recording the patient’s temperature, pulse rate, and respiration rate, giving medicine exactly on schedule, and keeping accurate records of the patient’s progress. Other points, such as attractive arrangement of foods and keeping the patient occupied, are shown. Finally, June aids her sister as she sits up for the first time in many weeks. In closing the narrator states that, thanks to good care, Ruth Edwards is on the road to recovery.

COMMITTEE OPINION: A good film for use in home economics, public health, and hygiene classes, and for showings to adult women’s groups, to teach the correct techniques in home nursing. Suitable for use at the junior high through the adult levels. Photography and sound are good.

A Way in the Wilderness (Teaching Film Custodians) 11 minutes, 16mm sound. Apply to distributor for lease price and rental sources. Produced in 1940 by Metro-Goldwyn-Mayer; “Passing Parade” series.

This is a dramatized story of the discovery of a cure for diabetes. As the film begins, the narrator speaks of the romantic South of tradition, contrasting it to another South—that of the poor whites and Negroes, where a murdering prowler is rampant in the form of the disease pellagra. Dr. Joseph Goldberger of the J. S. Public Health Service comes to a backwoods region in the South to stalk the killer. He goes to a county orphanage where all but three children have pellagra. The first light on his problem comes when he discovers these three children stealing milk, and forms a theory that the disease is a result of malnutrition. He elapses his findings to the authorities. But when he announces his discovery before a medical meeting, he is laughed out of the room. He begins another experiment, using some of the inmates in Rankin Prison. He places a small group of the men on a typical Southern backwoods diet of “cornpone, sowbelly and molasses.” Weeks go by, but no sign of the disease appears. Southern newspapers begin to stir up public sentiment against him, charging that he is helping the convicts and is being mistreated. Finally a telegram comes ordering that the experiment be stopped. Dr. Goldberger, despondent, makes one last examination of the men—and discovers that the disease has appeared! But there is yet much opposition. As a final test, Dr. Goldberger and his wife volunteer to have the blood of a pellagra victim inoculated into their veins, and when the disease fails to appear on them, his theory is proven. So on May 7, 1916, the job was done. A test area revealed that the disease could be stamped out over a large section of the country by making proper foods available to all the people. A concluding sequence in
the film shows how the depression following 1929 brought renewed inroads of pellagra, and emphasizes that only when 130 million Americans can find a way to provide correct diet for all will Dr. Goldberger’s “Way in the Wilderness” be completed.

COMMITTEE OPINION: An excellent film to teach the facts of the discovery of the cure for diabetes, and to show resistance to progress. Suitable for use in public health and hygiene classes, as well as for the social studies. Like others in this series, the film is well dramatized and is technically excellent in every way.

Addresses of Producers and Distributors:
Curtis-Wright Corporation, Department of Public Relations, 30 Rockefeller Plaza, New York, N. Y. For nearest source of prints for school use write the Association of School Film Libraries, Room 819, No. 9 Rockefeller Plaza, New York, N. Y.
Erpi Classroom Films, 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.
Teaching Film Custodians, 25 West 43rd Street, New York, N. Y.
U. S. Department of Agriculture, Extension Service, Division of Motion Pictures, Washington, D. C. Write for name of depository nearest you.

A Study Travel Workshop Course
(Concluded from page 386)

scenic views. One half day was spent here. Erie was the next stop. Here two nights and one day were spent in study and recreation. The last lap of the tour was from Erie to Indiana via Pymatuning Reservoir.

Approximately 1,200 miles were covered in the nine day tour. Excellent highways, pleasant stopping-off places, unsurpassed scenic beauty, as well as numerous outstanding educational features made the trip well worth while and enjoyable for everyone. The slogan of the tour was KNOW PENNSYLVANIA.

Prior to the trip the students each selected “topics for investigation” to be carried through the course. Verification, amplification and enrichment came with the study during the tour. The culmination of the work was the preparation of an analytical written report prepared during the workshop period following the trip. These reports from the various members of the classes were mimeographed and bound into a substantial volume, following a predetermined, uniform pattern, properly annotated, and documented. Each member of the class received copies of the completed volume, and several copies were placed in each of three libraries: Main College Library, Geography Department Library, and History Department Library.

A two-reel Kodachrome motion picture story of the trip was made to be used in the college courses, and by persons who were on the trip, in their schools. A total of several hundred still pictures and snapshots were made, since most of the members had cameras of one sort or another. A number of duplicate sets of prints were made, and several “travel booklets” were compiled. It is planned to make lantern slides of a great number of the best and most significant pictures secured. These pictorial records, still and motion, together with the mimeographed reports give quite a complete “documentation” of this experimental study-travel-workshop plan for conducting the combined History-Geography course.
NEWS HIGHLIGHTS OF 1941
IN CASTLE FILM

Class sessions in which students are asked to designate their individual selections of the ten to twelve most outstanding world news events in the course of 1941 are proving worthwhile innovations in a growing number of educational institutions. Generally a chronology of momentous occurrences, such as is available from local newspapers or weekly magazines, is provided. Other instructors, however, prefer to call upon the memories and observation of the students themselves.

Listings by students are greatly varied. After duplications, such as the historic meeting of President Roosevelt and Premier Churchill, are eliminated, there remains a wealth of discussion material as to the relative importance of other events, each weighed against the others. Arguments are directed away from the less important merit of the events as strictly news and more in the direction of their effect upon the world at large and future economic, moral and cultural existence.

When agreement finally comes by vote of the class as to the ten to twelve most far-reaching chapters of world history in 1941, instructors can then compare the decision of the class with that of editors of the motion picture, News Parade of the Year—1941, produced by Castle Films for showings on 16mm. and 8mm. projectors. One reel in length, this momentous movie compresses into that space limitation those world events that impress the editorial staff as outstanding, contents being at all times dependent upon whether or not certain vital episodes occurred when and where motion picture cameramen were present for reporting them just as they happened.

Because of the tremendous nature of world news in a year when each day produced globe-rocking changes, the 1941 edition of Castle’s annual News Parade of the Year is correspondingly important as an accurate, lasting aid for vitalizing the teaching of current history today and in the years to come. It shows Russians resisting Nazi invasion on land and sea. British forces are shown taking Syria and Iraq, and American troops are seen in Iceland and Newfoundland. The blasting of huge stores of supplies in Spitzbergen by Canadian troops and of other supplies on the Norwegian coast to prevent their use by Germany make stirring scenes. There is great poignancy in scenes that reveal the plight of the French people under the rule of Vichy. Far Eastern episodes focus attention upon the Pacific. The historic ocean conference between President Roosevelt and Premier Churchill is shown. There are shots of various Balkan campaigns, and Italian vessels are seen sinking in the Mediterranean, the victims of British gunfire. The epic destruction of the German battleship "Bismarck" is depicted. In spite of strike actions, which are shown, America’s vast defense program is seen gaining great momentum, and other last-minute world news contributes to a movie that literally records history at the moment it was made.

Whether used in connection with the quiz outlined above or solely as a supplementary means for teaching current events, this Castle film is of unquestionable value, and its merit will increase with the passing of time for the teaching of youth years from the present.

At left—Shots from News Parade of the Year—1941
1. Divine service aboard British battleship H.M.S. Prince of Wales in course of ocean conference between President Roosevelt and Premier Churchill.
2. One of America’s new dreadnoughts, the U.S.S. North Carolina, testing her guns.
3. German prisoners of war getting rations of bread from their Russian captors.
4. Heavy Russian tank flaming from a direct hit.
Over 6,000
Quality-Conscious Theatres
Use RCA Motion Picture Sound Equipment

The same "BIG TIME" quality is yours with
RCA 16 mm. SOUND FILM PROJECTOR

Offering you 16 superior features, this great projector provides finer, clearer sound... more even light distribution on screen... greater operating simplicity—yet is priced with the lowest!

Take a tip from the Broadways of America! Give your pictures the "big time" projection they deserve, with the RCA 16 mm. sound film projector. It's made by the makers of equipment used in over 6,000 theatres—those that demand quality!

You'll find that RCA engineering has produced a 16 mm. projector that gives new life to both pictures and sound. Light on screen is much more evenly distributed—due to oversize lens system used. And the sound is full and clear no matter what volume you wish to use.

Operation too, has been RCA engineered. Simplicity is the watchword. Threading is child's play with threading line cast right on the projection block. All size reels are quickly rewound by motor. Cleaning and adjusting are both extremely simple.

Yes—from its handsome, compact carrying cases to its tiniest integral part, the RCA 16 mm. sound film projector is just what you need to make every lesson live! And best of all—it's priced with the lowest.

For better sound film projector performance—use RCA Tubes

RCA Victor
AUDIO VISUAL SERVICE FOR SCHOOLS—Educational Dept. • RCA Mfg. Co., Inc., Camden, N. J. • A Service of Radio Corporation of America

November, 1941
Current Film News

The Educational Screen

The Manse Library, 1321 Dana AvenuE, Cincinnati, Ohio, has added to its library of 16mm sound films:

The Count of Monte Cristo, the United Artists feature release, starring Robert Donat.

Sixteen MM Pictures, Inc., 1600 Broadway, New York City, is offering a 16mm sound version of Dickens' classic, "A Christmas Carol," under the title: Scrooge, which was originally released in 35mm by a major producing organization. The film has been highly commended by critics for its fine acting and adherence to the spirit of the famous story. It is reported as being an hour in length, and is available for rental from leading film libraries in the country. Write to Sixteen MM Pictures for names of nearest source.

The Educational Library, 35th Avenue, Long Island City, New York, announce their new Historical Film Series, which is divided into two types of subjects.

The first type will show mainly by means of animation certain major historical developments since 1492. This type will include: Exploration and Discovery from 1492 to the beginning of the seventeenth century; Colonial Expansion from 1500 to 1763; The Westward Movement in the United States since 1763; and Immigration in the United States since 1790.

These film subjects, presented by animation, will provide a clear understanding and appreciation of the flow of history through long periods of time and over vast geographical areas. Special research in animation, during the past two years, has resulted in the development of techniques which have proved to be highly effective in presenting the dynamic aspects of historical development. One major purpose of these films is to provide a "birdseye" view of history. The intelligent use of these films should give the student a pattern of reference points upon which to place in proper perspective his intensive specialized reading in history. It is hoped, furthermore, that these films will provide learners with information which will enable them to grasp the significance of historical trends in their relation to modern developments.

The second type will provide a series of pictures of definite localities showing characteristics of peoples who lived in specific times and places during the onward march of our national history. They will serve as companion subjects to the animated films, and are intended to provide microscopc insights into important details of the environment, manners and customs of people who lived and worked during significant periods of our cultural growth. Such film subjects include: Early Settlers of New England (1600-1609); Colonial Children (1650-1700); A Planter of Colonial Virginia (1740-1765); Kentucky Pioneers (about 1800); Flatboat Pioneers (1779-1811); Old New Orleans (about 1830); and Pioneers of the Plains (1861-1885). These additional subjects planned for later releases are: Early Dutch Settlers, Spanish Settlers of the Southwest, and Pioneers of the Southwest.

A scene from "Kentucky Pioneers."

The study of these films will reinforce and make real the concepts that living on earth has been and is a highly dynamic and ever-changing experience, and that the relationship of man with his environment has been a potent factor in the shaping of historical development. With such understandings and appreciations, students should be better equipped to participate fundamentally in the solution of problems facing the citizen of today.

Erpi Classroom Films Inc., 35-11 35th Avenue, Long Island City, New York, have announced their new Historical Film Series, which is divided into two types of subjects.

Mogull's, 68 West 48th St., New York City, have brought out the November supplement to their sound film rental catalog, consisting of 659 titles. Included are films on Sports, Travel, Religion and News, as well as Educational and Entertainment subjects. The Educational section has a wide selection of films listed under Teaching Technique, Child Psychology, Vocational, Industrial, Animal and Plant Life, Biology, Physics and Serious Music. There is a timely listing of patriotic and historical subjects, Navy pictures and a series on the present war.

Among the theatrical features are: Zaftopatore (Tiller of the Soil), much of which was filmed at the University of Naples; Laughter Through Tears, made in Russia from stories of Jewish folklore; Wild Innocence, depicting the bush country of Australia; Spy of Napoleon, a story of the Franco-Prussian War; Othello, a full-length presentation of Verdi's opera filmed in Italy.

Mogull's has launched a program of expansion with a policy of releasing additional supplements every 90 days. This newest supplement may be had without charge.

Bailey Film Service, 1651 Cosmo St., Hollywood, California, offers two novel new music films in 16mm. sound: Lodonderry Air (Danny Boy), Grainger's composition played by Eugene Ormandy and the Minneapolis Orchestra. In a Monastery Garden, a recording of Ketelby's work, played by Lew White on the organ, with an accompanying harp and chorus.

Appropriate pictorial backgrounds on both films serve to intensify the effect of the music, or the films may be projected with sound only, letting the class tell what pictures the music suggests. If desired, the films may be purchased in silent form so that the music teacher can use records of her own selection.

Walter Q. Gutlohn, Inc., 35 W. 45th St., New York City, has released several new features, including:

Let George Do It—a comedy depicting amateur spy's adventures, and his single-handed capture of a U-Boat.

It's in the Air—musical farce centering around R.A.F.

Silent Battle—drama of intrigue, starring Rex Harrison.

Torpedoed—presenting authoritative pictures of the British fleet in action.

Among Human Wolves; Law and Disorder—espionage dramas.

Suicide Legion—another story of espionage, with music, featuring Tullio Carminatti.

Inquest; Sensation—mystery thrillers.

Land of the Cree—a documentary film on the life of an Indian tribe in Canada—is another addition to the Gutlohn library.

Castle Films, Inc., 30 Rockefeller Plaza, New York City, has received a contract from the Office of Education for the printing, distribution and promotion of fifty 16mm educational and vocational films produced by the Government. Castle was awarded the job by the lowest bid for the work stipulated in the contract bidding provisions. Eighteen of the fifty films are being released now, and the others will follow soon.

Michigan Department of Conservation, Lansing, has finished a new one-reel film in natural color and 16mm. sound, available for the cost of transportation through the Division of Education, entitled:

Timber Harvest—a picture of life and work in Michigan's early lumber camps. Other releases to follow will be on Michigan's waterfowl, scenic beauti-

(Concluded on page 410)
DESIGNED for use in junior and senior high-school courses, this new Eastman Classroom Film does for the antirachitic vitamin D what last year's highly successful Eastman film did for the antineuritic vitamin B₁.

