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EDUCATIONAL BULLETIN

HANDBOOK
Of
AUDIO-VISUAL MATERIALS
For
KENTUCKY SCHOOLS



Published by
DEPARTMENT OF EDUCATION
JOHN FRED WILLIAMS
Superintendent of Public Instruction

ISSUED MONTHLY

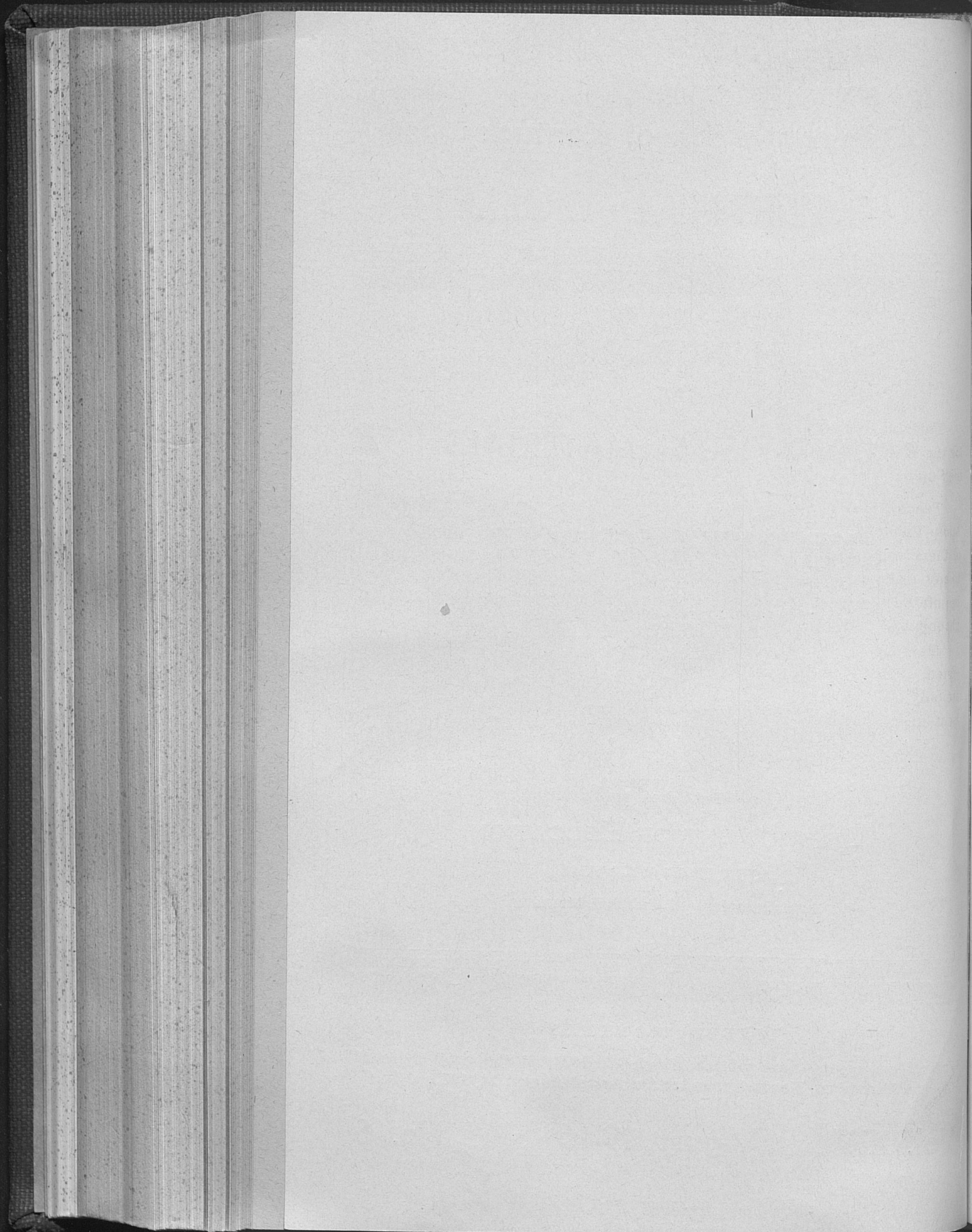
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FOREWORD

This bulletin is to serve as a Handbook of Audio-Visual Materials for the Kentucky schools. It was prepared by a committee appointed by the Superintendent of Public Instruction.

Teachers will find much valuable information in this Handbook of Audio-Visual Materials. Considerable space has been given to the use of the common, simple, and inexpensive materials which are available to any teacher. The bulletin also contains desirable information on the use of the more expensive type of audio-visual aids. Among these are phonograph, radio, film slide, silent picture and the sound picture.

Methods for the most effective use of the materials have been suggested. The fact has been emphasized that the audio-visual materials are only teaching aids which can be used very profitably in the improvement of instruction.

JOHN FRED WILLIAMS,
Superintendent of Public Instruction

INTRODUCTION

This handbook has been written to meet the need of educators for audio-visual aids as practical helps to more functional teaching. It is intended that this material shall serve teachers of all grades and all type schools. It is felt that any teaching situation may be vitalized through proper use of audio-visual aids and that some aid may be found for every situation.

