New Resources for the School Library Materials Centers
(With Appended Bibliography)

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As a graduate of the University of Illinois Graduate School of Library Science, one continues to carry in his life-long learning activities those ideals, concepts, and goals that were first given to him in his graduate training. Thus I have been exposed to a multi-materials philosophy for many years, and this philosophy is so much a part of me that I feel highly honored to speak with you about "New Resources for Library Materials Centers." Dr. Stone, our keynote speaker, set the tone of this conference and was able to express so clearly all the potential of the school library materials center. I think that in practice we do not as yet reach this goal, but we are moving in that direction. It is hoped that this audio-visual presentation (Colored slides were used throughout this presentation illustrating titles, equipment, or uses of library resources in individual libraries.) will amplify what Dr. Stone said, and in addition, expand your understandings of the new things that are happening in the school library world.

Before presenting slides of the many types of resources available today, I should like first to recommend to each of you the publication, The School Library, Facilities for Independent Study in the Secondary School, published by Dr. Harold Gores, President, Educational Facilities Laboratories, 477 Madison Avenue, New York 22, N. Y. I hope each of you will write for a copy and express appreciation to him for this very thoughtful and imaginative publication. And I hope you will also write to Dr. Ralph Ellsworth and thank him for his authorship of this significant publication. Someone in the audience asked last night, "What can we do to communicate with our superintendents?" The Education Facilities Laboratories, because it was primarily designed to assist the superintendent, is one agency that is respected by them. Your superintendent has already received this publication. Go in and ask him for his copy, borrow it, and discuss the principles expressed in it in relation to your own library program.

In The School Library, Facilities for Independent Study in the Secondary School, Dr. Ellsworth begins with a very provocative statement: "In most of today's secondary schools, the library will be found in a small room with a few hundred books around the wall. Seats for a few readers are presided over by a librarian whose main
task is to keep order over a reluctant group of students who are there, not because they want to be, but because they have been sent there to study their textbooks." On the other hand, that is not the total picture of the school library; nor does he project this concept in the book. But rather Dr. Ellsworth reports that we should have a collection of about 30,000 books and that we should be able to seat 60 per cent of our students in libraries in individual study units.

Illustrations in this publication show the imaginative space use of the library as a learning laboratory. The study carrels provide spaces where students may teach themselves and provide for individualized learning as a part of modern education.

Many types of resources for self-study are being used in the school library today and are shown in the slides. Teaching machines and individual study carrels are in use in some of the libraries in the East. A pace reader for improving reading speed is to be found in the Ridgewood High School in Norridge, Illinois. In this slide a young man from Cold Spring Harbor High School in New York is conducting science research in one of the individual study units close to the informational resources which is a part of the Science Library of the High School. Next are the study carrels from the University of Chicago Laboratory School. Again, this slide is another type of an individual study unit, a mechanical core, a do-it-yourself type, where you can typewrite as well as view and listen. A microfilm reader is also to be found in the laboratory school at the University of Chicago.

We are using more and more of these resources in school libraries. A picture of a typical busy day shows many kinds of activities going on in a school library. Illustrations in The School Library show the attractive use of screens and free standing carrels as well as opportunities for reading in a garden and for sitting in comfortable seats provided by the school library. Another new facility is the central processing center for films, filmstrips, and books for a system or region. We need to work toward developing more cooperative processing centers. These are desirable because they release time for the librarian to work with students and teachers.

Those of us who for many years have been promoting the library as a materials center, are sometimes described as having more interest in the new types of materials than in books and print. Yet we who are promoting an overall multi-media use of materials in the library are not promoting these at the expense of books but along with books. All types of materials are needed to meet the needs of education today. With this in mind, I am going to show rapidly many slides of bibliographical resources listed in the bibliography and well known to every librarian. Many of the new resources are now available in paperback form. School librarians certainly ought to examine the many types of paperbacks in science, biography, and fiction.