Clearly and comprehensively it deals with the natural and artificial sources of vitamin D... results of vitamin D deficiency in the diet—rickets and poor teeth... pictures the conditions in modern life which reduce the supply of vitamin D from natural sources... and establishes the relation between poorly balanced diets and vitamin D. Included is a series of experiments on laboratory animals, showing the results of vitamin D deficiency, and of the feeding of cod-liver oil. The film concludes with various means of increasing vitamin D in the body—use of concentrates, exposure to sunlight or sunlamps, well-balanced diets, irradiated milk, improved living conditions.

In the present emergency, the story of the vitamins and their invaluable contribution to a healthier people, a stronger nation, is one that must be told to every student. How can you tell it half so well as visually?

The new film... 1 reel, 16 millimeter (silent)... is $24. Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

***

Illustrations from the film show (A) The beginning of a poorly balanced meal; (B) A close-up of a well-balanced meal; (C) The effect of vitamin D deficiency on rats; (D) A rachitic baby—victim of vitamin D deficiency.
Among the Producers

Demonstration Set of SVE Kodachromes

The Society for Visual Education, 100 East Ohio Street, Chicago, has assembled a set of demonstration slides for viewing purposes only, to acquaint visual educators and others interested with the scope of their 2x2 inch Kodachrome slide library. The set consists of the following fifty color slides, representative of each subject division in the SVE collection:

Seven from U. S. geography and travel; six from foreign geography, depicting life and habits of people, landmarks, physical geography, cities, and so forth; twenty-one from the science group representing such specific subject divisions as botany, entomology, zoology, ornithology, nature study for young children, geology, technical subjects, health and medicine, and examples of late developments in modern photography useful for physics classes; one each on landscaping, interior decoration, modern and classical sculpture, costumes, dances, design and crafts; three Kodachrome copies of the Joseph Boggs Beale's hand-colored illustrations from famous works of literature; one illustration from Mother Goose Rhymes and fairy tales for children; and five reproductions of famous paintings of the world. Over 200 slides comprise this last group, including religious, classical and the best of the moderns.

This set of slides is not intended for sale, but is available for inspection through SVE educational dealers throughout the country. A viewing of them should suggest many possibilities in teaching as they have been designed primarily to meet educational and religious institutions' needs.

New Kodaslide Projector

Sturdy, yet small in size, is the new Kodaslide Projector, Model 2A, manufactured by the Eastman Kodak Company, Rochester, New York, for the projection of 2 x 2-inch Kodachrome transparencies. Replacing the popular Model 2, the new projector carries a 150-watt lamp, and is available with either a 5-inch f/3.5 lens, or 7¼-inch f/4.5 lens.

In addition to the Combination Case for projector, lens, and file boxes, a new Projecto Case will be available soon. The new case resembles the Combination Case but in addition it carries a folding leg stand which, when in use, provides a convenient projection stand and an extra shelf for 2 x 2-inch slide boxes.

Color Copying Service

Users of color films will be interested to learn that a Kodachrome copying process has recently been perfected by Colorcraft Studios of Chicago. They announce that it is now possible to make as many copies of the original as desired and retain color values. Material can be copied, enlarged or reduced and made into 2x2 inch slides, single or double frame slide films, and the standard size 3½x4 inch glass slides.

The value of this new color copying process has been proven through several highly successful industrial sound slide films. It is now being offered to educational institutions for the first time. It is possible for amateurs as well as professionals to have their color transparencies or opaque material made into slides or filmstrips for schoolroom use, personal pleasure, exchanging with other educators, or for gifts. If desired, Colorcraft Studios will also make recordings to accompany the slide films.

For additional information regarding this service, write to Colorcraft Studios, 6 North Michigan Avenue, Chicago, Illinois, or Portland, Oregon.

Slide on Electrical Transcription Making

A sound slide film was recently produced by Photo & Sound, Inc., 153 Kearny Street, San Francisco, showing how electrical transcriptions are made, and how transcribed shows and spot announcements are effectively used in radio broadcasting.

Kodaslide Model 2-A with Slide Changer.

The Educational Screen

Current Film News
(Concluded from page 408)

ties, and commercial fishing in the Great Lakes. More than thirty subjects are now available through this film library.

■ IDEAL PICTURES CORPORATION, 28 E. Eighth Street, Chicago, has in its vast library of 16mm films, many excellent subjects appropriate for the school or church Christmas program. These include religious as well as strictly entertainment subjects. It is suggested that those interested in these films obtain information at once from IDEAL, so that booking can be made as far in advance as possible, ensuring prints being available.

■ Y. M. C. A. MOTION PICTURE BUREAU, 347 Madison Ave., New York City, is cooperating with the U. S. Government, Office for Emergency Management, in distributing three timely one reel 16mm sound films on the subject of Defense, namely:

Power for Defense, which reports on defense activities using TVA power and shows manufacturing of army shoes, tents, textiles, shells, marine boilers, airplanes, aluminum and other items.

Army in Overalls, showing work of the C. C. C. in clearing military reservations for the U. S. Army.

Subcontracting for Defense—what the government is doing to speed up the program.

In addition to these free films, the Bureau has three free General Motors films: Wings for Defense (1 reel), Wheels for Defense (1 reel), Now Is the Time (3 reels)—and a series of fifteen 1-reel rental films, History in the Making, which dramatically visualize world problems.

■ BRANDON FILMS INC., 1600 Broadway, New York City, have announced for release two new educational motion pictures in 16mm and 35mm sound. Both are available for rental and sale. The films are:

A Place to Live—2 reels, 17 min. Produced by Irving Lerner in cooperation with the Philadelphia Housing Association. A documentary of the housing problem, filmed in Philadelphia and designed for use nation-wide in relation to civilian and defense housing.

Tall Tales—1 reel, 9 min. Produced by Thomas J. Brandon in cooperation with Documentary Film Productions Inc. The first in a series of films based on American Folk Songs. Features authentic songs, in natural locale, sung by prominent folk and ballad singers.

A special National Defense Bulletin of selected feature and short films is being issued by Brandon Films free of charge upon request. Motion pictures described in the Bulletin include dramatic story features and documentary films dealing with the important developments "Inside Asia", "Inside Germany", "Inside Europe."
Some Valuable Literature

“1000 AND ONE” FILM DIRECTORY

“1000 and One” The Blue Book of Non-Theatrical Films, published annually is famous in the field of visual instruction as the standard film reference source, indispensable to film users in the educational field. The new edition lists and describes over 5,000 films, classified into 162 different subject groups (including large group of entertainment subjects). A valuable feature is a complete alphabetical list of every film in the directory. Other information includes designation of whether a film is available in 16mm, or 35mm, silent or sound, number of reels and sources distributing the films, with range of prices charged.

128 pp. Paper. Price 75c. (25c o E. S. subscribers)

FILM EVALUATION SUPPLEMENTS TO

“1000 and One” under The National Film Evaluation Project

A new and unique service to the teaching field. Film Evaluations made by nation-wide Judging Committee of over 500 teachers after actual use of the films with classes.

Each Supplement consists of 50 standard-size library cards carrying detailed evaluation and optional suggestions on the basis of combined scores of 15 or more teachers on each film. Three Supplements have appeared to date. Another appears as soon as 50 more films attain their quota of 15 or more scores.

Price per Supplement—50 cards in carton, serially numbered 1 to 50, 51 to 100, 101 to 150, etc., with full explanations accompanying, 50 cents (postpaid in cash order).

VISUALIZING THE CURRICULUM

By C. E. Hoban, C. F. Hoban, Jr., and S. B. Zisman

Presents in theory and in practice the basic methodology of visual instruction in relation to classroom procedure. Provides an abundance of technical guidance in the form of illustrative drawings of photographs, report of school journeys, suggestions for mounting materials, for making slides, film strips, etc. It incorporates up-to-date material, provides a fine balance in the treatment of various teaching aids, evaluates various types of aids, and defines the functions and values of each in the learning process.

320 pp. Cloth. Illus. Price $2.75. (20% discount to schools)

THE AUDIO-VISUAL HANDBOOK. (3rd Edition)

By Ellaworth C. Dent


SELECTED FILMS FOR AMERICAN HISTORY AND PROBLEMS. By William H. Hartley

Part I gives directions for obtaining, evaluating and utilizing films. Part II comprises a fully annotated catalog of the most useful films for illustrating various aspects of American Civilization. Title of film, length, whether sound or silent, production company, description of the film, price, and rental price and grade level suitability, are given. Also synopsis of film content. Suggestions are offered concerning most effective application of the film to the teaching situation.


PICTURE VALUES IN EDUCATION

By Joseph J. Weber, Ph. D.

Presents in unusually interesting form the results of extended investigations on the teaching values of the lantern slide and stereograph. 156 pp. Cloth. Illus. Price $1.00

AN ALTERNATIVE FOR REVOLUTION AND WAR

By Albert E. Osborne

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Among the films useful for English instruction are: below, "Oil for the Lamps of China," a Warner Bros. production; right, "Romeo and Juliet," produced by Metro-Goldwyn-Mayer.

THE primary purpose of this article is to indicate the uses being made of motion pictures in the teaching of English in American colleges and universities. In effect, the article is intended to summarize replies to personal letters addressed to chairmen and professors of English departments in colleges and universities belonging to the American Association, the letters being designed to determine the extent to which motion pictures are being used, the various uses made of them, and how they are used in this area of teaching.

Quantitative Results

Frequency of Types of Uses. One hundred and thirty letters were sent out, and one hundred and twenty-five replies were received. It was found, first of all, that motion pictures are being used by at least forty professors of English in different sections of the United States. This is 32 per cent of the number of professors responding to the inquiry. It was also possible to discover the uses being made of motion pictures by these forty professors. Table 1 shows the frequency of four major uses mentioned.

TABLE 1

<table>
<thead>
<tr>
<th>Kinds of Uses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To develop photoplay appreciation</td>
<td>38</td>
</tr>
<tr>
<td>2. To motivate students</td>
<td></td>
</tr>
<tr>
<td>(a) in written composition</td>
<td>9</td>
</tr>
<tr>
<td>(b) in oral communication</td>
<td>6</td>
</tr>
<tr>
<td>(c) to do more extensive reading</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
<tr>
<td>3. To enrich background for literature</td>
<td>12</td>
</tr>
<tr>
<td>4. To vitalize instruction in</td>
<td></td>
</tr>
<tr>
<td>(a) Drama</td>
<td>6</td>
</tr>
<tr>
<td>(b) Theatre history</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
</tr>
<tr>
<td>Total extent of uses</td>
<td>78</td>
</tr>
</tbody>
</table>

Other uses were mentioned by a number of professors, but those indicated in the table were mentioned most frequently.

Motion Pictures Utilized

Summarizing the various purposes and techniques of film use, as reported by several English professors.

B. F. HOLLAND
The University of Texas, Austin

DORA G. NETTERVILLE
The University of Texas, Austin

A further study of the table will reveal that the least use made of motion pictures is that of vitalizing instruction in drama and theatre history; and that the greatest use made is that of developing photoplay appreciation. About 50% of the professors use motion pictures to motivate students in written composition, oral communication, and in extensive reading; and 30% use films to enrich their students' background for the study of English literature. Thus it appears that motion pictures are being used rather extensively in a number of important phases of English instruction.

Further quantitative data were compiled showing in general where motion pictures are shown to students. Of the forty professors using films, eighteen seem to depend upon showings in local theatres, sixteen secure them for use in their classrooms, or on their campi, and the remainder depend upon chance opportunities of students to see particular pictures. Thus there seems to be a determined effort on the part of most of the professors to make a rather formal use of motion pictures for the various purposes.

How Motion Pictures Are Used for Different Purposes

To determine the manner in which motion pictures are used for the variety of purposes indicated above, it was necessary to study the plans described by individual professors and to classify the methods in a variety of ways indicated below.

Development of Photoplay Appreciation in Special Courses. One plan for developing photoplay apprecia-
College English

tion, in operation in fourteen different institutions, is that of providing special courses for the study of the motion picture as an art form. One professor writes: "We try to understand pictures from the standpoint of their creators." Other professors aim at "the discriminative evaluation of motion pictures" and the development of "the ability to evaluate the current motion pictures as communicative arts."

A number of professors indicated the points of view from which photoplay appreciation is approached. A chairman in an Eastern university says, "The nature of this new art form will be discussed from the standpoint of aesthetics." A professor in the Middle West says that his course is a "study of the relation of the cinema to painting." A professor on the Pacific Coast describes an historical approach, in which he considers the outstanding stages in the progress of the art by making a survey of the contributions made from time to time by foreign producers and showing the effects their films have had on the American films. He also includes a study of the most important directors and technicians, illustrating with films appropriate for each stage of development. A professor in an outstanding college for women directs her students to the study of different types of films, including documentary, news, propaganda, and entertainment films. When possible, entertainment films are commented on in comparison with novels. Another professor emphasizes the narrative approach. He says, "We study story content, comparing with novels, plays, stories, studying how movies tell stories differently—cinematically." By using movies that "range and vary from the earliest primitives to contemporaries," he thinks that the "narrative approach is the most authentic, most useful to students." Still another professor develops "the theory used in the narrative film, the news reel, travel film, animated cartoon, and documentary film." For this purpose, he plans to use nearly 2,000,000 feet of films.

The scholarly type of instruction offered in some of the photoplay appreciation courses is suggested by a professor who requires his students to write "two full and detailed criticisms of current movies: one paper covering the various sources of reviews and evaluations of films; and a term paper on some phase of the motion picture, in which the student is particularly interested."

Other Plans for Developing Photoplay Appreciation. Eighteen chairmen and professors of English reported other plans besides college courses to develop photoplay appreciation. These plans include: (1) certain types of collaboration with local theatres for bringing good films to students and discussing the films in relevant classes; (2) sporadic endorsement of new pictures appearing in commercial theatres, with follow-up discussions; (3) recommendation of classic films with follow-up discussions in classes and informal seminars; and (4) showing of films in classrooms or at convenient places on the campus.

The most comprehensive plans reported were those that involved the projection of films in the classrooms or at convenient places on the campus.