It was the desire of the committee to simplify the presentation of the material so that interest could be created with those teachers who did not already use audio-visual aids in teaching and supplemental with those who were interested and wanted additional aid in material, method, or source of material. Only a limited number of publications and sources of materials have been listed, but from these additional information may be secured.

The committee has presented the material with the broad concept of audio-visual aids in mind. In no way should their use be limited in function, method of use, or objective. A picture show does not constitute an aid in its fullest sense when shown without proper introduction, explanation, and follow-up.

The aids suggested are simply "aids" to teaching. They are not sufficient within themselves.

LYMAN V. GINGER, Director
University School, University of Kentucky
Chairman, Kentucky Committee on Audio-Visual Aids

COMMITTEE ON AUDIO-VISUAL AIDS

- MR. LYMAN V. GINGER, University Training School, University of Kentucky, Chairman
- MR. ISHMAEL TRIPLETT, State Department of Education, Frankfort
- MR. G. M. GUMBERT, Eastern Kentucky State Teachers College, Richmond
- MR. CHILES VAN ANTWERP, Morehead State Teachers College, Morehead
- DR. C. H. JAGGERS, Western Kentucky State Teachers College, Bowling Green
- MR. C. M. GRAHAM, Murray State Teachers College, Murray
- MISS LILLIAN McNULTY, Division of Curriculum and Research, Louisville Public Schools
- MR. AUSTIN S. DURHAM, Director of Audio-Visual Aids, Ft. Thomas Schools, Ft. Thomas
- MR. RUSSELL S. CLARK, Covington Public Schools, Covington
- MISS MARY REES LAND, Department of University Extension, University of Kentucky, Lexington
- MISS CAROLYN L. SCHOEFFLER, No. 13 Preston Arms Apartments, Lexington
- MR. WALTER P. WEST, 1717 Walnut Street, Hopkinsville
- MR. SILLOUS G. HEMBREE, 112 1/2 Poplar Street, Corbin, Kentucky

The following people gave invaluable assistance:

- Mr. W. H. McCord, Central School Supply Company, Louisville
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- Mr. D. T. Davis, D. T. Davis Company, Lexington
- Miss Margaret Bell Humphreys, University School, Lexington
- Miss Anna B. Peck, University School, Lexington
- Miss Louise Willson, University School, Lexington
- Miss Betsy Roach, University School, Lexington, Kentucky

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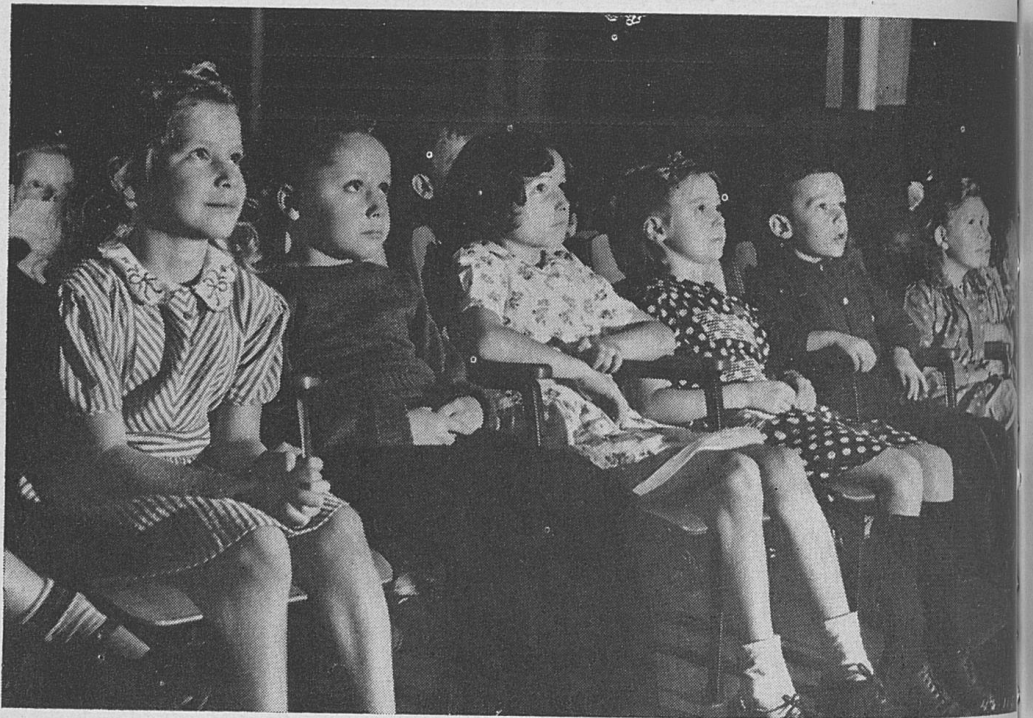
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"Audio-visual aids give reality to words and ideas."

