

The Electronic Learning Center in the Library

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In 1961 the University of Michigan published in the Language Laboratory Technical Report #12 an article by this author entitled "The Electronic Study Center." Outlined in this article were the reasons and methodology for expanding the ordinary language laboratory into an installation which would serve as a teaching aid for all subjects. The term "electronic study center" is rather cumbersome, and since I am addressing a group which is library-oriented, I shall refer to the same concept in this report as the "audio-library."

In preparing this report for an institute sponsored by a school of library science, one of my major endeavors has been to try to see the problems involved through the eyes of the librarian. Being woefully ignorant of those finer points of library science which go beyond the Dewey Decimal System and the card catalog, I hope I have not oversimplified or overlooked too many all-important details.

Most universities, colleges, high schools, and quite a few junior high schools have installed language laboratories. These installations are being used with varying amounts of success by foreign language teachers as a tool for teaching the spoken foreign language. Quite naturally, these language laboratories are controlled by, and under the direction of, the language teachers. At this time I should like to question seriously the wisdom of having these installations under the control of the foreign language department in the respective schools. I believe, rather, that that collection of teaching aids and the concepts which we at present call the language laboratory should be viewed as one of the several components of a modern well-equipped library and so operated.

Why do I hold this view? The school library and materials center has long been the repository for materials which aided and enriched class activities in all subjects. Most, but not all of these materials were printed matter, usually books. I believe a new type of volume, one on tape, would be an extremely valuable addition and complement to the usual collection of books and other materials. There is little doubt that the language laboratory has proved a useful tool for the teaching of foreign languages. If it can be demonstrated that such an installation can be equally useful as an aid to teachers of all subjects, then the school library as a materials center is the obvious choice to handle this inter-departmental teaching aid. Having accepted this concept, it becomes necessary to discard the term "language laboratory," and, as I mentioned earlier, in this paper I shall use the

term "audio-library" to refer to an installation similar to a language laboratory but adapted and available for use by all departments as part of the library's offerings and services.

How may a language laboratory be adapted to serve all departments? First, it is important to understand what functions a language laboratory may perform. A well-equipped language laboratory (or audio-library) is capable of performing three basic functions: (1) Simple listening—a passive activity in which the student listens to recorded material; (2) The listen and respond function, with its two variants—listen and repeat, and listen and answer (In this activity the student listens to recorded material and then either repeats or answers as the situation requires.); and (3) The recording function in which the student may record either what he has said in response to the pre-recorded material, or may record original oral composition.

Beginning with the first function, simple listening, I see the audio-library employing this activity as a means of supplying the student with enrichment material for any number of different subjects. The use of tapes and records (frequently supplied by the instructional materials center) to bring into the classroom great literature read by professional actors has long been standard procedure in many English classes. This is an easy and effective way of varying and stimulating classroom content and interest, but it has a certain minor drawback in that employing the same presentation for the whole class does not take into consideration individual differences and interests. The primary drawback, however, is that class time is so limited that the teacher is restricted in the amount of recorded material that may be played. An audio-library open to students during study-hall time or after school would relieve the problem by making available to a student more and different programs which would complement the material presented in class. For example, an English teacher might very likely present on tape or record, in class, part of Stephen Vincent Benét's "John Brown's Body" which is included in many high school literature books. Either as homework assignment or as an enrichment offering for those who are interested, the teacher might have the audio-library play another of Benét's classics, perhaps "The Devil and Daniel Webster."

(TAPE SELECTION WAS PLAYED AT THIS POINT.)

This is a rather good performance and illustrates the point that an audio-library can do some things better than the teacher or a book. The teacher and the book will always be necessary, but a good professional tape brings material alive in an exciting manner that captures and holds student interest. There is also no reason to restrict this type of activity to English. There are many tapes and records that would be useful to social studies classes. Brief excerpts from two tapes: one, a series of on-the-spot recordings made just before and during the Normandy Invasion, and the other a dramatization of

the Lewis and Clark Expedition can be used to illustrate the material now available.

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There are many other tapes in various subject matter fields that could be used in the same way. Another possible use of instructional tapes is as an aid to those students who do not read well. Very frequently we find that these students respond well to oral presentations, although unable or unwilling to do reading assignments. It is for this reason that the Personalized Curriculum Program (in earlier days called the "special room" or "ungraded room") at Ann Arbor High School is planning to install a small language laboratory (or audio-library) type installation which could be used to present taped lessons in home economics, driver education, and social studies.

Thus far the discussion of audio-library utilization has been restricted to passive listening on the part of the students. When possible, it is advisable to employ tapes that require student response. One kind of student-response tape, the "listen and repeat" type has long been used by foreign language teachers to improve oral proficiency and does not require elaboration here. However, some other listen and respond types that could be employed in an audio-library would include a shorthand dictation tape.

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Tapes and records of this type have been used for some time by business education teachers, but almost always with the entire class taking dictation at the same rate of speed. Using an audio-library with facilities for sending out many programs simultaneously, it would be possible to have the most skillful students practicing dictation at a speed of 120 words per minute while others were practicing at different speeds ranging down to 60 words per minute.