Uses of Film for Motivation of English. Twenty professors, it will be recalled, reported the use of motion pictures for motivation purposes: nine to motivate composition writing, six to motivate oral communication, and five to motivate extensive reading.

Composition writing is motivated in both regular and special courses. One professor uses films as subjects for critical writing in freshman English. Another permits freshman students to criticize particular films, and to attempt scenario writing. Others permit students to use the content of films for theme subjects of various types. Special courses are offered from several standpoints. A professor in an Eastern university offers a course in which he teaches students "to prepare materials, factual and fictional, their own or others', for transcription into film." He also illustrates the principles of scenario writing by such films as "Let Us Live," "Oil for the Lamps of China," "Life of Emile Zola."
and certain scientific and travel shorts. The head of the department in a teachers college describes an advanced course in which students write on "independent subjects, such as 'The Vamp', 'D. W. Griffith', 'The Documentary Film', 'The Abstract Film', etc." "In some cases," he says, "the ability of the student has warranted permitting him to expand his subject for the purpose of book publication."

The motivation of oral communication is likewise effected in a number of ways. In one university, a professor uses motion pictures as a basis for conversation with students during conference periods. In others, films are used to motivate class discussion of important novels and plays. The students read the books and then see the film versions, or vice versa; then they discuss both in class. In still another university, "a film or selection of a film is shown at each class session" with discussion following the screening. "Persons prominently identified with several phases of motion picture making and related arts will guide certain discussions." In another college, films are used as "springboards for discussion" of the problems of youth, in what the professor describes as a "conversation laboratory." In this, films provide students with a certain amount of "common experience" before they launch into realistic, unrehearsed discussions of problems of immediate interest to them as college students. The procedure following in the conversation laboratory involves "first, the showing of a selected ten or fifteen-minute sound film which emphasizes some particular problem in social affairs, government, or personal relationships; and second, a discussion of many related topics suggested by the film."

The use of films for the motivation of reading is not extensive, except as reading becomes necessary for the preparation of definite assignments associated with motion pictures. In several instances, professors report that students who have seen film versions of books and plays often follow up their experience by reading. In one college, 450 freshmen were encouraged to see a film version of one of Shakespeare's plays, after which most of them read the play without being required to do so. More often, however, it appears that reading particular books or plays motivates students to see the film versions.

A plan to determine the effects of motion pictures on the motivation or reading was put into operation at the Southwest Texas State Teachers College. The plan involved the use of two groups of college freshmen who were studying the Pan American Republics for the purpose of investigative writing on subjects pertaining thereto. One group of these students saw a number of color films on the Pan American Republics, and discussed the content for the purpose of selecting theme subjects. The other group discussed the Pan American Republics for the same purpose but were not shown the films. A comparison of the reading activities of the two groups revealed that students in the film group did 20 per cent more reading and spent 20 per cent more time in the library than did the students in the non-film group. It also appeared that the students in the film group manifested greater interest in the subject on which they were writing. Though not conclusive, the data yielded by the experiment are impressive.

**Enrichment of Background for Literature.** Attempts to enrich the background of students for the study of English literature, reported by twelve professors, seem to be made chiefly at the freshman and sophomore levels. One professor reported that the English Department requests the showing of film versions of books that freshman students are asked to read. Another reports "that attempts are made to gear-in a showing of feature pictures with a reading of related books," in a freshman course in English. "Tie-ups have been made with 'Romeo and Juliet', 'Mid-summer Night's Dream', 'Of Human Bondage', and others." Several professors mention the use of films in teaching Shakespeare. Use was reported of the film "Master William Shakespeare" and of films showing Shakespeare's country and scenes mentioned in his plays, as well as film versions of his plays. One professor says, "Shakespeare has become much easier to teach since one can use movie comparisons."

The use of films in teaching courses in the humanities at the sophomore level was reported by a number of professors. One professor says that "several films on musical instruments which we use every year we consider more valuable than either demonstrations or talks or pictures. There are also some films on processes in art which are useful."

**Use of Motion Pictures in Drama and Theatre History.** Uses of Motion pictures to vitalize instruction in drama and theatre history, reported by eight professors, include comparisons of movies and acted versions of dramas and the writing of scenarios. In one course described, about one third of the time is given to the study and analysis of historical films and the rest of the course is devoted to comparisons of the acted version of a play with a film version of the same text, and to the analysis of film versions of other plays. A professor in the Southwest uses film to present the technical aspects of drama, including themes, modernisms, anagnorisis, peripeteia, scene a faire, etc. A professor from the Northwest writes: "Personally, I believe that eventually all instruction in drama will be based on moving picture presentation of the more important plays."

**Summary and Interpretation**

**Summary.** It has been found that motion pictures are being used by at least forty English professors: (1) to develop photo-play appreciation, (a) by offering special courses and (b) by using motion pictures in regular English classes; (2) to motivate students in writing compositions and in oral communication and to do more extensive reading; (3) to enrich the background of students for the study of English literature; and (4) to vitalize instruction in drama and theatre history.

It has also been found that motion pictures are being used in a large variety of ways at various levels of college teaching. Some professors follow informal methods, such as that of recommending certain pictures to students; and others make formal use of films in their classes, showing particular pictures once or several times. A number of professors offer special

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VALUES OF VISUAL AIDS IN READING

How visual aids help solve various problems in the teaching of reading in elementary grades.

LAWRENCE R. WINCHELL
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VISUAL education represents the grouping of educational materials or devices and an organized department of instruction which is based not upon subject matter, but upon method of presentation. This method has as its essential feature the fact that it belongs to one of the senses. Such a situation is without parallel. Visual education in the broad sense is not new. Models, maps, diagrams, pictures have been used for generations.

Much should be done to acquaint the child with his environment. Life can become full and rich only as far as the environment is understood and appreciated. Since sensory experiences constitute the basis for the child’s educational pattern, with visual experiences accounting for perhaps three-fourths of our sensory experiences, visual education or sensual aids contribute greatly to the ends of education.

By use of excursions and his own spontaneous exploration the child will learn a good deal, but excursions are too expensive and time-consuming to meet the need. Something can be accomplished by bringing objects into the classroom, but these possibilities are also limited. A more economical and rapid means must be used to give the child an acquaintance with his world.

For some unexplained reason it seems commonly to be assumed that the necessity of supplying substitute or vicarious concrete experiences is very chiefly present in the upper grades or above. It is important in the later grades, but our earliest and still most striking evidence on the poverty of the child’s acquaintance with the physical world is drawn from studies of the child on entering school.

Perhaps visual aids are thought to be less important for younger children because the materials which have been most widely used have not been designed for younger children. The captions on motion pictures, for example, cannot be read by them. This does not indicate that they are not of value, and that other suitable aids for children cannot be prepared. It simply points to the technical problem which needs to be solved.

That appropriate forms of aid to teaching may in part make up for the unavoidable meagerness of the child’s direct knowledge of his environment, has been repeatedly shown by careful scientific experiments. These experiments have shown that well-selected pictures, slides, stereographs, silent motion or talking pictures may add from 10 to 25% to scores on tests of subjects which have been studied. But still many questions remain to be answered concerning the contribution which may be made by visual aids to education in order to establish beyond a shadow of a doubt their great potential values. There is far more justification for visual aids than merely the enrichment they afford.

More pictures and better pictures interpret facts difficult for children to understand. Motion pictures provide greater reality and interest.
The Keystone Flashmeter in use in the classroom.

Exhibits are utilized to advantage. Posters are made by the children. Models produce greater understanding. Museum materials are collected and mounted for immediate study and future reference. The abstract and difficult ideas and discussions of textbooks are enlivened and re-interpreted in many different ways.

Reading Defects

No one theory can be used to account for all causes of reading difficulty. Children have been taught to read by a variety of methods. Educators are becoming increasingly aware of the situation and are seeking preventive procedures. A large percentage of disabled readers and the chief causes of retardation in reading is due to poor teaching and equipment.

Failure to read correctly is noted by the ophthalmoscope, a device for photographing the eye movements in diagnosing the pupil with reference to speed. One of the things noted is the failure to attack words from left to right. This movement, from right to left, during reading is referred to as a regressive movement. Poor readers make more regressive eye movements than do good readers. Some children reverse words and letters until 7½ yrs. of age. The implication is that reading should be postponed until the special orientation of letters and words have a significance for the learner. Even at this time he should be closely supervised to prevent this backward movement and confusion in the mind of the child.

Initial instruction for some children lasts until 7 years of age, and others identified by means of a reading-readiness test as prospective non-readers should have the initial period of instruction further delayed. Another key factor in avoiding confusion in the visual perception of word and phrase forms is that of meaning. A child who can be caused to feel that there is a real need for reading to learn is probably much more mature than the average 6-year-old. A reading program based on reading for meaning will embrace a system of word recognition, where context clues are heavily emphasized. Hence, reading attitude is complementary with reading for meaning.

Aids in Detecting Poor Readers

1. Faulty eye movements are symptoms of a poor reader.
2. The character of the eye movements varies widely with the attitude of the reader and the type of reading material.
3. Immature reading habits may be detected by measuring eye movements.
4. For normal children eye movements improve progressively.
5. Poor readers evidence many fixation pauses of long duration and many regressive movements.
6. Eye movements of good spellers and good readers tend to be systematic.
7. No visual impression enters the consciousness during the periods between eye fixations.
8. Pacing eye movement increases reading efficiency.
9. Increasing distance page is held from the eye causes increase in the number of fixation pauses per line.
10. Each child has a natural reading pace which for the same material is consistent from one page to another.
11. Irregular habits of perception, and brief and fluctuating attention usually result in the child being unable to read.

Learning to read, and reading efficiently throughout life depends primarily on the development of one’s visual auditory powers. Recently, in the Vineland schools we have given prepared reading tests which have given us a key to the visual-auditory abilities that the child will need if he is to read easily and well. The tests measured perceptual abilities to discriminate among words, letters and forms; vocabulary; comprehension and recall of meaningful material presented orally; visual-auditory association of learning; knowledge of common, casual sequences and general information.

We have made a study of the Keystone Flashmeter and after several demonstrations by experts in the field, we have started to use it. In our remedial reading we feel that if we can find some specific lack and drill on it, we will improve reading. It is often our custom to take poor readers from the classroom and give them drill with a specialist, who is usually a non-teaching

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Between the Lines

The production of this film provided our pupils with experiences which seem to have deep educational significance. Both as a motivating and an integrating force, the making of the motion picture stimulated the pupils in a cooperative effort toward attainment of a common goal.

The pupils were initiated into the project by being told that a serious safety problem existed and that they had been chosen to help solve it by producing a motion picture. The problem was then explained to them: namely, that pupils were crossing the street in the middle of the block and not at the corners.

As a result of many discussions the pupils decided that the film should be so made that other pupils as a result of seeing the picture might be more careful when crossing the street. The scenario or shooting script which appears below tells its own story.

SCENARIO

Scene | Action | Camera
--- | --- | ---
1. | Mother stops car across street from School. | 1. Fade into L. S. (from opposite side of street). Child is not at school. Children coming out of school.<br>2. L. S. (from roof). Traffic and children crossing.<br>3. M. S. Mother driving up.<br>4. M. S. Mother drives up and stops.<br>5. M. S. X coming out of school.<br>6. M. L. S. (from school door) Back of X and Mother in car.<br>7. C. U. X at curb. Says goodbye to friend across street—from curb.<br>8. M. S. Mother motioning child to corner.<br>9. Two angle shots M. S. of (a) girl saying goodbye and x starting across; (b) same thing—different angle car closer to x.<br>10. C. U. Wheels as car comes to abrupt stop.<br>11. C. U. Driver's face.<br>12. C. U. Mother's face—fade out slowly.<br>13. Fade into M. S. X in classroom and in slings and tape on face.<br>14. L. S. X surrounded by group of pupils as X gestures showing how accident occurred.<br>15. Title: "This is how it happened."<br>16. C. U. Teacher asks: (Title) "How could this have been prevented?" Several pupils make suggestions. Teacher writes these on blackboard.<br>17. L. S. X is not at school. Pupils' hands go up.<br>18. Several C. U. of pupils as they make suggestions.<br>19. L. S. M. S. Boys in classroom and in slings and tape on face.<br>20. C. U. Teacher asks: (Title) "How could this have been prevented?"<br>21. L. S. X is not at school. Pupils' hands go up.<br>22. Several C. U. of pupils as they make suggestions.<br>23. L. S. X is not at school. Pupils' hands go up.<br>24. Several C. U. of pupils as they make suggestions.<br>25. L. S. X is not at school. Pupils' hands go up.<br>26. Several C. U. of pupils as they make suggestions.<br>27. L. S. X is not at school. Pupils' hands go up.<br>28. Several C. U. of pupils as they make suggestions.

A detailed description of a school-produced film and educational values derived from the project.

WILLIAM S. WAGNER
Principal, Maumee, Ohio, Elementary Schools

1. Pupils make safety posters which teacher places around room.
2. Pupils construct safety demonstration table. White lines are drawn at street crossings.
3. Pupils write letters to mayor asking him if it would be possible to paint lines at school street crossings. Letters are collected and folded and then put in large envelope which is addressed to mayor. Letter is mailed.
4. Pupils make safety posters which teacher places around room.
5. Pupils construct safety demonstration table. White lines are drawn at street crossings.
6. Mayor in his office receives envelope; opens it and letters fall out on his desk. He reads each one, smiling as he does so. Mayor rises, picks up envelope and hat and leaves his office.
7. Mayor enters classroom and confers with group of children at demonstration table. They point out where they think lines should be painted. He nods and leaves classroom.
8. Mayor is back in his office. Picks up telephone and makes call to maintenance department.
9. Street Maintenance Department truck pulls up in front of school. Men jump out and take painting equipment from truck and begin painting lines at school crossing. Men complete job of painting.
10. Mayor in his office receives envelope; opens it and letters fall out on his desk. He reads each one, smiling as he does so. Mayor rises, picks up envelope and hat and leaves his office.
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29. Street Maintenance Department truck pulls up in front of school. Men jump out and take painting equipment from truck and begin painting lines at school crossing. Men complete job of painting.
30. Mayor in his office receives envelope; opens it and letters fall out on his desk. He reads each one, smiling as he does so. Mayor rises, picks up envelope and hat and leaves his office.
31. Mayor enters classroom and confers with group of children at demonstration table. They point out where they think lines should be painted. He nods and leaves classroom.
32. Mayor is back in his office. Picks up telephone and makes call to maintenance department.
10. Mother drives up. Child who was hit comes out of school with other pupils. She continues to corner. Stops—looks both ways—then crosses between the lines.