More time, however, needs to be spent with some of the resources in the audio-visual field because they are not so familiar to many.
Many resources are available from local university libraries and large libraries. These include: The National Tape Recording Catalog, Sources of Information on Educational Media, Margaret Rufiovold's Guide to Newer Educational Media, and the recent Programs '63, the guide to programmed instruction from the U. S. Office of Education. These are all inexpensive items that every school library can afford. Sources of free films, filmstrips, and recordings are available from the Educators Progress Service. These are additional sources for gaining information for obtaining free materials, as for example, the George Peabody College learning resources booklet which is very inexpensive. Every school librarian working with multi-materials should receive Audio-Visual Instruction, the magazine of DAVI, and should also be a member of the Department of Audio-Visual Instruction. Of all the publications that are available in the total audio-visual instructional field, this publication is far superior to any other publication at the present time. Research interests can be met by reading Audio-Visual Communication Review and also some of the magazines in the field of programmed learning which are listed in the bibliography. Programmed learning is just beginning to take hold in this country, and school librarians have a great stake here as well as a great opportunity. The Center for Programmed Instruction Bulletin is not too expensive and is one that should be in the school library.

The new publication Teaching Aid News is excellent for keeping up with the newest materials in educational technology. For example, it has already reviewed The School Library, Facilities for Independent Study. Even though it costs $10, and the paper and format are not worth $10, the immediate information is invaluable. An agency that we should familiarize ourselves with is NAEB, the National Association of Educational Broadcasters. These people are friends of librarians and are working for the broad approach to the use of materials, and we should be knowledgeable about their activities. Everyone should be familiar with Dr. Jim Finn's Technology Project for NEA and the studies published from the project. These include research about the fields of print, media, textbooks, and audio-visual materials. Titles include: HISTORY OF INSTRUCTIONAL TECHNOLOGY, I: TECHNOLOGY IN AMERICAN EDUCATION, 1650-1900; HISTORY OF INSTRUCTIONAL TECHNOLOGY, II: THE TECHNICAL DEVELOPMENT OF THE MEDIA; TEACHING MACHINES AND PROGRAMMED LEARNING, 1962: A SURVEY OF THE INDUSTRY; INSTRUCTIONAL TECHNOLOGY AND THE PRESS: A CASE STUDY; AUTOMATION IN EDUCATIONAL ADMINISTRATION, I: VENDING MACHINES IN SCHOOLS AND COLLEGES; STUDIES IN THE GROWTH OF INSTRUCTIONAL TECHNOLOGY, I: AUDIO-VISUAL INSTRUMENTATION FOR INSTRUCTION IN THE PUBLIC SCHOOL 1953-1960 A BASIS FOR TAKE-OFF; THE DESIGN OF INSTRUCTIONAL EQUIPMENT: TWO VIEWS; STUDIES IN THE GROWTH OF INSTRUCTIONAL TECHNOLOGY, II: A DIRECTORY OF CLOSED
CIRCUIT TELEVISION INSTALLATIONS IN AMERICAN EDUCATION WITH A PATTERN OF GROWTH.

Serving on the Educational Media Council and sharing the responsibility for directing the planning of the Educational Media Index has been most rewarding. This publication by the Council is being compiled by McGraw-Hill and will include all types of non-print resources: film, both 16 mm and 8 mm, with a symbol for each: filmstrips, records, slides, tapes, and video tapes, sets of pictures, models and mockups, programmed instruction, and cross-media or multi-media kits as well as maps, globes, and charts. These materials will be collected in fourteen directories: one a master title directory and thirteen sub-directories for the following areas:

Volume 1, PRE-SCHOOL AND PRIMARY, GRADES K-3—$4.70
Volume 2, INTERMEDIATE, GRADES 4-6—$5.70
Volume 3, ART AND MUSIC—$4.50
Volume 4, BUSINESS EDUCATION AND TRAINING—$3.70
Volume 5, ENGLISH LANGUAGE—$4.20
Volume 6, FOREIGN LANGUAGES—$4.70
Volume 7, GUIDANCE, PSYCHOLOGY, AND TEACHER EDUCATION—$4.50
Volume 8, HEALTH-SAFETY AND HOME ECONOMICS—$4.70
Volume 9, INDUSTRIAL AND AGRICULTURAL EDUCATION—$5.00
Volume 10, MATHEMATICS—$3.20
Volume 11, SCIENCE AND ENGINEERING—$5.10
Volume 12, GEOGRAPHY AND HISTORY—$5.20
Volume 13, ECONOMICS AND POLITICAL SCIENCE—$5.20
Volume 14, MASTER TITLE INDEX—$6.75