AUDIO-VISUAL AIDS

I. WHAT ARE AUDIO-VISUAL AIDS?

Audio-visual aids are tools for teaching which supplement the written and spoken word and which facilitate instruction through the senses of sight and hearing.

The term "visual aids" refers to those devices which help the teacher through the sight of the learner. The term "audio-visual" places emphasis upon simultaneous seeing and hearing. Sensory aids involve the use of the various senses: seeing, hearing, feeling, tasting, and smelling.

II. OF WHAT VALUE ARE AUDIO-VISUAL AIDS?

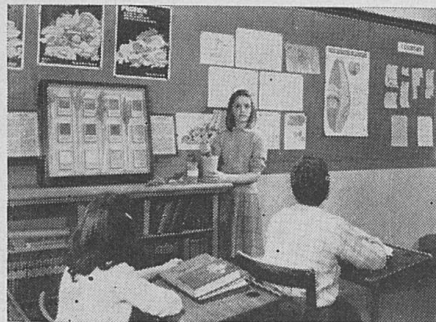
Audio-visual aids give reality to words and ideas. They:

- A. Reduce "verbalism"—the use of words without understanding the meaning.
- B. Develop, enrich, and clarify in gradual stages from the concrete to the abstract.
- C. Build desirable attitudes, create moods, form an outlook.
- D. Depict the now non-existent:
 1. by re-creation of the past,
 2. by animation of the inanimate.
- E. Bring variety into classroom instruction.
- F. Save time for both teacher and learner.
- G. Supplement and clarify discussion.
- H. Bring activities outside learners' experience to the classroom.
- I. Increase accuracy of knowledge.
- J. Increase and motivate wider reading.
- K. Stimulate further activity on the part of the learner.
- L. Help teach skills at all levels.
- M. Stimulate mutual understanding through group experiences.
- N. Provide a variety of materials adaptable to classroom situations.
- O. Enable the learner to have vivid first-hand and vicarious experiences.

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?

Blackboards

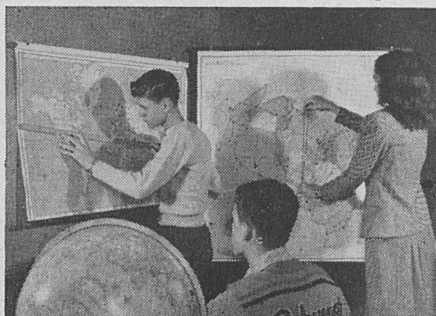
Bulletin Boards



Maps

Globes

Charts



GRAPHIC MATERIALS

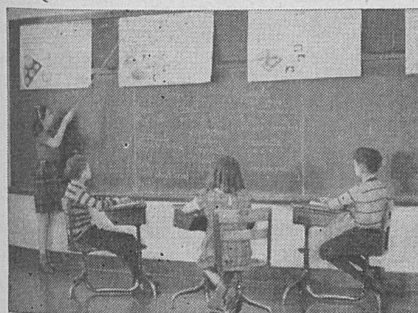
- A. Blackboards and bulletin boards are found in most classrooms. These are basic to all visual instruction, but frequently are used ineffectively. Blackboards and bulletin boards should be located in relation to lighting and seating arrangement, with attention where possible to height and width of these boards. The bulletin boards should reflect the constantly varying learning situations which would necessitate frequent changing of the materials displayed and exhibited. A desirable classroom situation is one in which the bulletin boards so clearly reflect what is going on in the room that no doubt could exist in the mind of an observer. Special attention should be given to color, proportion, and balance in arrangement of materials, and adequate space should be provided for the display of the creative work of the pupils. Blackboards and bulletin boards are visual aids which should be in constant use by both teachers and pupils.
- B. Maps, globes, and charts are another group of visual aids valuable in the effective teaching of many subjects. Great care should be exercised in the selection of these aids. In addition to the maps and charts which may be bought, many valuable maps and charts can be obtained free or at a nominal cost. Maps and globes should be chosen on a sound educational basis, consideration being given to distinctness of physical features and political divi-

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).



sions, coloring, and a uniform scale of mileage. Historical maps should be accurate as to time, place, and detail. The use of these materials should add to the clarification rather than to the confusion of the learner, and all such materials should be readily available to the pupils for individual as well as class use. Maps should be properly mounted so that convenient use in the classroom is possible. Desk outline maps have value for the individual pupil and can be bought or duplicated at low cost. Charts to illustrate industrial processes, mechanical devices, body structures and functions, growth of political and social institutions, and to serve other learning situations are available free, at low cost, or may be made.

Posters



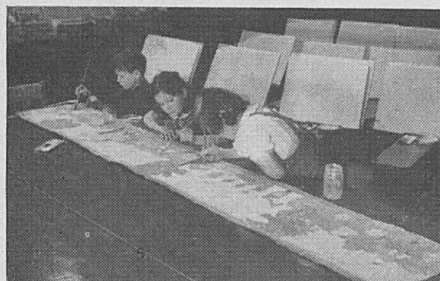
C. Posters, pictures, paintings, photographs, and cartoons are worthwhile visual aids, in which in addition to providing instruction, serve also in making the classroom more attractive.