42. L.S. (from front of school) X's mother pulls up in car on opposite side of street from school.

43. M.S. X coming out of school.

44. M.S. Legs and feet of children crossing between lines.

45. M.S. from in front of X as she walks across street between lines. Only legs and feet are shown.

46. Title

Before Crossing

Look Both Ways

Then

47. Cross

Between the Lines.

Length of film 300 ft. 16mm. Silent.

Looking back on the project the following results can be attributed to it, either directly or indirectly.

First: The cooperative effort put forth by the pupils is by far the most important result of the project. The pupils had much practice in working together effectively toward accomplishing a worthwhile goal.

Second: The value of the film itself is not easily measured. It has been shown and discussed in the Montpelier school with favorable results. There has been a definite improvement in the traffic problem outlined in the script since the showing of the film. Its value to schools in general will be determined in the near future when it will be available for showing.

Third: The pupils' contact with the mayor demonstrated to them that one of the functions of public officials is to serve the community. The pupils actually experienced a lesson on government which no amount of reading could have given them.

Fourth: The public relations value of the film is another factor not easily measured. It seems safe to say that the public in our community has a better understanding of school activities as a result of having seen the film.

Fifth: A much greater interest on the part of the pupils was shown toward the traditional subject matter.

A. English activities.

1. In writing their letters to the mayor the pupils needed to know sentence structure, punctuation, spelling, and letter form.

2. The pupils added to their vocabularies by adding such words as casualty, traffic, caution, pedestrian, zone, etc.

3. The pupils needed to read in order to assemble facts relating to safety.

B. Numbers.

1. In constructing the safety demonstration table it was necessary for the pupils to be familiar with the number processes involved.

C. Drawing.

1. In the making of the safety posters the pupils needed to know how to print and how to arrange the printed words to the best advantage.

Sixth: The pupils of the third and fourth grades of the Montpelier school have learned safety facts and acquired safety habits which they should retain for life.
Education Through Socially Useful Work

The terms "educational field experiences" and "field trips" are usually considered completely synonymous. In most cases the only educational work conducted under school auspices outside the school walls is guided field trips; yet within recent years there has been a conscious effort in some institutions to give pupils and students an opportunity to have other types of field experiences under the guidance of the school. For example, some school systems have conducted surveys of their communities, the bulk of the interviewing and fact-finding being done by young people. In other cases, community-wide clean-up campaigns have enlisted the energy of school children, and the schools have made use of the opportunity for educational purposes.

At first blush many of these innovations have seemed rather daring. There has been a feeling, in many cases, that children are not capable of bearing the responsibilities which such projects entail. Even the appearance of *Youth Serves the Community*, by Paul Hanna, citing numerous instances of socially useful projects by youth has failed to be convincing to many school people, yet a little thought will bring to memory the fact that in societies less complex than our own the principal means of education has been that of gradually inducting the young into the responsibility of adults by means of having them do socially useful work on a gradually increasing level. Almost from the time they can walk they are helping the older men and women, and by giving such help are acquiring the experiences and understandings which will fit them to do adult work. Until mass production methods reduced the importance of artisans, many young people received their vocational education through the apprenticeship system in which again they learned by doing work which was socially useful.

Because the activities of children in such systems are valued by the adults, the children early receive the satisfaction of doing something which everyone regards as worthwhile for its products. In contrast with this the incentives for most school work seem highly artificial. The products of classroom activities are seldom valued in and of themselves by adults.

The attempt to provide educational experiences involving socially useful work has taken many forms. The most striking experiments in recent years have been associated with the programs of the Civilian Conservation Corps and the National Youth Administration. In these programs areas have been reforested, erosion control projects built, recreation activities fostered, and, in the work experience centers, products needed by public institutions have been built. The young people served by these organizations have learned much and while doing so have had the intense satisfaction of knowing that they were doing something which was important. The success of such programs has led to widespread support for the idea of establishing work camps for young people.

Potentialities of the "school journey" as a valuable service to the community as well as to the school.

**WILLIAM W. WATTENBERG**
Chairman, Committee on Field Experiences
Chicago Teachers College

However, there is no reason why education through socially useful work must be relegated to non-school agencies in such special situations as a camp provides. As already indicated, some schools have made progress in this direction. And this may well be merely a beginning.

Because of the defense emergency, in many communities there will be tasks which badly need doing, which school children will be able to do without displacing gainfully employed adults. By being alert to such opportunities the schools will not only be rendering a great service to our country in the present crisis, but will also be providing for children an opportunity to develop desirable behavior patterns by engaging in socially useful tasks.

How such a program may come into being may be illustrated by recent developments in the community studies course at the Chicago Teachers College. This course had always relied heavily upon visual aids of various sorts to give the students a first-hand understanding of community problems in Chicago. Not only had moving pictures and slides been used, but guided field trips acquainted the students with conditions in various neighborhoods, particularly in blighted areas of the city. In order to gain additional first-hand experience, in former years students performed a comparatively small amount of observation and participation in the work of settlement houses, boys clubs, and other social agencies. The students enjoyed this very much and the experience they had with children helped them to develop rich insights into the problems of children in such neighborhoods. Because of this the faculty felt that an enlargement of this part of the program would be valuable.

This year the opportunity to do so presented itself. Many of the social agencies in the city had been depending upon W.P.A. workers as recreation leaders. Many of these workers have obtained employment in defense projects of various sorts. Those who are left on the project are, in a large number of cases, more sorely needed to staff recreational facilities for soldiers, as part of the morale aspect of the defense program. This withdrawal of personnel threatened many social agencies with the necessity of drastically curtailing their programs which, in turn, have been relied upon by many neighborhoods for the prevention of delinquency and for the maintenance of well-rounded leisure. If the students of the College could offer their services and fill the social vacuum created by this shifting in the recreational personnel, they would, in effect, be manning the second line of home defense, the morale build-
Values of Visual Aids in Reading
(Concluded from page 422)

principal, in a small clinic group. In my experience the majority of poor readers are poor because they lack many or all of the fundamental visual-auditory abilities basic to good reading. They do require clinic help, but most of all they need a program of enriched living with specific training in the development of the fundamental sensory abilities.

The Use of Visual Aids in Reading

Of all the physical factors we recognize vision and hearing—

Reading means visual stimuli being received and interpreted. It is only lately that school authorities have been adequately trained and equipped to determine visual readiness for reading. Since reading is based on sensory experiences the child who has had a greater number of these experiences will be the better reader. Some of these experiences may be first hand or real, others may be vicarious. For the sake of convenience, we will classify them under the following headings:

1. **Real**—a) excursions, b) construction, c) social experiences, d) practical experiences.

2. **Vicarious**—a) stories, b) pictures, charts, c) discussing experiences, d) motion pictures and slides.

Experiences when read by the child will make the material more meaningful. It may be said that experiences are of importance to a particular group of children if they extend and enrich knowledge, or change habits for the better. Vicarious experiences gained from pictures should be used in broadening meaningful concepts. But only the vicarious experiences which satisfy the criteria already set up for real experiences and which definitely aid in preparing children for later reading experiences, should be considered.

A fine example of vicarious experiences is found in the use of pictures to teach beginning reading. Visual appeals by presenting objects, models, charts, photographs, stereoscopes, lantern slides, and motion pictures furnish the pupil with impressions for which language is simply a symbol. Without the first hand experiences words are meaningless.

**Real Aids**

Excursions provide a means of enriching the experiences of pupils out of which school activities become more meaningful. Trips are a means of bringing the outside world into the schoolroom. Through this contact, reading and other subjects of the elementary school curriculum take on life and become more meaningful to children.


b. Activities—1. aquarium (outdoor)—charts and stories made by children, 2. school library—books borrowed from large library and exchanged weekly. 3. vegetable and flower garden—charts and stories telling what is being done. 4. museum—specimens brought in by children.

**Vicarious Aids**

A. Slide—The elementary pupil-made lantern slide holds a very real position in the field of teaching aids. He is not merely exposed to an experience—he is part of it. The whole experience is calculated to make a lasting impression on the child, and is thus an aid to reading readiness.

B. Motion pictures—Many students experience difficulty in school because of the lack of adequate cultural background as a basis of experiences to understand the school activities. There are many who have little or no experience with reading or travel. Here the motion picture is of service.
RESPONDING to the impulse of the time was also the Young Women's Christian Association. The outstanding early effort there was the three-reeler "The High Road," directed by Carlyle Ellis. He made for the same client the useful three-reeler on proper shoes called "Foot Folly." Then the Boy Scout Foundation in New York was represented with several reels on its especial interest, partly with the idea of impressing its own members with its ideals, but probably more to enlist the interest of needed benefactors. The drive for funds with which to support these admirable private arms of social service, was necessarily constant, so naturally, an instrument as effective as the motion picture in demonstrating what is being done with money in hand, was speedily developed with that object prominently in mind. Such was the aim of films made by the Modern Woodmen of America through the production facilities of the Ray-Bell organization; such was the intent of the films actively distributed during these years by the Order of Free Masons from the Masonic Temple Building in New York.

The officer in charge of this last-named work, begun about 1921, was the Executive Secretary of the Bureau of Social and Educational Service of the Grand Lodge of New York, known less pompously to his friends and associates as Sidney Morse. He was really an exceptional person. In the forty-seven years which had elapsed since his birth at Ledyard, Connecticut, he had had a varied experience in many widely separated localities. He had attended Massachusetts Agricultural College and Amherst; he had been connected with a publishing house at Richmond, Virginia; from 1900 to 1903 he had been associate director of the Home Correspondence Schools at Springfield, Massachusetts; 1904-1908 he had been editor and manager of the book department of Success Magazine, following which he had become managing editor of Craftsman and educational director of People's University at St. Louis. In 1918 he had been sent to France as a liaison officer coordinating records of the Y. M. C. A. and the A. E. F.—all this before taking his place at the Grand Lodge in 1921. After 1929 Sidney Morse became vice-president and general manager of the Educational Publishing Corporation, Darien, Connecticut, which issues The Grade Teacher and St. Nicholas magazines. He died January, 1939.

Most of his films were of visits to Masonic institutions, of parades and other typical Masonic events. Lacking funds for more ambitious productions, he was unable to realize his dream of a really adequate program. He used to watch with great interest, however, the many motion picture activities of other tenants in the building, hoping, no doubt, to find in what they were doing, some suggestion for betterment of his own list. We all knew Sidney Morse, respected and liked him and welcomed him at our councils. One day, out of a situation involving J. E. Holley, Fred Wythe and F. J. Romell, who was on from Cincinnati representing Albert Krippendorf, he hit upon a plan to produce a real Masonic film with ritual significance. From somewhere—I suppose that it was specifically out of the luggage brought back by Dr. Holley from Palestine—came five or six reels showing a reconstruction of the Temple of Solomon. They comprised photographs, made from various angles and distances, of Dr. Schick's celebrated model on exhibition in Jerusalem. It was believed by the schmears that this material might become the basis for a specialized entertainment for which the various lodges would be eager and happy to pay.

The general structure and proposed treatment developed rapidly in the fertile mind of Wythe, who planned to interweave various symbolic scenes with the shots of the model. I was assigned to supervise such production as might be necessary, and to cut, title and edit the whole. I was not a member of the order, but I knew enough about the subject to realize that every alleged detail in the design of the Temple of Solomon has a mystic meaning for this brotherhood. Merely to tell the story of the structure to any earnest Mason is to give him an inspiring message charged with meaning. Impressed with the possibilities, I read up on batches of literature sanctioned for the eyes of the uninitiated, and tried to interpret in picture forms the symbolic ideas cautiously conveyed to me by high officers of the order.

In accordance with the general intention to make a very little money go as far as possible, and taking advantage of the mystical indefiniteness of the subject to hide our poverty in deep impressive shadows, we photographed a sand-covered board on the roof of the Masonic Temple Building to illustrate the ancient desert tents. With a camera I built, with scissors, paste and cardboard, a miniature set of imposing doors which slowly opened to reveal the Holy of Holies. This consisted of the letter "G," back of which we gradually moved forward a naked electric bulb, and so presently glared out the holy light to the spectator with the idea of eternal light.

In an interval, Larry Fowler, the cameraman, took three or four volunteers up to Fort Schuyler, draped them in bedshirts and crepe hair, and marched them up and down the huge granite stones of the battersies to represent workmen doing their daily stint on the temple. It was an old idea. These same blocks had served long before as the walls of Jerusalem for an early theatre "Star of Bethlehem." Somewhere, too, we photographed a large mirror in a strong light to show how ancients told the time, and I made a series of white sketches of signs of the zodiac on a black ground to be turned past the tip of a pyramid in illustrating the presumed method of the Egyptian high priest when he measured the limits of the year. Redistributed dresses and whiskers enabled us to show "three travelers on the shore"; a mound built at the foot of a small tree indicated the grave of the architect, Hiram Abif; and what I took to be his death was envisioned by some stock shots showing a tall tree in the forest struck by lightning. Results were duly cut into the assembled excerpts of the Schick reels, and there was a generous interlarding of long, solemn titles, expressed in what we now profanely call four-dollar words.

Looking backward, I suspect that there may have been plenty of sheer hokum about this shoestring production, but high officials approved the film enthusiastically, slaapping another on the back in great delight over references which were "all Greek" to me; and I understand that the later exhibitions actually made some money for the backers.

In the propaganda groups one does
not readily include public museums, but such institutions on days, enjouing tax and tariff exemptions because of their avowed usefulness to mankind, and needing added funds for many purposes, feel obliged to publicize their services. But publicity is only a minor aspect of films as used by the Metropolitan Museum of Art in New York City. There motion pictures have become an extension of the institution itself, carrying photographs of its treasures to places throughout the nation where eager students cannot otherwise enjoy the benefits. In all events, that is the theory.