If a teacher were planning a unit on the history of the Civil War, he would find under that subject: films, filmstrips, tapes, recordings, sets of prints, sets of slides, and all the media just mentioned, which would help him do a better job of teaching. This tool is based on a publisher’s description in telegraphic English and is not evaluative like the Standard Catalog series. We still need librarians to take a look at the total universe of materials, and then select from these the best. The following is a sample entry from the Educational Media Index:

*FRENCH CONVERSATIONAL PROGRAM—RECORD SET. L1 7" rec 45-33 1/3 rpm jh-sh-c-g&p-ad $57.50. French conversation lessons in continuous discourse of every day speech for advanced auditory comprehension. Covers audio-training, reading, writing, structure, 3,000-word vocabulary. Native speakers. Directed by Professor P. Fouche, Director of the School for Teaching French to Foreigners, of the Sorbonne, Paris. Same material as paused version.
There will be many subject headings throughout the directories. This information is assembled by IBM cards and photographed by a system that is used to print out negatives from which the positives are printed. It is hoped that every center of any size will buy the Educational Media Index and that additional sets will be purchased to sub-divide for departments. This is a very expensive venture, and there has been difficulty getting a publisher interested in publishing this index because of the cost. The Educational Film Guide and the Filmstrip Guide have already ceased publication. This educational tool is needed; librarians should inform others about the publication. At least 5,000 orders are needed to put it on a sound financial basis.

Returning to books, we now have slides of special types of books that we need in our libraries. As one example I have chosen Exploring Science from the Golden Book Series. Our science professors at Purdue University have checked these books and report that they are excellent resources for learning and should be used in school libraries. Another example is Planets. The reason I have chosen these books is that they are inexpensive, they are beautifully illustrated, and the information is correct and up to date. Because librarians are inclined to look at literary value only and not at some of the other criteria that are just as important, I am emphasizing some of these resources. This 50¢ book on How and Why: The Wonder Book of Stars is one resource that should be available in every elementary school. Some of these resources that are inexpensive can make a real contribution to learning.

Paperbacks have already been mentioned, and one on Birds from the University of Michigan is a fine example.

Other slides include new films from Encyclopedia Britannica Films, Coronet, and McGraw-Hill. Librarians should examine carefully the various films series, e.g. those of the Physical Science Study Committee, the New Mathematics series, and the AIBS materials. The new biology series uses the technique of micro-photography in a way that has not been seen before in many commercial materials. There are kits of recordings, sound films, and study prints altogether in one correlated teaching unit. One of the new films "Why Explore Space" causes young people to think about the "why" of things and not so much the "how" or "what." Well known are the books put into the film series of the Weston Wood Publications—the Picture Book Parade series.

The next series of slides shows a system for putting filmstrips into a small library and identifying them as one might the books and other resources. Filmstrip reviewers are also available in the library for students to use individually, or to take to individual carrels, or to check out in the same manner as other library materials. This is only one way in which filmstrips can be organized for use.

There are many newer kinds of tools which are available on the commercial market. One is the new stereo recording unit produced by Revere. A stack of tapes will play for sixteen hours. A student
brought in this picture of a jukebox for motion pictures—a clipping from last week's paper. It is a new motion picture exhibiting device capable of showing forty different sound motion pictures without changing reels. It is just like a jukebox for recordings, but it is for motion pictures. Many of these devices are self-operating, and fifth and sixth graders have no difficulty using these new resources, nor should librarians.

Other slides show tape tables, listening tables in units, and a language laboratory which is also being used for other kinds of learning situations. Many teachers and librarians are finding language laboratories helpful in speech, English, and social studies programs.

The teaching machine is very useful in libraries; it is really a book, programmed so that it takes the best that we know about a subject and the best we know about learning and puts these together. The programs are adaptable to library use. Some of these are programmed texts; others range from very simple devices that any child could check out of a library for individual use to extremely complicated and expensive electronic devices. One example is the Temac Series which is produced by the Encyclopedia Britannica Press. Another example is the audio-lingual textbook, which uses tapes, filmstrips, and texts in addition to teaching machines for teaching. This represents the multi-media approach to learning. One does not need to understand how the machines are built. We only need to know how to use them with students and teachers.

