The outpouring of new instructional materials and techniques has resulted in a demand for instructional materials centers at the elementary school level. This handbook has been published to assist in planning and developing such a facility. The media center's usefulness to students, teachers, and administrators is outlined. The qualifications and job descriptions of the professional staff are set forth, along with a list of necessary supportive staff. It is pointed out that the quarters for a media center should be centrally located to students and teachers. Guidelines are laid down for the acquisition of an adequate supply of books, magazines, and other materials needed for both student and teacher use; the equipment necessary for the display and use of the materials is listed. An annual budget is proposed to provide sufficient funds to cover the costs of maintenance. Since there will be some material the teacher will want to develop himself, equipment necessary for such production is suggested. Standard library furnishings are suggested; specifications (height, width, depth, etc.) for various items are noted. A 3-phase program for each aspect of the center's development is outlined. A bibliography supplements the report. (JY)
Plan for Progress

... in the media center

"... guidelines for development of K-6 media centers or libraries in Iowa's schools."
Preface

This handbook has been prepared by a special committee composed of administrators, librarians, and audiovisual specialists under the direction of Betty Jo Buckingham, library consultant for the Department of Public Instruction. Its purpose is to establish guidelines for the development of elementary K-6 media centers or libraries in the schools of Iowa.

A broad concept of services, personnel, equipment, materials, physical facilities, and school-community coordination has been outlined. Since this publication could not be designed as a detailed manual for administering a library or combined library-audiovisual program, the bibliography lists books and periodicals that will be helpful in planning, developing, and administering a media center. Each school should purchase a copy of Standards for School Media Programs, prepared jointly by the American Library Association and the Department of Audiovisual Instruction of the National Education Association as a more specific guide in this area.

Members of the Handbook Committee

Carl R. Brown
Director of Elementary Education
1314 Maxwell Avenue
Ames, Iowa 50010

Doris Fistler
Elementary Librarian
Grundy Center Community Schools
Grundy Center, Iowa 50638

Charles Jordan, Librarian
Waterloo Community Schools
1516 Washington Street
Waterloo, Iowa 50702

Mary Mennig, Librarian
Wilson Elementary School
2002 North Clark Street
Davenport, Iowa 52804

Elizabeth Forbes, Project Director
Exemplary All-Level Instructional Materials Centers
Sibley Community Schools
Sibley, Iowa 51249

Nancy George, Librarian
Longfellow Elementary School
1130 Seymour Avenue
Iowa City, Iowa 52240

Betty Jo Buckingham, Library Consultant
Department of Public Instruction

Robert Paulson, Audiovisual Director
Malcolm Price Laboratory School
University of Northern Iowa
Cedar Falls, Iowa 50613

Virgil Kellogg, Audiovisual Consultant
Department of Public Instruction
Plan for Progress
... in the media center

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent the official position or policy.

STATE OF IOWA • DEPARTMENT OF PUBLIC INSTRUCTION

Introduction 3
Staff 7
Quarters and Facilities 10
Materials Collection 12
Professional Collection 16
Budget 17
Equipment 18
Furniture 23
Bibliography 26
The tremendous increase in knowledge, the changes in learning theory, the advancement of technology, and the changing curricular patterns, have made reassessment of present library and audiovisual practices at the elementary school level imperative. Making learning more interesting and making teaching more effective requires flexibility which can be achieved only through the use of many kinds of materials and techniques. Effective use of materials and techniques has resulted in a demand for media centers at the elementary school level; therefore, this handbook is being published to assist in planning and developing these facilities. The quantitative guidelines have been arranged in three phases to enable Iowa schools to develop both short and long-range goals to provide a learning center in every elementary school building. It is recommended that not more than three years should be allowed to achieve each of the three phases.

The term media center is used throughout this handbook to designate a centralized collection of materials and service with a staff of professional personnel working closely with teachers and administrators. There are many other terms for such a center; for example, library, cross-media center, media library, instructional materials center, library/instructional materials center, learning resource center, and multi-media center. Regardless of the terminology used, all elementary schools in Iowa are urged to meet the standards set forth in this handbook.
The Media Center...

serves children by:

- Indicating all learning materials (print and non-print*) that are available in the building
- Teaching how to locate and use materials
- Teaching how to evaluate materials
- Providing an atmosphere for individual and small group inquiry
- Teaching how to relate to outside sources for additional information
- Developing skills in the production of learning materials
- Encouraging creativity
- Giving increased dimensions to learning through access to a variety of media
- Providing materials of varying levels of difficulty and on a wide variety of subjects

*Print and non-print materials include books, magazines, filmstrips, records, tapes, films, pictures, games and other learning materials not considered as classroom texts.
The Media Center... 

serves teachers by:

- Cataloging all instructional materials that are available in the building
- Providing a professional library
- Assisting in selection and accumulation of materials for a unit
- Assisting in the planning and production of various teaching materials
- Providing information on available outside resources
- Aiding in correlation of unit materials and activities
- Providing information on new materials and techniques
- Providing inservice training including methods of using and evaluating materials and evaluating techniques
- Providing examination and previewing facilities
- Scheduling materials and equipment for maximum use
The Media Center...