It was about 1924 when this activity of the Metropolitan Museum was pronounced. Conspicuous among the names of those responsible for the development was that of George Dupont Pratt, a trustee. It will be remembered that, when Allen Eaton, of the Russell Sage Foundation, was promoting his enterprise called the Pioneers of the West, the burden of support came from George D. Pratt. What have wondered if that experience did not in some measure induce Pratt to this later activity. The idea gains color from the fact that Eaton was in close touch with the Museum work from its inception. On the other hand, George Pratt himself had been an amateur motion picture cameraman for a number of years, especially in photographing wild life. For several years he was in charge of game conservation in New York State. Through Mr. Pratt's plan was to dramatize objects in the art collection as to compensate for their inanimateness and to stimulate appreciation of their associated cultural ideas. To produce a few preliminary subjects of this sort experimentally, the Museum authorities engaged the very competent and worthy Major Henry M. Dawley. What he produced for them included "The Gorgon's Head," in three reels, a version of the story in Hawthorne's Twice-Told Tales, and "The Spectre," described as "a New England legend." There were also more frankly expositional films, "A Visit to the Art Galleries," in two reels, and "Firearms of Our Forefathers," in one. The program was swollen by the addition of Eaton's "The Making of a Bronze Statue," "Vansantasea," a two-reel adaptation of an episode in the earliest extant Indian drama, "The Boy Coy," prepared and produced by the School of Art of Pratt Institute in Brooklyn, and four reels engaged, no doubt, from the Museum's archaeological stations abroad, called "Egyptian Monuments and Native Life." "The Etcher's Art," which appeared among the available subjects later, was produced by the Museum of Art in Boston, with Frank W. Benson providing the principal illustrations.

If the Metropolitan Museum had its problems in sequestering funds for its own films, another great popular educational resort westward across Central Park, the American Museum of Natural History, seemed to enjoy a happier situation which made its supply of motion pictures virtually inexhaustible, even ig-

The Educational Screen

Without meaning to do it, Theodore Roosevelt showed how museums might obtain educational films by cooperating with the big game expeditions.

Education makes about thirty million contacts with individuals annually. The Department curator at present is Dr. C. Russell. The Museum began using films in its lectures to school children in 1911.

It is the motion picture work which is our present concern, and here the notable figure is Dr. Grace Fisk, Ramsey, associate curator, who has done so much to organize and conduct the efficient Museum motion picture distribution. Dr. Sherwood had plenty to do most of the time of his directorship in setting up and maintaining policies, and of necessity the development details was in the hands of assistants. Mrs. Ramsey was a very dependable assistant, attributes such success as she has had to her early training as a teacher, for through that she has known and appreciated school requirements and the educational ambition of the school.

When the First World War began, Mrs. Ramsey was teaching science in a high school at Chautauqua, New York. Caught in the patriotic fervor of that stirring time, she joined the War Canteen. Returning to New York, she was engaged by the Museum in 1919 to take charge of lantern slides. A part of her duties was "sight conservation," working in the Museum's celebrated training of the blind, in which connection she lectured frequently in the large auditorium, sometimes to audiences of approximately 1,500 persons.

The usefulness of motion pictures for Museum extension work became more and more evident to her, although it was clear, also, that for a comprehensive program the films at first in hand were insufficient. This conclusion came in the period when the Bureau of Education of the U. S. Department of the Interior was dividing its collection of motion pictures among the thirty-five volunteer distributors over the country. Several museums were in that list. Mrs. Ramsey became impressed especially with opportunities to regulate the reeds of the Bureau of Mines. Accordingly the possibility was realized. In 1926 she visited Canada, where she found more valuable material in the library of the Canadian Government Motion Picture Bureau. The Museum of Natural History was therefore commissioned to distribute those films in the same manner.

Through the Museum Department of Education today, of course, there are many other subjects to be obtained. The stock is classified as: Athletics, Biology, Chemistry, Economic Geography, Domestic Science, Physics, Photography, General Science, Health and Hygiene, Music, Nature Study and Elementary Science, and Social Studies. Borrowers pay for transportation both ways, plus a fixed charge per day of fifty cents for each silent reel, and a dollar-fifty for each in sound. Responsible educational institutions are offered an especial rate of twenty-five sound films at twenty-five dollars, if ordered at one time.

Discovery of the opportunities and advantages in expedition sponsorship probably belonged more particularly to the
Smithsonian Institution, of Washington, D. C., which arranged the celebrated African expedition of ex-President Theodore Roosevelt in 1909, although motion pictures did not figure in its original agreement. When the doughty T. R. left for Africa, he resisted all offers of motion picture cameramen to accompany him because of the earlier still-picture contracts; but Cherry Kearton, a London newspaperman, took a chance and followed the expedition with a filming outfit. Teddy could not resist a go-getter like this, and welcomed him in camp. Kearton cranked numerous scenes which were brought to the United States and sold to the Motion Picture Patents Company. They were edited in the Kalem laboratories to two reels—the "program picture" length of that day—and released, beginning April 18, 1910, through General Film. European distribution was arranged by Kearton, himself.

However, the officials of the Smithsonian Institution quickly learned the value of films, as records if not actual history for the educational force, and in later years they acquired many valuable subjects. Most of these are not nearly well enough known, probably because funds are not always available for circulation and because some owners of films have complicated reservations as to their use. Of course, there is expense attached to picture distribution, just as there is to the exhibition of fine museum specimens that are frequently stored away in the basement pending the release of funds.

I have happened to see Smithsonian film properties from time to time in private projection rooms while the material was being edited. For example, I recall with pleasure seeing the extended footage brought from Dutch New Guinea about 1926 by Matthew W. Stirling, the scientist who is now of the Institute's Office of Research of the Bureau of American Ethnology. That fascinating study of primitive pigmies was made with the backing of the Smithsonian and the cooperation of the Netherlands Government. I had the additional privilege of hearing Dr. Stirling talk informally about his trip as the then unedited passing pictures recalled various incidents to his mind.

One supposes that expeditions of this sort, with their scientific specialists, chartered ships, airplanes, automobiles and companies of hundreds of native porters and guides, must cost huge sums to the modern day, but it is astonishing to learn at how low a figure many of these adventures may be financed, provided that the persons to be hacked are qualified explorers. Contracts for theatrical release of motion pictures taken, rights to first-hand narratives sold to newspaper syndicates, elaborate aids from government and national tourist societies to their off-the-beaten-path possessions, advertising testimonials of various sorts—all these bring the out-of-pocket costs rapidly down. Just lately a friend was telling me that his recent sojourn in the heart of Africa, lasting two full years and resulting in many valuable reels of undetermined earning power, cost him only about $3,000. The rest of the expense was compensated for through some forty-five contracts for incidental services of the kind mentioned.

Of course, the great museums have a dignity to maintain, so they are obliged to forgo some opportunities like these and to pay the larger bills directly. It would be absurd thus to minimize the costs of the Gobi Desert expeditions of Roy Andrews, lately the director of the American Museum of Natural History, although there is no doubt that sale of profitable "log-rolling" rights somewhat lightened the financial burden. Andrews, to be sure, brought back an ample supply of films photographed on his later trips. His best known cameraman was James B. Shackelford. He shot the Gobi Desert series.

January 13, 1924, the American Museum of Natural History announced that it had made an agreement with the Martin Bros. Antarctic Expedition Corporation to show all the films made by the Johnsons during twenty-six years of world travel. Looking at the record, one finds that F. Trubee Davison, president of the Museum, is vice-president of the corporation, and James L. Clark, vice-director of the museum and secretary. Clark, it may be mentioned, in addition to being lecturer, explorer, big game hunter, taxidermist and animal sculptor, described himself as a motion picture engineer. In the last named respect he was long a moving factor in the Akeley Camera Company.

Today the motion picture cameraman is an indispensable member of every scientific expedition, and one may understand how a large institution of this sort may quickly build up an imposing film library by glancing with me at a converted classroom from the New York Times of November 20, 1934. Therein are named the chief parties currently in the field for the American Museum of Natural History, F. Trubee Davison, president, speaks of the discoveries and researches of Dr. Barnum Brown in Wyoming; the Scarritt-Simpson Patagonian expedition; the Whitney South Seas expedition; the Bolivian sojourn of Dr. Wendell Bennett; Dr. Frank Lutz's studies in Colorado and Northern Arizona; the Van Campen Heiner and Archbold parties respectively in the Zimapampa, Wyoming, in New Guinea; the Vernay-Hopwood-Chindwin expedition soon to leave for Burma, "and others." Arthur S. Vernay, whose name has appeared in connection with many interesting expeditions, is a trustee of the American Museum of Natural History; so is W. Douglas Burden, who produced the remarkable "Silent Enemy," a film acted by the Ojibway Indians in their own Hudson's Bay country.

The distinguished arctic explorer, Donald MacMillan, headed various expeditions for the Field Museum of Chicago. The Oriental Institute of the University of Chicago has made films at its several archaeological stations in Egypt, Iran and elsewhere on sites of ancient civilizations, principally under the supervision of Charles Breasted, son of the late James H. One needs but to follow through the records of important scientific institutions to find a wealth of material. I do not attempt it here because, so far as this narrative is concerned, the essential facts are already made sufficiently clear.

The Busy Government

The apothecary of the "customer" story is in the case of the United States Government. The reader has been acquainted in earlier pages with some of Uncle Sam's first steps to use films, but the great efflorescence here, as in other places, was after the First World War. A summary of the film activities of the Government in 1920 was given in July of that year by Fred W. Perkins, assistant in charge of motion pictures in the Division of Publications of the U. S. Department of Agriculture, before the National Academy of Visual Instruction in session at Madison, Wisconsin. Mr. Perkins reported on the progress of such undertakings being carried on by the Signal Corps and the Army Recruiting Division and the Marine Corps of the Navy Department; the Bureau of Education, the Reclamation Service, the National Board of Park Service, and the Bureau of Mines of the Department of the Interior; the Public Health Service, the War Risk Insurance Bureau of the Treasury Department; the Bureau of Standards of the Department of Commerce, and the Department of Agriculture, where the motion picture work of seventeen bureaus was united under a single head.

Motion picture work of the Government, resembling in this respect its elaborate and long established activity in still photography, was not by any means then, any more than it is now, exclusively for public information. The purpose intended frequently just for the fuller guidance of Government scientists and engineers who were employed on large projects, or for the training of operatives in various specialized lines of service. And, as the nation's circumstances changed, so did the Government's picture requirements expand and contract. In time of war the film supplies of Army and Navy grew out of all ordinary proportions; in time of peace the special interests of the Administration in power likewise reflected the character and the scope of related official departments.

The Department of Agriculture received the first healthful encouragement in the Government motion picture plan doubtless because the people of the United States of America were then traditionally and preciously an agricultural nation. At about the same time, it was reported that the motion picture divisions of most foreign governments also are strongest in films designed to educate their people in tilling the soil and in animal husbandry.

(To be continued)
Among Ourselves

The New England Branch of the Division of Visual Education of the N. E. A. convened in a special meeting at the University of Maine Saturday morning, November 15th. Leading speakers were Professor Abraham Krasker, Boston University, who discussed “Recent Tends in Visual Education”; James Brewster, head of the Harvard Film Service, Harvard University, whose topic was “Educational Recordings”; Donald W. Smith, University of New Hampshire, who conducted “A Question Box on Audio-Visual Aids,” and Harold W. Louder, Maine Central Institute, who demonstrated “Classroom Methods in Teaching with Sound Films.”

Dr. Abraham Krasker was a speaker on the New England Association of Teachers of English program, November 8th, at Springfield, Massachusetts, discussing the subject “Using Teaching Aids Effectively to Improve the Teaching of English.”

Dr. Krasker reports that Boston University is now offering a program which affords an opportunity for students to major in Visual and Audio Education. The following courses are being given this semester: Visual Aids in Occupational and Vocational Guidance, The Use of Teaching Aids, Visual Aids in the Sciences, Methods of Teaching Science, Problems in Visual Education, Preparation and Projection of Teaching Aids. Courses planned for the second semester, beginning February 4, are: Visual Aids in Health and Physical Education, Visual Aids in the Social Studies, Visual Education-Management; and the last three included in the first semester’s program. All the courses are conducted by Dr. Krasker.

The placement of graduates of the Department as directors of Departments of Teaching Aids in school systems warrants the establishment of a major.

Another news item to reach us from New England is the establishment of a film library at the University of Connecticut at Storrs, to serve the schools of that area. That institution also plans to offer courses in Visual Education.

Mr. Wilber Emmert presided at an Audio-Visual Education Conference held at State Teachers College, Indiana, Pennsylvania, Saturday morning, November 1, for member schools of the Indiana Film Library. “Effective Utilization of Instructional Sound Motion Pictures in the Classroom” was the theme of the session.

Miss Margaret V. Girdner is the director of the newly organized department of visual instruction for the San Francisco schools. She is cooperating with Boyd Rakestraw of Berkeley, and Gardner Hart of Oakland in planning the program of the winter meeting of the D.V.I. at San Francisco in February, to be held in connection with that of the Association of School Administrators.

Dr. John E. Dugan, Principal of Haddon Heights Schools, New Jersey, has been appointed President of the Visual Education Section of the World Federation of Education Associations. Dr. Dugan is a member of the Committee on Motion Pictures of the Department of Secondary Education of the National Education Association and is the author of several motion picture study guides.

The Texas State Department of Education has set up a Division, with a director in charge, to supervise and develop visual education and radio and similar activities on a state-wide basis. Other states having directors of Audio-Visual Education are Ohio, New York, Montana, California, Louisiana, and Virginia.

Copies of the Proceedings of the Fifth Annual Southern Conference on Audio-Visual Education, which was held in Atlanta on November 13-15, 1941, are available for purchase at $1.00 each. Included in the Proceedings are the principal addresses given at the Conference, and complete stenographic transcripts of seven group forums which were conducted during the Conference by leading audio-visual educators.

Orders and remittances should be sent to the Southern Conference on Audio-Visual Education, 223 Walton Street, N. W., Atlanta, Georgia. Postage is free on all orders which are accompanied by remittances.

The publication, News, from the Bureau of Audio-Visual Aids, Indiana University, reports the following:

Carl A. Benz and C. M. Seddelmeyer have prepared a mimeographed announcement entitled “Information for Operators.” The announcement points out clearly the responsibilities which must be assumed by students who expect to perform the projection duties of a school, and the procedures to be followed in handling showings. If you would like to know how Mr. Benz and Mr. Seddelmeyer are handling the situation in their school, contact them at the Hammond High School, Visual Aids Department, Hammond, Indiana.
The Literature in Visual Instruction

EXHIBITS


Rural educators, in their modest, unsung way, are often responsible for introducing and effectively using vitalized teaching aids. Of course, this is the result of sheer necessity, since the children in rural areas have so little first-hand experience with the world at large. On the other hand, they have access to many of the "visual aids" which large-city schools must borrow.