A different type of listen-respond lesson is the "audio-tutorial" tape which begins with a lecture section followed by a question section which requires active student involvement in answering. A biology tape on leaf structure will illustrate the audio-tutorial tape.

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The teacher whose students use a tape of this nature might wish to use it as a testing tape, and eliminate the answers which the tape supplies as reinforcement. The students' answers might be written down and handed in as with a regular test, or the teacher might employ the third language laboratory function, that of recording, as a means of evaluating the students' grasp of the subject matter. A more rewarding use of the record function, however, is its use as a device to assist students in preparing for oral reports. Oral reports

are attractive assignments in that they compel active student participation in the learning process, vary the usual classroom routine, and should yield significant and valuable side effects in training students to gain mastery of that most useful and difficult instrument, the tongue. However, experience shows that with many students the oral report is a rather dismal and embarrassing failure marked by poor organization, flat, lifeless delivery, insufficient material, and no rehearsals. But using the audio-library's record function as a rehearsal tool several times before giving the report "live" in front of a class would go a long way towards eliminating some of the problems which plague oral reports.

Up to this point examples have been cited and samples have been used of taped lessons most suitable to secondary level students. Needless to say, the same concept may be extended to both the elementary and university levels, the only major change being the level of difficulty of the taped lessons employed.

At the elementary level especially, teachers are sometimes at a loss over what to do with those pupils who have made a "great leap forward" in learning and who finish their seat work long before the rest of the class. Nancy H. Davis of Lincoln Elementary School in San Bernardino, California, gives a very good blueprint for using taped lessons at the elementary level in her article "A Second Teacher," in the April 1961 issue of Audiovisual Instruction. In addition to explaining how taped lessons may be used with elementary pupils, the article also includes scripts for a science and a phonics lesson.

Working at the university level, there are many excellent tapes of lectures given by experts in various fields ranging from cloud chambers to Latin American socio-economic problems. These taped lessons preserve lectures given by noted authorities which might otherwise have been consigned to oblivion, or at least not be available to students in the original form. The "listening room" is a fixture of long standing in many university and public libraries but is too often limited to playing music and literature selections.

The different procedures and practices mentioned thus far are ones which can be carried out at present with components available from the many firms which sell language laboratory equipment. One important factor to consider in planning an audio-library is how many program sources to include. The number of different program machines will be determined by how many different lessons should be offered simultaneously. In some university laboratories the number is several hundred. At the Ann Arbor High School in Michigan, there are facilities for sending out 100 programs simultaneously. A few slides which show the electronic installation similar to that found in a telephone company will give an idea of what such an installation entails.

(SLIDES WERE SHOWN AT THIS POINT.)

The central program room, located in the Ann Arbor High School, has facilities for sending programs to the high school laboratory and to the three junior high schools which have laboratories of their own. This concept of a central laboratory installation with one or more satellite labs can easily be adapted to an audio-library so that there could be auxiliary listening rooms in different parts of a library, in different buildings on a campus, or even in different cities. At Ann Arbor High School the laboratory network is tied together by leased telephone lines; another possibility is to connect the units by radio or private cables.

Thus we see the basic language laboratory idea extending in two directions; first, from one subject-matter field to all fields, and, secondly, from one room to any number of rooms and buildings, including even the students' homes during after-school hours. When the audio-library is extended to the students' homes or dormitories by radio, or phone lines, or some similar device, then taped lessons will be almost on a par with circulating volumes which a student may take home to peruse at leisure and as often as necessary. Making the resources of the audio-library this accessible is going to go a long way towards moving this material far to the right on the "A-line" (accessibility line). As Dr. Louis Forsdale of Columbia University has so aptly pointed out, any material, of whatever value, achieves its full potential only when it is easily accessible to the student, so that a radio program which is broadcast only once and at a time not convenient for student use is not very far to the right on the "A-line," whereas a circulating book in an open stack would be far to the right. In any event, an audio-library should be planned so that a student will be able to have ready access to the offerings of the audio-library in as many different places and at as many different times as is possible.

Still one more extension of the audio-library that I should like to propose is the inclusion of visual aids as a complement to the taped material. The value that visual stimulus in the form of slides, films, filmstrips, and similar devices would add to the taped lesson is so obvious that I shall not belabor the point but rather content myself with pointing out that there are at present devices which can project an 8mm color motion picture, and in many cases play an accompanying sound track, employing equipment that would easily be accommodated within the confines of an audio-library booth or carrel.

In summary, then, it would be wise for all schools not already doing so to investigate the advisability of implementing the following procedures:

- (1) Expand the offerings of the language laboratory to include taped lessons for all subjects.
- (2) Expand the number of listening positions so as to include the library, study hall, dormitories, and if possible, the students' homes.

(3) Explore the possibility of including in the listening posts projection devices which add visual reinforcement for the taped lessons.

A word of caution to those junior and senior high schools whose language laboratories were purchased with NDEA funds, since these laboratories were approved for use by the foreign language department it would be unwise and very likely illegal to so modify the scheduling of classes using the language laboratory that the foreign language classes did not have sufficient time to use the laboratory. After all, a debt of gratitude is owed to the foreign language teachers who pioneered in the development of a learning aid which seems to have great promise as a teaching tool for all subjects.