1. Posters are obtainable from many commercial sources. They are usually more valuable when constructed by the pupils under the supervision of the teacher.
2. Teachers will find it helpful to make collections of pictures suitable to their subject matter and grade level. These should be properly mounted and filed. These pictures may come from magazines, commercial advertising, travel folders, post cards and other sources.

Pictures

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

Paintings



3. Paintings are of various types:

a. Pupil's creative paintings—paintings expressing emotions and ideas of the pupil.

b. Friezes—a frieze is a strip of pictures, individually mounted on a roll, depicting a series of events or ideas developed from the learning activities of the pupils. Wrapping paper, wallpaper, or newspapers may be used.

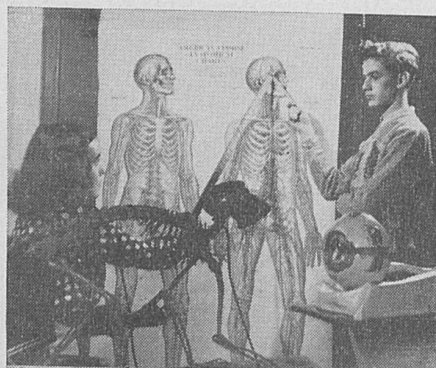
c. Murals—a mural is a large wall picture showing a central idea. The background may be feed sacks, burlap bags, old window shades, several thicknesses of newspaper or the wall itself. Various coloring materials may be used to suit the backing on which it is made.

d. Prints — reproductions of paintings.

Photographs

4. Photographs may be taken by the pupil, the teacher, or may be purchased.

Objects Specimens Models



COMMUNITY MATERIALS

A. Objects, specimens, and models may be made, collected, or purchased.

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

Field Trips Excursions

B. Well-planned field trips or excursions, either in the immediate neighborhood of the school or at greater distances, provide excellent learning experiences. These trips should be related to the immediate learning situation. Such trips will provide information on various subjects; for example, erosion. The rural teacher is especially fortunate in having a wealth of possible trips. Appraisal of the trip is as essential as planning.

Libraries Laboratories Museums

C. School and community libraries and museums provide reading and display materials for individual and group activity. In either case, planning and a follow-up appraisal are essential.



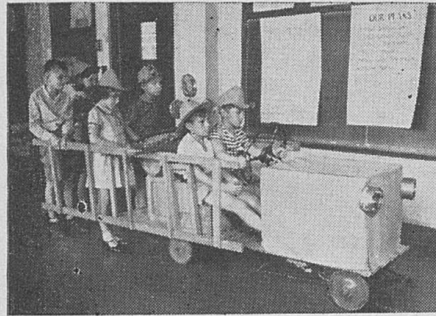
Demonstrations Experiments



D. Demonstrations and experiments are used in audio-visual teaching, and afford the teacher and pupil the opportunity of cooperative work. Demonstrations should be performed above the eye-level of the class and should provide for adequate class discussion.

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

Dramatizations



E. Dramatizations motivate the learning process by introducing the more colorful and emotional elements, and the opportunity for actual "doing" which is necessary to pupil growth. Dramatization may deal with any situation, and may illustrate ideas or stories. The characters in plays, pageants, operettas, and shadow plays may be enacted by pupils or by objects, such as hand puppets and marionettes, which may be constructed and manipulated by pupils or teachers. Sets and stage construction contribute to the understanding of color harmony and constructive manual skills. The cooperation of the students in achieving success in a joint project is also important.

Preparation for any projected picture

Selection

Preview

PROJECTED MATERIALS

A. It is well to remember that pictures do not teach by themselves. To gain the maximum benefit from what they have to give, a definite procedure should be followed. Pictures, regardless of type (those with motion, filmstrips, or slides) should be correlated with the topic being studied. They should be chosen for a specific purpose and to meet a definite class need. In previewing the pictures, the teacher can:

1. Become familiar with the subject matter of the aid and select the special pictures which are to be emphasized.
2. Check the vocabulary.
3. List the places, people, or special features with which the class should be familiarized before hand.

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

4. Determine when it will be best to use the information contained in the aid.
 - a. to introduce the topic,
 - b. to stimulate interest while the topic is being developed,
 - c. to summarize or review the topic.
5. Plan how this information will serve best:
 - a. to develop attitudes toward a problem,
 - b. to give a common background for discussion,
 - c. to introduce other class activities,
 - d. to illustrate the information in the textbook or from other sources.

The pupils should be properly prepared if they are to obtain the maximum benefit from this visual experience. They should know the purpose for seeing the aid and know exactly for what to look.