In this article, we learn about a very workable exhibit library that has grown as the result of one man's resourcefulness. From crates or simple wooden containers he has fashioned scenes of foreign life, American Indian life, and habitat groups for plants and animals. Workers on a WPA project have helped to increase the number of dioramas and today the teachers of Box Butte County have ready access to 73 subjects from which to choose. Each exhibit is accompanied by a teacher's guide and reading material for pupils of each educational level. This is a very helpful article, and one which should lead to similar projects in the most underprivileged community.

Radio

Adapting the Radio to the Classroom—Allen Y. King, Cleveland—Social Education, 5:412 Oct. 1941

This is a progress report of the now-famous educational broadcasting program of the Cleveland Board of Education. The schools of that city have the good fortune to have exclusive use of an FM station. Three principal advantages are seen in maintaining a school station. First, radio broadcasts can be planned to fit school schedules. Second, there can be pauses to permit classroom activities. Third, programs do not have to appeal to the general public. Programs seem to be most effective when not more than 15 minutes in length and heard only once a week. Broadcasts are prepared with the aid of a classroom teacher in each field. A teachers' manual is prepared for each program. Each script is tried out with children first. Radio technique varies. The exposition broadcast is desirable for some kinds of lessons; dramatization for others. Wherever possible the listeners carry on activities in the classroom. Sometimes outside experts are brought to the microphone.

Lantern slides, often especially made for the broadcast, are used in each listening room. These supplement the broadcast admirably where maps, diagrams or cartoons are needed.

The assistant superintendent in charge of radio for Cleveland, H. M. Buckley, has summarized the values as follows: 1) Radio is an important means of communication; 2) It may present auditory images more effectively for some persons than do printed symbols; 3) It improves some phases of school work; 4) it becomes an excellent medium for teacher education and an aid to supervision; 5) radio lessons, with silent intervals for activities, increase effectiveness; 6) radio programs of a local nature may be supplemented by national programs.

The persons engaged in educational broadcasting have noted that pupils are much more interested in radio; that they want to continue to listen; that most teachers use radio, even though listening is optional; that there are requests for repetition of broadcasts that pupils learn from the broadcasts; and that teachers are learning new techniques.

Photography

Featuring Photography—John B. MacHarg, Lawrence College, Appleton, Wis.—National's Schools, Nov. 1941 p. 43-45.

An appeal, (well-documented and most convincing) for the teaching of photography as an art form throughout the school.


This article should be interesting to those who are looking forward to three-dimensional photography at low cost. It describes an experiment by the Douglas F. Winnek Laboratory, Mt. Vernon, N.Y., using an extension of the moving-picture camera technique for obtaining three-dimensional effects without use of viewer. The feature of this experiment is that it permits the study of depth and motion by means of a single composite stereograph.

PERIODICALS

Sight and Sound, Summer 1941, Vol. 10 No. 38. British Film Institute, 4 Great Russell St., London WC1.

It continues to amaze an American reader that so quiet and dignified a publication can come from a war-torn land. The British have a reputation for being matter-of-fact in the midst of turmoil. The British Film Institute, true to this spirit, is still interested in such innocuous themes as reviewing mediocre American films, and reporting Canadian and Australian film production.
Two articles, however, stand out as important contributions for American educational film-makers. Basil Wright analyzes the service of the documentary film group in producing films for general education. His article, "Realist Review" comes as a welcome supplement to the British war films already being circulated here. He tells us that the documentary units serving many agencies, are busier than ever before.

"One or two facts, however, have already become clear," writes Mr. Wright. "The documentary experiments in dramatic technique have had a very great value, not only in the . . . longer productions, but also in the . . . five minute films . . . Clearly the documentary approach, based on the observance of reality and on many years' experience of handling of ordinary people, is in a position to give an impression of actuality to the public; and, more importantly, to make the public feel that the subject dealt with is really a part of their own lives and responsibilities, and not a fictional episode divorced from their own experience."

The article by Avelino Ginever (p. 35) is entitled, "Principles of Technical Film Production," for it deals with the principles of making and using educational films. Among the principles are:

1. The film subject should be appropriate to the medium. If a subject can be taught without the aid of visual education, then a film is redundant. 2. A film should be built not to tell a story, but to make a point. There should remain questions for discussion with the aid of the teacher. 3. A film can have great interest, even though it is educational. "There is drama even in a nut. There is no need to strain for effect—the drama is there waiting to spring into animated life on the screen, if you will possess the elements of humour. 5. Technical treatment should not get in the way of the story. 6. A film demonstration should plant the seed for further study; it should arouse curiosity and a desire for knowledge. 7. Above all, simplicity should be the keynote. But, this should be planned simplicity.

The threat to the future development (of educational films), concludes the author, is now from within. Poor craftsmanship, inefficient production, static technique endanger the normal evolution of the educational film toward its proper function in our national life—an influence as powerful as the printed word.


The biology teachers of most urban schools are way past the era of "shall we or shall we not use visual aids? They've been making and using them for many years. This issue of their magazine, therefore, plunges into specifics—

For example, Mary D. Rogick tells how students can apply their art ability, plus their sense of humor, to create "Car- toons and Simple Sketches as Visual Aids." (p. 45-48). The important things to remember about science exhibits are summarized in "Science on Display" by Addison Lee. Other articles are equally suggestive of simple projects for an integrated high school curriculum.

BOOK REVIEW

How to Make Animated Cartoons—Nat Falk—Foundation Books, New York City, 1941. 79pp. $1.49.

There has been much publicity given recently to the great skill and elaborate planning needed to produce the charming animated cartoons of the Disney, Fleischer, Terry-Toons, and other studios. Mr. Disney himself has exploited the field in no small degree, through his "Reluctant Dragon" in which Robert Benchley tours a cartoon studio to get a story filmed. At about the same time a traveling exhibit was displayed in museums around the nation, showing how animated cartoons are made. Mr. Falk's book is a valuable supplement to these demonstrations. It permits the enthusiast the luxury of browsing in private through the history of the industry, or to dabble in making creatures of his own imagination.

How to Make Animated Cartoons will meet the needs of a varied audience. For example, it presents documentary notes on the history of cartoon-making that has not previously been recorded in a single volume. In this respect it is similar to the article currently running in Educational Screen on "Motion Pictures—Not for Theatres." Drawings and interesting format help to make this history very readable.

Another chapter serves as a directory to would-be cartoonists, giving addresses and brief description of each of the important cartoon-producing studios. There are seven large studios: Disney, Fleischer, Terry-Toons, M-G-M, Walter Lantz, Leon Schlesinger and Screen Gems. Most moviegoers recognize these studios only by their products, so illustrative drawings are included to help us.

The chapters on "How Animated Cartoons Are Made," and on "Character Creation" are highly recommended to high school students and grown-ups who want a better understanding of this art form. Mr. Falk has an excellent manner with his pen. He uses simple sentences and non-technical language. He has sought cooperation from one of his fellow- artists to describe how characters were born. Walter Lantz tells how Andy Panda came to be. Andy grew out of a three-page spread in Life Magazine on a panda couple at the Chicago Zoo. Mr. Lantz went to Chicago, took movies of the team and studied their movements. And when Andy Panda was created in pen and ink.

Children of any age, from 6 to 60, will enjoy the section on "How to Draw Animated Cartoons." Art teachers will especially want to use this section as intrinsic motivation for the habitual doodler. The book is replete with ideas, and may be used as an introduction to drawing in comic books. It can be used by art teachers as a large and small enough for all grades. The book is a valuable addition to the library of any teacher, regardless of age.
December, 1941

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Experimental Research
in Audio-Visual Education

By DAVID GOODMAN
New York University, New York City.

Title of Thesis: HIGH SCHOOL SCIENCE STUDENTS
PREFERENCES OF ILLUSTRATIVE MATERIALS

Thesis completed 1940 for the degree of Doctor of Education,
Colorado State College of Education, Greeley, Colorado.

Investigator: CAROL C. HALL

Need for Study

High school science textbooks contain many illustrations. These illustrations are of various types and are used in many
different ways. In fact, it is difficult to conceive of the
publication of a science textbook at the secondary level that does
not contain illustrative materials. Yet, in spite of their common use, very little is known
about illustrations. It is assumed that they aid in the learning
process. This assumption, however, has little support in
terms of objective evidence. The effectiveness of illustrations
as aids to the learning process is not known. It is an edu-
cational problem that needs careful study.

If the students prefer one type of illustration over another,
a clue is furnished as to the type of illustration that would be
potentially more effective in stimulating learning. The type of
illustration must have in it an element of attraction that is not
present in the other types.

Perhaps all types of illustrations are equally attractive. If so,
then other qualities for effective illustrating must be sought. If not, the type of illustration that is most attractive should
have greater learning value. Other questions are immediately
raised as the study of this subject progresses. Which type of
illustration is the most attractive to the younger students, to
boys, to girls, and how are the preferences affected by the
amount of science education or by the number of years spent
in high school?

Answers to these questions should aid the classroom teacher
or school administrator in the selection of high school science
textbooks. Publishers and editors of secondary school science
textbooks should also find this information to be of value in
making their products more effective for classroom use.

Problem
What are the illustration preferences of high school science
students?

Procedure
The study was conducted during the school year 1939-40
in Springfield High School, Springfield, Illinois. Members
of the classes in general science, biology, and physical science
indicated their preferences. Three hundred forty-five students
(345) indicated a total of 20,700 preferences for the illustrations
shown them.

A check through a number of the commonly used high
school science textbooks showed that three basic types of
illustrations are used. These are: the diagram, the cartoon,
and the photograph. This does not imply that three methods
of illustrations are the only types used. Other types are used
in varying amounts. The three types chosen are most com-
monly used.

For the present study sixty (60) science illustrations were
chosen. Two hundred illustrations (200) were originally se-
lected from high school science textbooks that were in class-
room use. The final illustrations for the study were selected
by a process of examination and elimination. Every effort
was made to reduce the factors of difference in attractiveness.
Uniformity in the quality of the illustrations used was carefully
judged. To insure further uniformity in the illustrations, only
those showing some science fact, law, theory or basic principle
were used. This eliminated the purely decorative type of
illustration.

The illustrations chosen covered a wide range of science in-
formation and were confined to high school science. Twenty
illustrations of each of the three basic types were included in the final selection.

The illustrations chosen for the study were mounted on pieces of white cardboard 8x11 inches in size. The size of the cards was determined by the dimensions of the projecting machine by means of which the illustrations were shown to the students. The cards were numbered from one through sixty so that as each illustration was shown the number could be clearly seen. This was done to avoid confusing the student while he was recording his preferences.

There were two possible ways of collecting the student preferences. One was to pass cards among the students and have them make their choices as the cards came to them. The other method was to project the illustrations by means of the daylight projector. The latter method was chosen because of the large size of the class groups involved.

To facilitate the collection of the student preferences a special form was prepared. This form provided spaces in which the sixty decisions to be secured could be indicated. For each illustration shown provision was made for the choice of one of three decisions. The three choices were indicated by the letters a, b, and c. The use of the three-letter preference range appeared to be adequate in obtaining the degree or intensity of preferences.

In addition to the use of the blank just described, certain preliminary precautions and instructions were given the participating student to insure complete understanding and accuracy in the process of indicating the preferences.

The preference blanks were checked to determine (1) the number of times each letter (indicating intensity of preference) had been marked for each type of illustration and (2) the total number of preferences indicated.

The next step in tabulating the data consisted in the preparation of tables showing the influence of sex, chronological age, year in school, and semester of science education on the preferences for the types of illustrations.

Findings

1. The total group of high school science students preferred the types of illustrations in the following order: (1) the cartoon, (2) the diagram, and (3) the photograph.

2. The preferences when checked in terms of sex, revealed that the boys preferred the diagram and that the girls preferred the cartoon. The photograph was preferred with approximately the same intensity by both the boys and the girls.

3. The preferences for the cartoon and photograph were greatest by those students who had less than five (5) semesters of science education, who were in the first three years of high school and who were youngest in chronological age.

4. The preferences for the diagram were greatest by those students who had over (5) semesters of science education, who were in the last year of high school, and who were oldest in chronological age.

In the interpretation of the findings certain limitations should be recognized: (1) Preferences for certain of the illustrations may be influenced by aesthetic qualities, and (2) Individuals involved in the study were enrolled in one school in one community.

Conclusions

The findings of the study indicate the fact that there is a difference in the preferences for different types of illustrations by the older and younger high school science students. A science textbook published for twelfth grade boys should make liberal use of the diagram type of illustration. A textbook designed for boys or girls in the ninth or tenth grades of high school should use the cartoon more frequently than the diagram.

A textbook prepared for girls classes at any level of high school science or for use in a mixed class should use the cartoon type of illustration as much as the subject matter will permit.

The photograph as a type of science illustration for the high school science textbook should be used sparingly. The fact that this type of illustration was consistently low in the preferences shows that it is not the best type of illustration for promoting interest in the subject matter.

DA-LITE SCREEN COMPANY, INC.
Dept. 1225, 2723 No. Crawford Ave. Chicago, Ill.
SCHOOL film production is in the news again. The Education Page of the November 18 Christian Science Monitor showed four pictures of school film producers accompanied by an article on “Producing School Movies.” The December 1 issue of Time magazine displayed a picture of students at J. C. Murphy Junior High School, Atlanta, making a film in connection with the Thirty-First Annual Meeting of the National Council of Teachers of English.

Throughout the United States, school film production groups are making news and are making educational history. Today these producers are viewed as experimenters, but tomorrow they will be looked upon as more important to the school program than the school newspaper or the school debating club.

**Reports on Films**

**California**

Hester School at The Alameda, has produced a documentary film in color on The Santa Clara Valley. The 400-foot film, made by the sixth grade and Miss Ruth O. Bradley, is in four sections: Historical Points, Scenic Beauty, Civic Interests, and Industrial Advantages.