Some librarians are saying, "Where on earth would we store this?" "How would we manage it?" There are many examples of compact storage areas, such as those planned for the Chicago public schools under the direction of Dr. Philip Lewis. A great many resources can be planned for a small space. Other storage areas have been devised by Margaret Nicholson. One of the outstanding materials centers is the Evanston Township High School Library. Other materials centers are described by James Boulia in the October 1964 issue of the Illinois School Journal on instructional materials. Mary Louise Mann of the North Central High School library in the Washington Metropolitan District, Indianapolis, Indiana, has another fine example of a school library which functions as a multi-materials center.

Other multi-media resources include the International Communications Foundations Kits on countries of the world, such as the one on Turkey. There are filmstrips, recordings, printed resources, realia, and other kinds of materials, all available in one kit. More of these resources are needed in libraries. Other kinds of kits from the International Communications Foundations are those on electricity, magnetism, and basic electronics. Shop teachers and physics teachers would be vitally concerned with these resources.

The overhead projector is a practical device for teaching, and many teachers are making use of it. Preparation laboratories are
being planned for new schools where pupils and teachers can prepare transparencies for class use. Library schools provide the opportunity for students to make some overhead transparencies for library teaching. The Indiana Librarians had a workshop last summer under the auspices of Technifax. A set of thirty-four transparencies were made for teaching the use of the library. The Graduate Library School at the University of Pittsburgh is producing imaginative transparencies for teaching cataloging and classification. Encyclopedia Britannica Films has sets of transparencies available, for example, one from the Bullfrog Series in science. Industrial firms are now making available transparencies for subject fields. Many are of high quality. Librarians should not take the time to reproduce materials that are already available commercially. It will take enough time to produce those things that are not yet available.

Looking for toys for my nephews and nieces, I found some excellent science materials in the catalog from Creative Playthings, located in Princeton, New Jersey. These science resources sell about like toys so can be afforded in a library. There are also similar resources for reading and the language arts.

Mathematics materials can be secured from the Mathematics Laboratory Materials Corporation. Some are very imaginative materials for teaching the new mathematics. Many parents are also interested in these resources because they do not understand the new mathematics any more than you do.

Another new teaching device is the 8mm film. Many of these single concept films are being used in science and foreign language classes. Dr. Louis Forsdale is going to discuss this topic later. Mention will be made of these with a slide to show the Technicolor projector with a single concept film. These single concept films have great possibilities for us in teaching the use of the library. We should prepare single units on the card catalog, reference books, and the Readers' Guide so that students may teach themselves. Another type is the Kodak 8mm film to which sound can be added. This has been developed primarily for the home, but it has great potentials for school use. With an A-V specialist on the staff such as the specialist at North Central High School, Indianapolis, locally prepared materials can be produced.

Next is the Revere Slide Sound Projector which puts thirty seconds of voice on the disk around the slide. Again one could prepare slides for teaching the use of the library and put sound on them; these would be self-instructional devices for young people. Another method is to coordinate a set of slides with sound on tape such as those Mrs. Juanita Landman from Andalucia School, Phoenix, Arizona, has prepared.

Rear projection devices are going to be used more extensively in schools and libraries in the future. It is not educationally sound to have children sitting in classrooms in total darkness. Commercial
equipment industries are working on new equipment which will be produced when financially feasible.

Other new types of materials include microprojection equipment and portable display units that can be set up in various places in the school. There are also commercial processing companies who catalog, classify, and prepare books for library use, thus making it possible to set up several new libraries which will be simultaneously ready for student and teacher use.

