Tools for Learning

WANTED: A BROAD CONCEPT OF AUDIO-VISUAL INSTRUCTION
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THERE IS A GROWING TENDENCY to think of audio-visual instruction as being more-or-less synonymous with the use of motion pictures. This limited view is largely responsible for the omission of many other types of audio-visual materials from organized programs of audio-visual instruction. It must be recognized that each type of audio-visual material has inherent characteristics which make it particularly adapted for definite educational purposes. Motion pictures are indispensable and their use should be continued and expanded, but only for those purposes for which they are particularly adapted. It is recognized that this problem is one over which the teacher often has little control because the desired subject may be available in motion picture form only.

Motion is not essential for adequate presentation of many subjects. Also, many motion pictures consist largely of still picture sequences or of irrelevant motion which may detract from concentration on the content to be learned. Motion pictures are of exceptional value in introducing and summarizing a unit of study, but they may be of only moderate value for detailed study and classroom discussion.

The problem as to which type of audio-visual material is best suited for a particular purpose resolves itself into a consideration of the principles of selection, integration, and utilization, which is beyond the scope of this article. It must be frankly admitted that less is known about these three aspects of audio-visual instruction than any others, despite the fact that the degree of effectiveness with which audio-visual materials are used depends primarily upon the extent to which such principles are applied. This lack of knowledge is very largely responsible for the present indefinite status of audio-visual instruction. Much has been written on the subject, but the approach has always been either too general, resulting in the formulation of generalized criteria difficult to apply to a particular situation or very specific, "rule-of-thumb," criteria which overlook many significant applications. It was this realization which recently prompted the NEA Educational Policies Commission to undertake a comprehensive study of the problem.

Since significant interrelationships exist among the essentially visual materials designed for projection, this article deals only with the more common of these materials. Projected audio-visual materials and radio programs and recordings are important because they facilitate group instruction, upon which our educational system is fundamentally based. However, audio-visual materials which are designed primarily for individual instruction are probably more indispensable. For example, it would be regrettable indeed if textbooks became any less visual than they already are or if maps were dispensed with.

There are several reasons for the tendency to use motion pictures to the relative exclusion of other audio-visual materials:

1. Motion pictures are intrinsically interesting and more dynamic in nature than most other types of audio-visual materials.

2. A large number of motion pictures are available for use in practically all subject-matter fields.

3. Motion pictures can be substituted for practically all other types of audio-visual materials but often at a sacrifice in edu-

A fresh approach is given the much-discussed subject of audio-visual tools in this introduction to "Tools for Learning" by Vernon G. Dameron, director of the NEA Division of Audio-Visual Instructional Service. Pointing to the current tendency to use motion pictures to the exclusion of other audio-visual materials, Mr. Dameron discusses the characteristics of a variety of available projected materials and their consequent educational uses.

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4. Motion pictures, in comparison with most other types of audio-visual materials, are relatively easier to use effectively because of their self-sufficiency—a means of communication per se.

5. A motion picture projector is generally the first—and unfortunately often the only—audio-visual equipment purchased by a school. This is probably the result of the foregoing considerations.

The distinguishing characteristics of the projected audio-visual materials most commonly used and some of their adaptations are:

1. Visual, with Motion and Sound. These characteristics are essential when adequate portrayal necessitates presentation of the synchronized actions and voices of living beings, synchronized movements and sounds of inanimate objects, or action plus musical backgrounds. The combination of visual images, motion, and sound provides for emotionally derived learning, which may be the most effective means of instilling such extremely hard-to-teach but nonetheless important attitudes and appreciations as tolerance, ethical conduct, democratic ideals, and international understanding. The sound motion picture and television both provide for life-like and dramatic presentations; however, television goes a step further because of its capacity to present current events. In regard to documentary films, they have a great part to play in the education process, but there seems to be an increasing tendency to over-emphasize their function at the expense of strictly classroom films.

2. Visual, with Motion. Silent motion pictures are more flexible in use and any one film is more adaptable to various grade levels and subject-matter fields than sound motion pictures. They are effective for showing operations, functions, processes, and skills when the emphasis is upon the subject-matter content rather than the human element. Silent motion pictures are, of course, considerably less expensive than sound motion pictures.

3. Visual. Silent film strips, slides, and opaque projections are extremely flexible in use and are excellent for prolonged study and detailed discussion. They are also very effective in presenting cutaways, phantom views, and superimposed drawings and diagrams. The rate of presentation can be varied at will. Not only is there great diversity in the reading rate of individuals, but also in the viewing rate. Since silent film strips and slides are relatively inexpensive, they are generally purchased by the school, making them readily available for preview by the teacher and for use in the classroom. The equipment with which to present these materials is also relatively inexpensive and simple to operate.

The silent film strip is not a succession of disassociated slides; it should be thought of as an adaptation of the silent motion picture, because of its continuity in both pictorial and verbal presentation. Also, it is not just an illustrator of nouns. Silent film strips are effective in presenting many activities. In fact, this medium capitalizes upon the elimination of irrelevant—and often distracting—motion by showing only the pertinent characteristics of each detailed step in a procedure. The writer's experience in the production of sound motion pictures, sound film strips, and silent film strips in the Army Air Forces clearly indicated that motion is not essential for the effective portrayal of many activities.

Slides are especially flexible in use because the sequence in which they are presented can easily be modified by additions, deletions, or shifting of order. Some film strip projectors accommodate 2" x 2" slides. Because of their large area, 3¼" x 4" slides are particularly adapted for showing large interrelated masses and diagrams.

The main value of opaque projection is that it affords presentation of an almost unlimited amount of pictorial material not available in slide form, such as maps, charts, and illustrations in reference books.

4. Visual, with Sound. The sound film strip should be thought of as an adaptation of the sound motion picture. The educational purposes for which both sound and silent film strips can be effectively used is similar, except that the sound type has the advantage of affording more dramatic presentation.

The broad view of audio-visual instruction includes more than the use of the best type of audio-visual material for a particular educational purpose; it also involves the correlated use of different types of materials to accomplish the same purpose more effec-
If, as the training aids officer of the Marines states in a recent article, the sand table "has been of great value in showing personnel the 'why' of military operations as well as the 'how,'" then surely there can be many vital applications of the less-dynamic types of audio-visual materials in our schools throughout the nation. New programs of audio-visual instruction are being established and former programs are being expanded and developed more rapidly now than ever before. Their effectiveness will be immeasurably increased if they are based upon the broad view.