**West Virginia**

The Mercer County (W. Va.) Schools have just completed production of a teacher-training film especially designed for use in the one-teacher school field. The new film, *Time to Spare*, is a two-reel sound-on-film subject. Through screen picture and narrator’s comment it explains one way in which the daily schedule of the isolated one-teacher school can be organized to provide sufficient time for the individual and group attention that pupils need. It uses a typical one-teacher school already organized in this fashion to illustrate the important points of teacher-pupil planning and execution of the two major time blocks of the school day.

The film attempts to show in a positive way how pupils in the one teacher school can be organized in broad ability groups, thereby giving both teacher and pupil much more time than would be found under traditional plans of organization.

This film is specifically designed as a teacher-training film for use with the personnel of one-teacher schools, either in the pre-service college period or for in-service training of such workers through their study groups, institutes, and other local meetings.

Correspondence concerning sale or rental of prints should be addressed to: The Audio-Visual Aids Service, Mercer County Schools, Princeton, W. Va.

**Kansas**

Caldwell High School reports a 200-foot film on Homecoming, showing a parade and other activities of the day. K. R. Hinkhouse was the film director.

**New York**

Charles Cook, author of Cinema Handbook (Fieldston School, New York, 1940, $1.50), reports that his Cinem Arts classes have made a film version of The Fieldston Plan, 500 feet with sound. Other films made by Mr. Cook’s students recently include Anthracite, Posture, Fall Sports, and a newsreel.

Philip Livingston Junior High School, pioneer in the public relations film field, has made a revision of its all-color Day in a Junior High School (1200 feet). According to Theodore W. Cassavant, counselor for boys, it is “the visualization of the curriculum of the modern Red Schoolhouse. It shows the adaptation of the school program to fit individual differences in pupils’ needs, interests, abilities, and aptitudes.”

**Ohio**

A film showing faculty members of a college how to order films for their lecture rooms has been made by Melvin Moorhouse at Muskingum College, New Concord, Ohio. The film, Films for the Classroom at Muskingum, is on 8mm. stock and is 200 feet in length. Future plans for the Muskingum producer include the making of a film to show the operation and care of a projector.

John Hay High School, Cleveland, has made another film on typewriting techniques. The film is used in teaching typewriting to students. It was produced by the Commercial Curriculum Center in the school.

By Hardy R. Finch

Head of the English Department
Greenwich High School, Greenwich, Conn.

With a question box on the making of school film productions, conducted by Godfrey Elliott, Oakvale, W. Va.

Readers are invited to submit questions.

Scene from a film produced by Mercer County Schools, W. Va.
Anthony Cope was the director of the production. (800 feet) Rental charge: $3.00.

Another film, Activities for Girls in Junior and Senior High Schools, is a color film (400 feet) on girls' gymnasium activities.

Aberrant Behavior in the White Rat is the subject of a film developed by Paul E. Fields and Ralph Turner of the Psychology Department, Ohio Wesleyan University, Delaware. In 400 feet, the film "shows white rats going through convulsions in response to high-pitched auditory stimulation. The general activity of the convulsive rate is higher than for normals, although respiration rate is lowered."

The funds raised by a 250-foot advertising film made at the Washington-Cessna School, Dola, helped in the purchase of film equipment, N. C. Rungst states.

Pennsylvania

The Reading Senior High School students have made a short postum film. This production, Watch Your Posture, reports Eloise E. S. Hettinger, advisor, "was a better and more effective force for better posture than any verbal criticism used by the teacher. . . . The film show each pupil's posture in an English class." (50 feet, 8mm.)

The life of students during a typical year at the Johnstown Center of the University of Pittsburgh, Johnstown, is the subject of a 1200-foot film made by C. A. Anderson. As new film subjects are discovered, new sequences are added to this publicity film.

Tennessee

Central High School, Memphis, has produced another melodrama on 8mm stock. The latest release of the school photoplay club is The Lady Killer, or Who Killed the Lady? Dick Wooten, the club's cameraman, classifies the film as "ultra-modern, comedy murder plot." By means of camera angles and special lighting the club has tried to show its characters as unusual types.

Wisconsin

A revised edition of From Nursery to Graduation or The Story of Our School has appeared at the South Girls' Junior Trade School, Milwaukee. The film was made by Mr. Louthain.

Please send reports on new films, pictures of school film producers, and school film scenarios to your editor. New material of this type is always welcome, Haror R. Finch, Greenwich High School, Greenwich, Connecticut.
A New Educational Film
...in Natural Color

ANIMAL LIFE OF TROPICAL DRY TORTUGAS

Made by professional biologists at the Dry Tortugas, an isolated group of small coral islands in the Gulf of Mexico which are noted for their rich bird and marine life and for historic Fort Jefferson (the "Shark Island" of the movies).

Shown in their natural habitats are the birds which nest at Dry Tortugas (a National Bird Sanctuary for thousands of years); remarkable tropical fishes of the Gulf stream; the rich animal life in coral reef tidal pools as well as shots of some of the spectacular forms of animal life encountered on a coral island.

Can be shown effectively to any audience. It could be used as a travelogue. The impression received from the film is as realistic as if the spectator had been a member of the expedition to Dry Tortugas. It is especially useful for general biology or nature study classes to demonstrate principles of color and form mimicry, ecology and coral island formation. Scenes of the Fort are included.

Fully titled, silent, 450 feet
16 mm. Kodachrome

Write immediately for a descriptive circular containing titles, scientific names of animals shown in the film and other information useful to the teacher or lecturer.

BIOLICAL INSTITUTE
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Question Box on School Film Production

1. What does it cost to add sound to a reel of 16mm film?

That would be like asking "How much does an automobile cost?" One can purchase an automobile anywhere within a price range of from several hundred to several thousand dollars, and the price range for recording and printing 16mm sound is almost as wide. In a recent informal survey made by this writer, prices for recording a narrator's voice and printing a combined picture and sound print of one reel of 16mm film ran from $65.00 to $700.00. It can be said, however, that recording of a fairly good quality can be obtained for $75-$150 per 16mm reel, this price to include the final combined print.

Readers who contemplate tackling a sound film production are urged to read the portions devoted to sound production in such references as Students Make a Movie and Producing School Movies. Also, this writer had a short article on introductory problems and solutions in addition to asking sound in Home Movies for September 1941. If you are interested in adding sound to one of your productions, and your budget will not permit the spending of more than $150 per reel, names of studios will be furnished on request.

2. How many photofoods is it possible to use on one circuit without danger of overloading?

On the typical school building wiring circuit fused at 25-30 amperes it is possible to use not more than eight No. 1 photofoods or their equivalent without danger of overloading. This is slightly above the manufacturer's recommendation for ordinary house circuits which are usually fused at 15-20 amperes.

The manufacturer's rating on photofoods is as follows: No. 1—2.2 amperes; No. 2—4.4 amperes; No. 4—8.7 amperes. Thus, one could safely use either (1) eight No. 1, (2) four No. 2, (3) two No. 4, or (4) any equivalent combination. If mixing photofood sizes, one No. 4 equals two No. 2 equals four No. 1.

This recommendation is predicated on the assumption that no other load will be placed on the same fuse circuit, and that this circuit is fused at not less than 25 amperes. If drawing the full maximum load from one circuit, avoid over-loading the connecting wires by using two or three different outlets on the same circuit. Before determining the maximum possible load and making connections, always check the amperage of the fuses recommended for use in the panel board of your building.

3. What is a "daylight-blue" photofood, and where can they be obtained?

A daylight-blue photofood is a No. 1, No. 2, or No. 4 photofood made with a blue dye in the glass shell which gives a color temperature matched to daylight film emulsions. When they are used the exposure meter reading can be based on the daylight emulsion speed of the film being used.

The daylight-blue photofood finds its chief use as a booster light to be mixed with natural daylight when using color film. Its use enables the two types of light to be mixed without noticeable color distortion on the film.

Daylight-blue photofoods are manufactured by all of the standard lamp companies such as General Electric, Westinghouse, and Westinghouse, in the same sizes and amperage rating as regular photofoods, and at about twice the price of regular photofoods. General Electric's daylight-blue photofoods currently retail as follows: No. B-1—30 cents; No. B-2—60 cents; No. B-4—$1.75. Your camera store can supply them.

4. How can we put, wipes, dissolves, and fades in our film after it has been exposed and processed?

Hollywood is able to insert effects in 35mm film by means of optical printing, but such facilities are not at present available on a practical basis for 16mm or 8mm film. There is, however, an inexpensive liquid dye on the market which permits the addition of fades to your film. It is obtainable from any camera store in the form of a powder which is then mixed with water to make enough solution to last indefinitely. Ask for "Craig Fotofade".

Motion Pictures Utilized in College English
(Concluded from page 420)

courses dealing with important phases of motion picture production and entertainment.

Interpretation. The general attitude toward the use of movies in teaching college English seems to vary from cool indifference to warm enthusiasm. Those who are cool toward the use of movies are particularly dubious about the Hollywood versions of the classics. Since a film gives but a small fraction of a novel, for example, seeing the film version can in no sense serve as a real substitute for reading the classic. In many respects, therefore, screenings of the classics may be "initiating the coming generations' deep understanding and appreciation of the riches of world literature." On the whole, however, professors who make use of such screenings use them for comparative and critical purposes rather than as substitutes. This type of use seems to be both justifiable and profitable to students. At any rate, most of the professors who reported that they use motion pictures in English instruction, for one purpose or another, seem to think that they have many important teaching values that are not inherent in any other form of presentation. For example, one professor writes: "I regard films as possibly the best point at which the instructor can meet modern college students."

Perhaps a greater use of movies in college would help to achieve the objectives of a course offered by Dr. John L. Hamilton of the University of Minnesota, who writes: "The main objectives of the course are: to develop an aware, alive, sensitive theatre-goer; to increase the theatre-goer's pleasure in the theatre; and to organize the information and principles which help in developing a sensitive theatre-goer." To achieve these objectives, the students see about fourteen films and five plays. Dr. Edgar Dale of Ohio State University suggests another desirable outcome for the use of movies when he says, "One can readily grant that the final product has not in the past been too satisfactory. Yet I believe that a very critical study of the motion picture as an art form will tend in the long run to produce more effective and satisfactory motion pictures."
IN THE gigantic effort to weld this country into an effective fighting force—sound motion pictures are of tremendous importance. They play a vital role in training U.S. Army, Navy and Air Corps personnel...speeding up industrial production...training industrial workers...aiding in vocational education...making possible the more effective operation of government departments...providing morale-building entertainment to U.S. armed forces...and in disseminating important defense procedures to the general public. Ampro 6mm. silent and sound projectors, in ever-increasing numbers, are helping carry out this huge program.
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M O G U L L S
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"of Radio City"
New York, N. Y.

Visual Programs at State Teachers Meetings

Many state teachers association conventions, held this fall, included departmental programs on audio-visual education.

The Southwest Kansas Educational Conference was held at Meade, Kansas, on October 4. There was a well attended section entitled "Audio-Visual Aids Round Table", with H. L. Walton, Supervisor of Audio-Visual Aids, Garden City, acting as chairman. The program included a statement on the Fort Hays Teachers College Film Library Service by Dr. Ira O. Scott; a demonstration on still projection by Bryce Gleckler, Dodge City; and demonstration lessons. Hectographed material on various audio-visual aids applying to organized units was distributed to the audience.

Ford L. Lemler, Director, Bureau of Visual Education at the University of Michigan, gave an illustrated talk on "A Practical Visual Program for Your School" to the Indiana visual group which assembled in Indianapolis on Thursday afternoon during the two-day state association meeting October 23-24.

Minnesota teachers participated in seven division meetings throughout the state last month. The name of Elsa Callista Clark, Winona State Teachers College, appeared on three of the visual section programs—at Mankato, October 16, at Rochester the following day, and at Saint Paul on October 24.

Nebraska also held district conventions at six points. Harold Griffin, Visual Aids Committee Chairman, Wayne State Teachers College, spoke on "Visualizing the Curriculum" at the meeting of District 3 in Norfolk, October 23. Visual programs were given also at Omaha and Grand Island.

The New Jersey Visual Education Association convened during the annual convention of the State Education Association November 8-11. Continuous showings of films and slides were conducted Saturday morning. At the Monday afternoon session Mr. Richard Ford of the British Library of Information, discussed "National Defense through Motion Pictures" and showed the latest British films. He was followed by Dr. Morton C. Kahn's motion picture lecture on "Djuka", story of the Bush Negro.

The annual meeting of the Virginia Education Association took place at Richmond November 19-21. The Audio-Visual group conducted a joint session with the Grammar Grade Teachers section on the morning of the 20th. It was devoted to discussions and demonstrations of visual aids.

Pasadena Visual Service Moves

The Library and Visual Service Department of the Pasadena City Schools has just moved into the Administration Annex Building of the Board of Education, at 1501 East Villa Street, where it is being consolidated with the School Museum. Harry H. Hahworth, Supervisor of Library and Visual Service, is
Notes

in charge of the enlarged department, with Miss Helen Burr Durfee, Teacher-Librarian and Assistant Elementary Curriculum Coordinator, assisting.

Latin-American Cultural Relations Program

Kenneth MacGowan, Twentieth Century Fox producer, is now serving the United States as executive in charge of film production and distribution for the Nelson Rockefeller Committee known as the Office for Coordination of Commercial and Cultural Relations between the American Republics, Council of National Defense, of which John Hay Whitney is director. The purpose of this committee is to prepare suitable American film material for Latin American consumption, and to obtain films that will introduce our Southern neighbors to us in the right way.

Thirty 16mm sound projectors have been placed in the U. S. embassies and consulates in South America, through which the films will be distributed. The subjects have been selected from existing motion picture material, re-edited, and special sound-tracks made in Spanish and Portuguese. The first group of films to go to the Southern continent include: “Power and the Land,” “The City,” twelve Erpi films, “This Amazing America” and other travel subjects, films made by the Office of Production Management and other government agencies.

The committee reports it has been more difficult to obtain films on Latin America, and would appreciate the assistance of amateur cameramen who have footage on those countries. Subjects so far acquired include thirty-nine color reels, twenty-nine of which concern Mexico and Central America. A tie-up has been made with March of Time for the use of material now being photographed in South America. What is needed particularly, Mr. MacGowan points out, are films of an editorial nature, like Julian Bryan’s documentary “Americans All.”

The Coordinator’s offices are located at New York’s Museum of Modern Art, 11 West 53rd Street, New York City.