Arrangements should be made to darken the room. If possible, the regular classroom should be used as there is less loss of time and pupil interest if the children are not moved from their regular classroom. However, if this is not possible, plans should be made to make one or more rooms in the building sufficiently dark for use in cases where projection materials are desired. Assemble all the needed materials and equipment in advance. Set up the projector and screen. The lower edge of the screen should be at the eye level of the children. Be sure that the machine is properly located and seats for the class arranged so that vision will not be hampered. The seats in the front corners should not be used. No one should be seated between the projector and the screen unless the projector is mounted on a

Preparation of class, room, and equipment

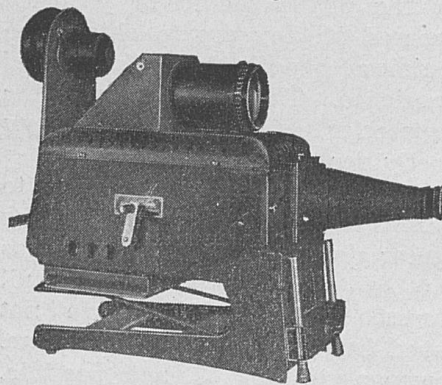


III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

high platform. Make sure that the light switch works and that extension cords, where needed, fit the sockets. Try out the projector in advance to see that it is properly adjusted. Choose pupils to sit near the windows to adjust shades and one to sit near the light switch. Changes of shades and windows are needed to provide ventilation. If these mechanics of routine are carefully planned, loss of pupils' time during the actual showing of projected materials will be prevented.

The materials to be projected should be carefully arranged in the order of use.

Opaque Projector

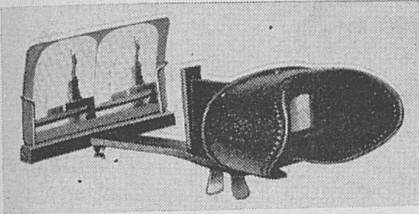


B. The opaque projector is a machine which reflects on a screen the exact and enlarged image of an object for study by the class. A variety of materials can be used. A book illustration, printed page, post card, photograph, map, graph, sheet of typed or written material, a small object, or live specimen may be inserted into the machine and left any length of time. The use of still pictures allows ample time for discussion of the material projected. The slow learner has greater opportunity to learn from the discussion while the picture is there before him. The projected material provides a common experience for the entire group which is supplementary to the individual work done by each pupil.

The material can be secured at low cost, and files can be built up from year to year which cover a variety of subjects and uses. The projector, which is widely used, is not an expensive device if the economy of time

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued)

Stereoscope Stereographs



and the enrichment of learning which are outcomes of its use are considered.

- C. The stereoscope is a small hand instrument through which the learner looks. It consists of two lenses set in a frame that fits over the eyes.

The stereograph is placed in the stereoscope for detailed study. It is made of two pictures taken from different angles and placed on a card. Each picture viewed separately has only two dimensions—height and width. When viewed through the stereoscope, they appear as one picture with the third dimension—depth. The value of this teaching aid lies in the three-dimensional quality of the image which so closely approaches reality.

Stereographs have been prepared on a variety of subjects for all grade levels.

Film Strip Projection



- D. A filmstrip is a series of still pictures arranged in order and printed on a strip of film. These pictures are without action. A filmstrip projector is needed to show these strips. Each picture may be projected upon a screen and left there long enough for detailed study and discussion.

There are two types of silent filmstrips:

1. Strips which are accompanied by guides giving the background or special information for each picture.
2. Strips with titles on the films which precede and explain the pictures.

Filmstrips are known by various names, and this is responsible for much confusion. They are referred to as filmrolls, film-slides, slidefilms, stripfilms, and

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued)

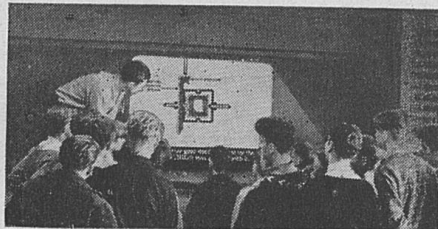
"Pictorol," the last being a trade-name. These names all refer to the same type of projected picture. Some filmstrips contain more pictures, or frames, than can be conveniently viewed in one lesson, especially if they are used as the basis for discussion while an individual picture is held on the screen. This is particularly true of those strips accompanied by manuals in which explanations are separate from the pictures.

This situation can be handled in two ways:

1. Select those pictures for emphasis which are most pertinent to the subject and quickly pass over the others. Show all of them, however, in order that the continuity of the strip will not be broken.
2. Divide the strip into parts so that the break will come at an appropriate place. Show the parts on different days. This is the best method to use with some of the strips which deal with advanced subject matter and which provoke extensive discussion.

Most of the filmstrips are the "text" type. Whether or not they lead to other activities depends upon the subject matter of the strip, the purpose for which it is used, the educational background of the class, and the type of school situation in which they are used. The follow-up may include discussions of the points which were emphasized, clarification of any misunderstandings, and summarizations. The discussion which follows the showing of the filmstrips

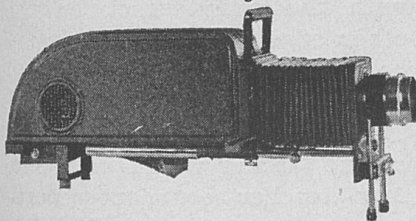
Film Strip



III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued)

should not consist of mere recalling of facts or generalizations but should be based upon critical observations, judgments, analyses, comparisons, relationships, identifications, and conclusions, according to the nature of the subject matter involved. The content of the strips may often lead to the planning of some special activities.