The Midwest Program on Airborne Television Instruction is a new resource for learning. Instructional television, including closed circuit, requires many resources for teaching and makes new demands on school libraries. The American Association of School Librarians is working with Airborne Television at Purdue on a national bibliography project to improve the resources available in school libraries by up-grading the bibliographies in the various study guides. This project was an outgrowth of a study that Dr. Harold Goldstein of the Graduate School of Library Science at the University of Illinois reported in Illinois Libraries, November 1962. It was exciting to see how responsive MPATI personnel were to one small study where librarians said "Why don't you ask us to help you?" MPATI now belongs to the schools of the six state area, and the schools pay a fee of a dollar a student in order to participate. This project will be as good as the people in the six state area want it to be, for these schools will direct the organizing of the television curriculum. MPATI is now doing forty hours of telecasting for twenty-two courses. In addition to MPATI there are also local television stations, the regional networks, and the National Education Television Center in New York. The national center has a potential of improving the programs needed for instructional television. Instructional Television Materials: A Guide to Films, Kinescopes, and Videotapes Available for Televised Use is published by the Center to demonstrate the feasibility of a national library system for the exchange and use of recorded tele-courses.

A school in Plainedge, New York, has been experimenting with a new type of 2,000 megacycle band for broadcasting in small areas. Stan Lapin has described this system in Audio-Visual Instruction, June 1963. Use can be made of as many as ten channels. Imagine having a channel in a central center that could send out all the films that one wanted by dialing from a classroom. This is possible now with the new Federal Communications Regulations which permits a fixed service for instructional television.

New portable television equipment also has great potential. With a good camera one could go out and take scenes that might be used in the teaching process. Eight mm films could be made from these.

Three new television tapes machines that may be of major importance in advancing the fast-growing market of TV tape recording products have been announced by the Radio Corporation of America, 30 Rockefeller Plaza, New York 20, New York.
The new tape playback machine, the TR-3, is analogous to the film projector in the motion picture field. It provides a professional yet economical device for playback of tape-recorded programs and commercials for broadcast and for such other purposes as previewing and editing. Until now, all professional TV tape recording equipment has had a dual function, i.e., record and playback.

The new transportable tape recorder, the TR-5, is contained in a small cabinet which can be wheeled into a station wagon for travel to a remote recording location. Because of the compatibility feature, tapes recorded in this manner may be played back on any standard broadcast-type recording equipment at the TV studio.

A learning laboratory that has been very successful has been developed at Purdue University with one professor teaching Botany to 480 freshmen. This laboratory operates from 7:30 in the morning until 11:00 at night. Students meet for one lecture a week and then they have an opportunity to do their work in this learning laboratory in individual stations using an audio-tutorial system. The tapes, the diagrams, and the specimens are altogether in one center, and the student may stay for the day if he likes and if his schedule will permit, or he may stay for as short a time as needed. Students are taking this system with them when they go into the teaching field, and we are seeing these learning laboratories being set up all over the country in the teaching of science at the secondary school level.

An automated teaching response system has been developed by Edex Teaching Systems, 3940 Fabian Way, Palo Alto, California. The system teaches, tests, and grades students. Its essential elements include:

(1) A multi-media programer unit which records the audio portion of an instructional presentation and a series of inaudible magnetic pulses to control the operation of various types of audio-visual equipment or to perform other tasks (counting scores, turning lights on and off, sounding signals, etc.)

(2) The necessary audio-visual equipment. (Each system is equipped with either an Eastman Kodak Carousel for 2 x 2 slides or a DuKane 35 mm filmstrip projector.)

(3) Student response stations (available in groups of 10, 20, 30, or 40). Each station is equipped with four pushbuttons (ABCD) related to answer choices to questions presented audiovisually or by the instructor.

(4) A classroom communicator unit containing four meters (ABCD) which permits instructors to read directly and to gauge immediately the percentage of responses to each choice.

The man of the future is our student now. To help him, the computer and data processing equipment hold great potential for assisting
librarians in the utilization of information. The possibility of a regional and national network for libraries that Dr. Walter C. Stone discussed in his paper is similar to a system based on ASTIA, which is one of our governmental units. With the new electronic equipment now available, all of library resources can be retrieved. They can be projected by television and copies can be made on special kinds of paper. Another resource for the library of the future has been developed by AVCO Corporation in Cincinnati. This is an electronic file prepared by microphotography. The library book will be reduced to 140th of its original size so that one can put books in reduced space and retrieve the information from a computer in two seconds. These items could be recalled from the film and sent out on television or on sensitive paper.