Disney Studios Produce Training Films

The Canadian Government has commissioned the Walt Disney studios to produce animated films for training purposes. Production has already started on five short films, half of the footage being devoted to a technical military subject—the operation of a new anti-bitchkrieg weapon. Arrangements for the enlistment of the Disney studios were made by John Grierson, chief of the National Film Board.

Grierson’s attention was directed to the use of Disney films for training purposes through the studio’s recent offer to make training films at cost for the United States Government. Disney had backed up his offer with a sensational sample picture, teaching aircraft riveting, which used a revolutionary new technique.
NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

This monthly page of reviews is conducted for the benefit of educational film producers and users alike. The comments and criticisms of both are cordially invited.

Producers wishing to have new films reviewed on this page should write Don White at 223 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, basis of availability, and prices of the films. They will be informed of the first open date when the Teacher Committee will review the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, WHICH MUST BE BORNE BY THE PRODUCERS.

Properties of Water (Coronet) 11 minutes, 16mm sound. Sale price $40.00. Apply to producer for rental sources.

Subtitles divide this film into separate sequences, in which laboratory experiments demonstrate the various properties of water. First, experiments with electrolysis show the composition of water. Next, boiling is demonstrated, with reference to variations in boiling point due to pressure changes. In the following sequence a condenser demonstrates distillation. Solubility of gases in water is illustrated, and then miscible solutions are compared. Copper sulphate is dissolved to demonstrate a saturated solution. Evaporation causes crystals to form, which are filtered out of the solution. Crystallization is demonstrated as a saturated solution of potassium nitrate is cooled. Then supersaturation is demonstrated; the supersaturated solution is disturbed and immediate crystallization results, with a temperature increase. The use of water as a standard of comparison is next shown, and then heat of fusion and heat of vaporization. At the end of the film there is a brief summary.

COMMITTEE OPINION: An excellent film for use in general science and chemistry classes at the junior high, senior high, and college levels. Content is accurate, organization is good, and the various experiments are clearly pictured. Photography and sound are well above the average.

Pneumonia (Erpi) 11 minutes, 16mm sound. Sale price $50.00. Teacher's guide to be furnished.

This film outlines modern methods for the control of pneumonia, one of man's most deadly enemies. It begins with a general discussion of pneumonia. Graphs show fatalities resulting from the disease and compare it to others; the physician's methods of treatment and the ways in which the disease is transmitted are demonstrated, and the classes of people who are particularly susceptible are mentioned. Then a dramatization of a typical case begins.

Ed McGrath, a telephone company trouble-shooter, comes home with a chill. Here animated diagrams are interspersed to show the inflammation of his lung. His wife puts him to bed and calls a doctor, who upon arrival notes his condition, takes blood
and sputum samples, and begins a drug treatment immediately
while waiting for a report from the laboratory where the sputum
is being examined to determine the type of pneumonia present.
When it is established that the patient has Type 1 pneumonia,
the doctor proceeds to administer further treatment. The
fever-weakened patient receives fruit juices, and the nurse
makes him as comfortable as possible. A drop in the fever
begins. A later analysis shows the presence of germs in the
blood stream. Serum is administered. A day later, the re-
sults of the treatment appear as the patient begins to improve.
There is easier breathing, much sleep, and a drop in his tem-
perature. When McGrath is out of danger, his wife takes
over the work of the nurse, and his improvement continues.
The doctor comes for a final visit and advises ample rest, fresh
air, and nourishing food during convalescence.

Animated diagrams show how the disease clears up in the
lung. Precautions against relapse are next mentioned, and in
closing the narrator emphasizes that if the doctor is called
quickly so that proper diagnosis and typing may be made, if
the correct drugs and serums are administered, and if the
patient has proper diet and a capable nurse, his chances for
recovery are very good.

COMMITTEE OPINION: A very good film for use in health,
hygiene, public health, and home economics classes, at the
junior high through adult levels. The film is good in all
technical respects.

Oil for Aladdin's Lamp (Shell) 3 reels, 16mm sound,
"free." Produced by the J. Walter Thompson Company.
Directed by Joris Ivens; photographed by Floyd Crosby,
A. S. C.

In this film scenes in the research laboratories of the Shell
Development Company at Emeryville, California, tell of
petroleum research and its importance in the development of
many products useful in our daily lives. It opens with a
dedication to research scientists and a rapid succession of
scenes showing some of the marvels of chemical research.
A shot of dirty, gummy crude oil introduces an explanation
of the molecular composition of petroleum. A model of a
typical hydrocarbon molecule is shown, and it is explained
that various products are derived by changing the arrange-
ment of the atoms and by removing some of them. Some of
the concrete results of petroleum research, such as butadiene
synthetic rubber, concentrated Vitamin E, and plastics, are
shown. An example of direct benefit to motorists is cited in
the discovery of the Shell "Solulizer" process which reduces
motor knock. Importance of proper engine lubrication and
the work of experimentation to improve Shell oils are also
shown. Scenes of mechanized Army units, of battleships at
sea, and of planes in flight next appear as the narrator
speaks of the value of Shell research to the defense pro-
gram. The function of further research and the use of the
small-scale pilot plant in establishing processes for com-
mercial production are mentioned. The film closes with an
expression of confidence in the ability of the Shell labora-
tories to produce results to meet tomorrow's demands, and
with the statement that in the meantime every Shell station
has the products to fill today's needs.

COMMITTEE OPINION: A good film to cover one specific
phase of chemical research; should be of value at the junior
high level and above, in chemistry and general science
classes, and also for general showings to stimulate interest
in chemistry and research. Advertising content is indicated
in the foregoing description; the film contains some advert-
sing and the sponsor's name is repeated occasionally, but
the advertising content of the film is not considered objec-
tionable. Photography and sound are good.

Producers and Distributors:
Coronet Productions, Glenview, Ill.
National Film Board of Canada, 59 East Van Buren Street,
Chicago, Ill.
Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long
Island City, N. Y.
Shell Oil Company, Public Relations Department, 50 West
50th Street, New York, N. Y. For nearest source of prints
for school use write the Association of School Film Libraries,
Room 819, No. 9 Rockefeller Plaza, New York, N. Y.
**Current Film News**

- **Bell & Howell Company**, 1801 Larchmont Ave., Chicago, reports the acquisition of many new subjects, among them the following:
  - *Skis*, the Symphony of Milady Takes to Skis—two newcomers to the list of alpine skiing films in the Filmosound Library. They are single reels with musical background instead of narration, and present thrilling photography of snowscape and winter sport. Others in the same series, previously released by other distributors but now taken over exclusively by Bell & Howell are: *Skiing with Hannah Schneider, High School of Sking, Snowscapes, Winter Magic, Rock and Ice, Winter Holiday*.

- The series of single color reels entitled "Our Colorful World" is being augmented by several new arrivals:
  - *In the Wake of the Beagle*, which traces the historic journey of Darwin from Tierra DelFuego to the Galapagos.
  - *Desert in Bloom*, showing the flora and fauna of the southern Arizona desert and the practical work of a group of naturalists who assemble a habitat group for their museum.
  - *The Real Hawaii*, by Leroy Segall, presenting the principal industries, sugar, fruit, tourists, mixture of peoples, survivals of native life, and defense. A similar film on "Perto Rico," by George Greenwood, is also available.
  - *Navajo Sand Painting*, photographed in Monument Valley by Jack Breed.
  - *American Frontiers*, an animated talking map in color, showing the expansion of western boundaries.
  - A reduction in the rental price of over 200 recreational feature films, some amounting to as much as 50%, has just been announced by Bell & Howell's Filmosound Library. Still further reductions are offered to "Annual Service" patrons.
  - **Biological Institute**, Camac and Berks Streets, Philadelphia, Pa., announces a new film on tropical marine and bird life for general biology classes, produced by three professional biologists at the Dry Tortugas.

- **Animal Life of Tropical Dry Tortugas**—1 reel, 16mm silent, color—shows some spectacular members of the variety of tropical fish which inhabit the warm waters of the reefs, life in coral reef tidal pools, and the thousands of birds which nest there. In addition to showing the normal behavior of a variety of invertebrates, fishes and birds in their natural environment, the film emphasizes certain special characteristics common to a number of these animals.

Because the Dry Tortugas islands themselves are of historic interest, this subject lends itself also to a discussion of their history and geography. Fort Jefferson, also seen in the film, is of particular historic interest.

- **Walter O. Gutlohn, Inc.**, 35 W. 45th St., New York City, has released a new one-reel color documentary film in 16mm silent, entitled *Elementary Activity School*—showing the operation of the progressive school at the famed government-created community of Green Belt, Maryland.

- Gutlohn also announces the release of three new major Universal features in 16mm sound. With each picture are shorts to make up an hour and a half program. Advance approval is required, but one approval suffices for all. The pictures are:
  - *House of Seven Gables*—featuring George Sanders, Margaret Lindsay—a screen version of Nathaniel Hawthorne's dramatic story of a curse that persisted through the ages, and a love that could not be defeated by misfortune and disaster. Only slight changes were made from the original story.
  - *Sandy Is a Lady*—comedy with Tom Brown, Nan Grey, Mischa Auer, Butch and Buddy. The hair-raising adventures of the baby star, who wanders off alone, keeps the picture moving at a lively pace.
  - *Alias the Deacon*—a merry comedy starring Bob Burns. An amiable card sharp masquerades as a deacon while he solves the troubles of his friends.

- **Castle Films, Inc.**, 30 Rockefeller Plaza, New York City, have completed their annual motion picture football review of the current gridiron season. Designed primarily as a picture of action and sport excitement, these releases have also served as aids to coaches, demonstrating as they do the stellar plays of the best collegiate elevens of each season.

- **Football Thrills of 1941** will include all that anyone saw of the trick play that made the Minnesota-Northwestern game famous. The long run down the sidelines to a touchdown, with bewildered opponents pulling themselves together and charging in pursuit is shown. But the trick itself escaped cameramen as it did spectators and sports reporters. The high spots of the following 1941 contests will also be seen in the annual sportfilm classic: *Army-Navy; Harvard-Yale; Duke-Georgia Tech; Princeton-Yale; St. Mary's-Duquesne; Columbia-Princeton; Michigan State-Santa Clara; Navy-Notre Dame; Fordham-Southern Method; Minnesota-Northwestern*.

- **Audio-Film Libraries**, 661 Bloomfield Ave., Bloomfield, N. J., have available for both rental and sale, in 16mm sound, a series of "Pioneer Life Films," (with Study Guides) from the studio of Arthur Bax Productions, Inc. Present subjects, one reel each, are now ready:
  - *Kentuckie Rifle*—showing the pioneer's dependence on his rifle for hunting and protection, the molding of shot on the hearth, the establishment of homes in the wilderness.
  - *Candle Making*—cutting the wicks, preparing the tallow, dipping the candle rods, and trimming the candles. Whole family participates in the activities.

- **The Spinning Wheel**—carding of wool, the rolling of curls, spinning into yarn, twisting and drawing into the spindle, and winding on the bobbin.

- **Placer Gold**—explaining simple tools and methods used.

- **Bailey Film Service**, 1651 Cosmo St., Hollywood, California, has a film which shows the destruction of an outgrown group of subjects on the defense line, entitled:
  - *Iron Mining and Manufacturing*—1 reel, 16mm silent—telling the dramatic story of iron ore from the open pit mines near Marquette, Michigan, to the blast furnace where it is transformed into pig iron. Factory scenes show the iron being remelted in the cupola, molded, poured, and the castings finished ready for assembly. A study guide is included with the film which is suggested for use in shop and chemistry, geography, history and social science classes.

- **High Honor Bestowed on Late Herman A. DeVry**

  The name of the late Herman A. DeVry, D. S., pioneer Chicago motion picture equipment manufacturer, engineer and inventor, who produced and marketed the first portable motion picture projector and was responsible for many basic patents that benefited the entire motion picture industry, will be perpetuated along with such other famous and distinguished immortals as Thomas Alva Edison and George Eastman by the Society of Motion Picture Engineers.

  By unanimous decision the members of the SMPE, while in executive session during the recent convention in New York City, approved the proposal of the Society's Board of Governors that the name of Herman A. DeVry be added to the Society's Honor Roll. This Honor Roll, international in scope, was established in 1931 for the purpose of perpetuating the names of distinguished pioneers who are now deceased.

  Mr. DeVry becomes the first Chicagoan, only Midwesterner and the fifth American to so honored by this internationally recognized Society.

- **Distributor's Group to Larger Quarters**

  Having outgrown its former quarters at 119 Luckie Street, Atlanta, Georgia, the Distributor's Group reports removal to a new and larger home at 256 Peachtree Street. Their greatly expanded facilities include a comfortable projection room, double their former shipping capacity, and three decorated display rooms. This well-known dealer of projection equipment has added the schools of the South with a complete line of equipment for visual instruction representing the products of leading manufacturers, including projection equipment, for both motion and still pictures, screens and recorders, as well as a large library of 16mm motion pictures.

- **The Educational Screen**
More and More

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Keystone Etched Glass is mud-ground, with a satiny surface that has no superior in the possibilities of even, smooth projections.

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All other items in the list of endorsed Keystone Handmade-Lantern-Slide Materials are of the best and highest quality, thus assuring a high level of interest on the part of the pupil and, therefore, the effective and continued use on the part of the teacher.

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"The Keystone Method of Teaching Reading" provides 100 drawings of primary subject matter for etched-glass slides.

"American History on Parade" provides more than 300 drawings for handmade slides on American history.

Either of these publications will be sent postpaid upon receipt of $1.25.

Keystone View Company
Meadville, Penna.
## FILMS

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<th>City</th>
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<td>Fryan, V. L.</td>
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<td>Mogull's</td>
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<td>Mutual Film Service</td>
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<td>Post Pictures Corp.</td>
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## SCREENS

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<td>Da Lite Screen Co.</td>
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<td>Radiant Mfg. Corporation</td>
<td>1140-46 Superior St., Chicago</td>
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## SLIDES AND FILMSTRIPS

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<td>Radio-Matic Slide Co., Inc.</td>
<td>1819 Broadway, New York City</td>
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## MOTION PICTURE MACHINES AND SUPPLIES

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## STEREOPICIONS and OPAQUE PROJECTORS

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## REFERENCE NUMBERS

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[Signature]
Sales Manager

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