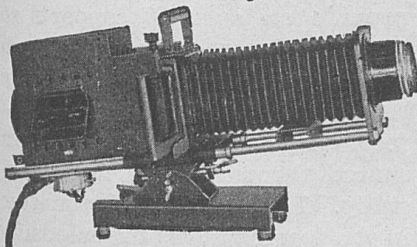
2x2 Slide Projector



- E. Slides get their name from their dimensions. The 2" x 2" slides are made on film and mounted in paper or glass mounts. They are usually in color. Sometimes they are called "kodachromes" which is the trade-name for the color process.

3¼" x 4¼" slides are made on glass and are usually in black and white.

Slide Projector



Slides have an advantage over filmstrips in that the teacher may arrange them in the order of showing best suited to the teaching situation. Teachers may make their own slides. A camera which uses 35mm film is necessary to make the film slides. The strips may show local scenes of historical or scientific interest. The teacher who travels will be able to take many pictures of educational interest; also, special school projects may be photographed on a film strip.

Certain types of glass slides may also be obtained from nationally known producers of glass slides. The same method used with the filmstrip will apply to the glass slide:

1. Preview.
2. Selection.
3. Class preparation.

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

4. Presenting the pictures.
5. Follow up.

When slides are used in a lesson, they should be organized according to some system and filed properly after the showing.

Motion Pictures



- F. Motion pictures consist of two types—silent and sound. A distinguishing feature is that the silent film is perforated on both edges while the sound film is perforated on only one edge with the sound track on the other edge. A sound film may be used only on a sound machine.

The film should be previewed by the teacher who is to use it. Any teacher comment to accompany showing of the film should be well planned in advance. Two or more showings of the film may have a definite advantage, the first being to provide an over-all concept of what is later to be analyzed specifically, and the second to give a review or “clinching” effect to learning experiences shared through other means of study. Films are usually placed in the teaching unit to serve one of the following major purposes:

1. to introduce a new subject,
2. to examine or study factual material,
3. to stimulate and promote class discussion,
4. to provide review.

Only films meeting definite objectives in the plan of the work should be used. They should be shown only to the group for which the plan of learning is designed. This will eliminate the use of films for entertain-

III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued)

ment purposes in the classroom. It is doubtful that a break should ever be made in the showing of an instructional film.

A suggested procedure for the proper use of a classroom film follows:

1. Choose an appropriate film suited to the subject matter and grade level,
2. Preview the film well in advance of showing,
3. Show the film,
4. Discuss and explain its contribution to the content being studied,
5. Re-show the film,
6. Apply and follow-up the learning experience.

AUDIO-AIDS

- A. The radio is an audio-aid to instruction which has many possibilities. The teacher should be continuously alert to advance announcements concerning future programs. Teaching plans should be flexible throughout the school in order to integrate radio programs with the related teaching situation at the logical time.

The program should not be interrupted or receive comment by the teacher during the broadcast.

Until more programs pertinent to school learning situations are broadcast within school hours, the use of the radio in the classroom is limited. However, the teacher should offer guidance to pupils in their selection of out-of-school programs, and continue to use this aid to the best advantage.

Radio



III. WHAT ARE THE TYPES OF AUDIO-VISUAL AIDS AND HOW ARE THEY USED?—(Continued).

Recordings

B. Records are an accepted low-cost medium of instruction. A teacher knows in advance what her pupils will hear. Valuable records are available to the teacher on all levels from kindergarten up.

Recorder

C. In certain fields of instruction, the recorder may be used. It is desirable to record the learning situation in foreign language instruction, public speaking, history, and many other fields. Many modern devices such as wire, tape, and improved disk recordings may be used.

Transcriptions

D. Transcriptions are events or radio programs which may be used at the critical time in the learning situation. These are available in disk form, but a special type of 33- $\frac{1}{3}$ revolutions player is necessary instead of the standard 78 revolutions phonograph player. Dual speed players may be purchased.

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?

Appointment of a Director or Coordinator

The administration of a local school unit is concerned with effective teaching, and is eager to encourage the use of all types of aids which will improve the teaching program.

A. A director or coordinator is essential for the success of an effective program. His duties should be part or all of his assigned teaching load. In some school systems the duties of such a director may, of necessity, be assigned to a critic or helping teacher.

It will be the duty of the director to assume responsibility for planning and executing the total audio-visual program.

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?—(Continued).

In-service Training

B. Some teaching aids are more generally available than others, and, therefore, are more commonly used. In-service education is necessary to train teachers in the use of recently developed devices which require special skills and equipment. Administrative guidance will involve the appointment of special teacher committees to work with the director or coordinator in sponsoring and planning audio-visual programs within the school system through:

1. review of literature,
2. conferences, discussion, clinics, and workshops,
3. instruction by specialists in the use of materials and equipment,
4. survey of practices in the local school system and in other schools.