This brings us back to symbols. Ever since man learned how to develop symbols, he has worked to record them so that he could share his knowledge with his fellow man. At various times these records were clay tablets, stone, wood, papyrus, scrolls, handwritten books, printed books, recordings, films, tapes, wires, electronic impulses, and the like. What if we have to learn a new language? What if, as librarians, we do not have books in their present form? Librarians since the time of King Ashabanabul in 662 BC, have been managing, preserving, and recording the ideas of man, and I am sure that librarians will continue to do this in whatever form knowledge is presented.

A BIBLIOGRAPHY OF LIBRARY AND AUDIO-VISUAL RESOURCES

Starred items are evaluative.

BOOKS, MAGAZINES, AND PAMPHLETS


*Basic Book Collection for Junior High Schools; ed. by Margaret V. Spengler. 3d ed. Chicago, Illinois, American Library Association, 1960. $2.00.


Books in Print; an author-title-series index to the Publishers Trade List Annual. New York, Bowker, $18.00.


*Dobler International List of Periodicals for Boys and Girls, compiled by Lavinia Dobler. Muriel Fuller, P. O. Box 193, Grand Central Station, New York 17, N. Y., 1960. Price $2.00.


*Good Reading for Poor Readers, by George Spache. 3rd ed. Champaign, Ill., Garrard Press, 1963. $3.00.


Paperbacks for High School by Norman R. Lee. Reading Center, Syracuse University, Syracuse 10, N. Y., 1962. 50 cents.


*Patterns in Reading. by Jean Carolyn Roos. 2nd ed., Chicago, ALA, 1961. $2.25.


Subject Index to Books for Primary Grades, by Mary K. Eakin and Eleanor Merritt. 2d. ed. Chicago, American Library Association, 1961. $4.50.


Textbooks in Print. Annual. New York, Bowker. $3.00.


GENERAL A-V


FILMS AND FILMSTRIPS


Guides to Newer Education Media . . . by Margaret I. Rufsvold and Carolyn Guss. Chicago, ALA, 1961, $1.50.

*The Landers Film Reviews. Published monthly except August, Bertha Landers, 4930 Coliseum St., Los Angeles 16, Calif. June 1956. $27.00 per yr.


See also catalogs for audio-visual materials from the nearest colleges and universities and the major producers and distributors in the area.

FREE AND INEXPENSIVE MATERIALS


PICTURES


PROGRAMMED INSTRUCTION


RECORDINGS

*Audio Cardalog. Larchmont, N. Y., Max V. Bildersee. $25.00, per year.


*Children's Record Reviews. Box 192, Woodmere, N. Y. October, 1957, to date. Price $10, per year, and $2 for cumulative index. Issued five times per year.


Satisfactory selected lists for use in choosing recordings are not yet available. Useful in locating long-playing records are such comprehensive monthly catalogs as the Schwann Long Playing Record Catalog, 137 Newbury Street, Boston 16, Massachusetts, Catalogs of commercial producers such as Califone, Columbia, Decca, Enrichment Records, Folkway Records, RCA Victor, etc., will be helpful.

SLIDES

TELEVISION

Educational Television Motion Pictures. 1960 Catalog: Descriptive Catalog Containing Series Data, Subject and Use Level Index for 16 mm Educational Television Programs. Net Film Service, Audio-Visual Center, Bloomington, Ind., Indiana University. 1960.


PERIODICALS LISTING CURRENT MATERIALS

*Audio-Visual Instruction. Published monthly except July, August, by the Department of Audio-Visual Instruction, NEA, 1201 16th Street, N. W., Washington 6, D. C. $4.00.


*Educational Screen and Audio-Visual Guide. Published monthly except July and August by Educational Screen and Audio-Visual Guide. 415 N. Dearborn, Chicago 10, Ill. Subs. $4.00 per year.

*Film Review Digest. Published 8 times a year by Educational Film Assn., 250 West 57th St., New York 19, N. Y. Subs. $4.00.

Bulletin of Progamed Instruction. Published 9 times a year by the Center for Programed Instruction, Teachers College, Columbia University, New York 25, N. Y. Subscription $3.00 per year.


NSPI Journal. Monthly except June and August. National Society for Programed Instruction, Trinity University, 715 Stadium Dr., San Antonio 12, Texas. $6.00 for non-members. Members $4.00.