C. No material should ever be shown except for a definite instructional purpose. The director or coordinator should assist each teacher in integrating the sensory materials used with the curriculum, and in selecting and evaluating those materials.

Published studies will be helpful in the selection of evaluated materials, and file cards will afford cumulative appraisals of aids used. Adequate score cards should be used in making these appraisals.

Selection, Evaluation, and Integration of Materials into the Curriculum

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?—(Continued).

SAMPLE SCORE CARD (for films)

Name of Teacher.....

Class

Scale:	Excellent	Good	Fair	Poor
Quality of photography	x			
Quality of sound		x		
Suitability of subject matter to teaching situation	x			
Accuracy of subject matter	x			
Vocabulary level	x			
Correlation with curriculum	Complete	Close	Not at all	
		x		
If "free" film, the advertising	Does not detract	Detracts but film usable	Makes film unfit for school use	
	x			
Grade level to which best suited	Prim.	Elem.	Jr. H. S.	Sr. H. S.
				x
Recommended for future use	Yes	x	No	
Comment:				

(Many scoring devices have been developed and are available)

Provision of Suitable Space for Equipment

D. In an ideal situation all aids could be used in the classrooms. Plans for new buildings should include this provision. In buildings now occupied, one or more classrooms should be equipped for materials requiring special conditions for use. A centrally located room should afford suitable storage. All materials should be classified, labeled, and kept in good condition.

Adequate Administrative, Clerical, and Mechanical Services

E. Good administration will entail careful records of utilization which will contribute toward improved use of materials. The operation of the total audio-visual aids program may require clerical assistance for the director. Careful supervision is required in the handling of rental ma-

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?—(Continued).

materials. The responsibility can be placed with **one** teacher or older pupil who will check rented materials, supervise their use, and see to it that they are returned promptly and in good condition. Promptness in returning materials is imperative when they are booked from rental or cooperative libraries to insure satisfactory service for all.

Operation and maintenance of the equipment also requires careful direction. A teacher or capable older pupil can be placed in charge of the operation of the equipment, and it has been found desirable to have a trained crew of student operators who will in turn train their successors. The director or coordinator of the program should have the responsibility of supervising the maintenance of equipment, assigning maintenance tasks only to those who have been trained to handle them properly.

Adequate Budgetary Planning for Financing the Audio-Visual Program

- F. Adequate financing is essential to the success of the audio-visual program. If the program is worthwhile, it is worth a definite place in the budget. Minimum needs should be determined as a guide to estimated costs. As has been indicated throughout the bulletin, much material is available free or at very low cost, and requires only the initiative of the teacher with the helpful guidance of the administration.

Approximate costs of some types of equipment needed for the use of more recently developed materials are listed as a guide to planning.

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?—(Continued).

MOTION PICTURE EQUIPMENT

Projector, 16mm sound.....	\$350—\$600
Film rental, per reel.....	35c—\$1.50
Club membership, for 50 reels	\$45 rental \$20 transportation
Screen, beaded, in case on tripod	\$15—\$50
Blackout shades or curtains for classrooms.....	\$15—\$60
Annual supply of extra lamps and accessories.....	\$10—\$20
Extension cords 15 to 50 feet	\$1—\$7
Instructional films, 400 ft. reels, running time 11 minutes, purchase	\$10—\$120

OTHER PROJECTED MATERIALS

Filmstrips, 35mm, 25 to 65 frames on each strip, black and white	\$1.50—\$4.50
2" x 2" Kodachrome slides in cardboard Ready Mounts, each	50c
2" x 2" Kodachrome slides in Binders, mounted between glass, each	60c
Projector for film strips and slides, 100 watt and 300 watt	\$30—\$70
Opaque projector	\$70—\$120
Lantern for 3¼ x 4" glass slides	\$57—\$70
Slides, black and white, individually selected, each.....	55c
Rental sets of slides in series, about 20 slides to a set, for one day (user pays return postage).....	60c—\$2

SOUND MATERIALS

Single speed record reproducer (phonographs)	\$20—\$150
Dual speed transcription and record reproducer....	\$90—\$250
Single speed record turntable (to be used with	

IV. WHAT ARE THE BASIC ADMINISTRATIVE PRINCIPLES?—(Continued).

- motion picture projector or other sound amplification units)\$15—\$50
- Dual speed transcription and record turntable (to be used with motion picture projector or other sound amplification units)\$60—\$100
- Radios\$25 up
- Recordsfree to \$2.25 each
- Transcriptionsfree to \$7 per unit

V. WHAT ARE THE SOURCES OF INFORMATION?

Kentucky Sources of Educational Films, Film Strips, Slides, and Other Audio-Visual Aids

- A. Bureau of Audio-Visual Aids
Department of University of Extension
University of Kentucky
Lexington 29, Kentucky
Louis Clifton, Director
Rental Library

Cooperative Film Library
Eastern State Teachers College
Richmond, Kentucky
G. M. Gumbert, Director
Limited to members only

Cooperative Film Library
Murray State Teachers College
M. O. Wrather, Director
Limited to members only

- B. Much excellent material for educational film and slide service is now available from other sources. Suggestions regarding any type of visual aid may be obtained by writing the following:

General Information

Bureau of Audio-Visual Aids
Department of University Extension
University of Kentucky
Louis Clifton, Director
Lexington 29, Kentucky

Eastern State Teachers College
G. M. Gumbert, Director
Richmond, Kentucky

Murray State Teachers College
M. O. Wrather, Director of Extension
Murray, Kentucky

V. WHAT ARE THE SOURCES OF INFORMATION?—
(Continued).

Morehead State Teachers
College
Chiles Van Antwerp, Director of
Training School
Morehead, Kentucky

Western State Teachers College
Dr. C. H. Jagers, Director of
Training School
Bowling Green, Kentucky

Kentucky State College
Dean J. T. Williams, Chairman
Committee on Audio-Visual Aids
Frankfort, Kentucky

**Recommended
List of Books**

- C. Dent, Ellsworth C., *Audio-Visual Handbook*. Society for Visual Education, 100 East Ohio Street, Chicago, Illinois. 227 pp., 1942, \$1.00. A reference book on audio-visual instruction.

Hoban, C. F., Sr., Hoban, C. F., Jr., and Zisman, S. B., *Visualizing the Curriculum*. Gordon Publishing Co., New York, N. Y., 304 pp., 1937, \$2.50. An excellent basic text on all phases of audio-visual instruction. Should be read by all teachers.

Hoban, C. F. *Movies That Teach*. The Dryden Press, Inc., New York, 16, N. Y., approximately \$3.75.

Dale, Edgar, *Audio-Visual Methods in Teaching*, The Dryden Press, Inc., New York 16, N. Y., \$3.75.

**Suggested List
of Books**

- D. McKown, H. C., and Roberts, A. B., *Audio-Visual Aids to Instruction*. McGraw-Hill Book Co., New York, N. Y. A basic text on using various types of audio-visual aids. Contains helpful suggestions for adapting audio-visual aids to various subject matter fields.

Noel, Francis W., *Projecting Motion Pictures in the Classroom*, Series II, No. 5, American Council on Education, 744 Jackson Place, Washington, D. C., 53 pp., December 1940, 50c.

Seaton, Helen H., *A Measure For Audio-Visual Programs in Schools*, Series II, No. 8, American Council on Education, 744 Jackson Place, Washington, D.

V. WHAT ARE THE SOURCES OF INFORMATION?—
(Continued).

Information on
National Film
Sources

Magazines

C., 40 pp., 1944, 40 cents. A discussion of current problems in audio-visual instruction. Sets forth goals for programs in individual schools.

Motion Pictures for Postwar Education. Series I, No. 21, American Council on Education, 744 Jackson Place, Washington, D. C., 23 pp., October 1944, 20 cents.

- E. Cook, D. E. & Rahbeck-Smith, E., *Educational Film Guide.* H. W. Wilson Co., New York, N. Y. A catalog of educational films. Contains brief description of contents, price, source, running time. Most suitable for audio-visual materials coordinators. Published annually with supplements.

1001 and One. Published by *Educational Screen*, 64 East Lake Street, Chicago, Ill., \$1.00 a copy. Free to members of the Department of Visual Instruction, N.E.A., 25 cents to subscribers to *Educational Screen.*

- F. *Business Screen.* 157 East Erie Street, Chicago 11, Ill., \$2.00 for eight issues. (For vocational and distributive education classes)

Educational Screen. Educational Screen, Inc., 64 East Lake Street, Chicago, Ill. \$2.00 per year (10 issues). Contains many excellent articles on using audio-visual aids in education. Includes sections: The Literature in Visual Instruction, Experimental Research, Teacher Evaluation of New Films, Current Film News.

See and Hear. See and Hear, 157 East Erie Street, Chicago, Ill. \$2.00 (8 issues). A new publication in the audio-visual field. Well illustrated. Many excellent articles on using audio-visual materials in schools. Of particular usefulness to administrators and classroom teachers.

The News Letter. Bureau of Educational Research, The Ohio State University, Columbus, Ohio. Free.

V. WHAT ARE THE SOURCES OF INFORMATION?—
(Continued).

**Care of Films
and Equipment**

- G. *ABC's of Visual Aids and Projectionist's Manual*, Educational Film Library Association, Inc., 45 Rockefeller Plaza, New York 20, N. Y., 83 pp., 1946.

The 1946 Audio-Visual Projectionist's Handbook, published by Business Screen Magazine, 157 East Erie Street, Chicago 11, Ill., \$1.00.

Wing, Frank, Jr., *Suggestions for Prolonging the Service Life of 16mm Prints*, Allied Non-Theatrical Film Association, Inc., 303 Lexington Avenue, New York 16, N. Y.

Radio

- H. Levenson, William B., *Teaching Through Radio*, Farrar and Rinehart, New York, \$3.00.

Woelfel, Norman and Tyler, I. Keith, *Radio and the School*, World Book Co., Yonkers, New York, \$2.12.

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