assists administrators by:

- Providing central purchasing of learning materials and equipment
- Maintaining a constant and complete inventory of all learning materials and equipment
- Providing inservice training
- Avoiding needless duplication of learning materials
- Providing a central collection of statistical data, area facts, buying guides, and other pertinent information
- Relating with other libraries in the area
- Providing examination and previewing facilities
- Maintaining circulation-utilization records
- Providing central distribution of materials and equipment
- Supporting the total school curriculum
- Providing continuous orientation to new ideas
- Simplifying maintenance of equipment
- Providing a centralized area for production of instructional materials
An adequate qualified staff is necessary if a media center is to become an integral part of the school. The staff should include both professional and supportive personnel. A job description should be written to define the details of each position in every school district.

**Professional Staff**

The professional person is one of the most vital components of a media center. He initiates the services which change a room full of materials into a well-functioning center of learning. He provides guidance in the selection of materials to be used and purchased; organizes the materials, equipment, and space for maximum use; provides instruction in the use of the center and its contents; aids teachers in planning and preparing materials for their individual class use; serves on curriculum and textbook committees as a materials specialist; and helps organize inservice training for teachers. He should enjoy working with children and be capable of working with a wide variety of adults.

The first professional staff member should be a media generalist trained in both the library and the audiovisual fields, having the
same general educational background as other teachers. He should be certificated by the Department of Public Instruction.

When an additional professional person is added to the staff, the second person's training and background should strengthen and complement the first professional's training and background. One of the professionals should be designated as head of the center.

Supportive Staff

Non-professionals supply supportive services, freeing the professional staff from clerical and mechanical tasks. Two broad classifications of supportive personnel are clerks and technicians.

Clerks can perform the following tasks:
1. Typing
2. Keeping records
3. Sending notices
4. Opening mail
5. Handling office and circulation routines
6. Reading shelves
7. Shelving and filing materials
8. Inspecting and repairing films
9. Mounting pictures and transparencies
10. Maintaining appearance of center
11. Repairing of minor damage of print materials

The training of a clerk is done primarily on the job, but office experience and typing skill are prerequisites.

Technicians are supportive personnel who have special training in the fields of graphics, information and materials processing, television, photography, or media production methods. The services to be offered by the media center will determine the type of technicians needed. Technicians may or may not be certificated personnel.
Phase I ______ Phase II ______ Phase III ______

Professional Staff
(Phases or goals to attain by the end of successive three year periods)

1-499 pupils - 1 professional person
500-749 pupils - 1½ professional persons
750-999 pupils - 2 professional persons
1,000-1,499 pupils - 2½ professional persons

Teaching certificate with appropriate endorsement

1-399 pupils - 1 professional person
1 additional professional person for each additional 400 pupils or major fraction thereof

Teaching certificate with appropriate endorsement

1-249 pupils - 1 professional person
1 additional professional person for each additional 250 pupils or major fraction thereof

Teaching certificate with appropriate endorsement

(Head professional should have a master's degree in library science and audiovisual education)

*This professional person may serve half-time in two different media centers if the schools involved do not have a combined enrollment over 499.

School districts with several elementary school attendance centers may find it advantageous to employ a media center coordinator for the district.

Supportive Staff One non-professional person for each professional staff member
The location of the media center will vary according to existing facilities, but it should be as centrally located as possible to provide maximum accessibility to students and teachers. Whether the media center is in an existing building or planned in a new structure, consideration should be given to future expansion as the enrollment and program may demand. It is vital that professional media consultative services be obtained from a college or university, the Department of Public Instruction, or exemplary school systems before educational specifications are submitted to an architect.

The media center should be an attractive facility which children and teachers enjoy using. Since a wide variety of activities will take place in a media center, several areas should be kept in mind:

1. Study area to include space for reading, browsing, listening, and viewing by individuals, small groups, and large groups (Allow 40 sq. ft. per student)
2. Office area for professional personnel
3. Work area for cataloging and processing new materials and for maintaining present materials and equipment
4. Production area to accommodate materials and equipment needed for production of instructional materials
5. Faculty area including professional collection and conference facilities
6. Storage area with space for shelving magazines and other materials
7. Storage area for equipment

The electrical system should be designed to provide effective lighting in each activity area, adequate light control for many types of viewing activities, and an adequate number of electrical outlets in all areas. At least one telephone outlet should be located in the office area. Light switches, electrical outlets, fire extinguishers, telephones, and thermostats should be located so they do not take up space needed for shelving or storage. Movable, counter-height shelving permits flexibility in arrangement and allows the floor space to be used in a variety of ways. The floor and ceiling should be acoustically treated for noise control.

"...a wide variety of activities will take place in the media center..."
Phase I

All materials, print and non-print, centrally cataloged

Central room furnished and equipped to house as much of the program as possible, preferably with space available to seat the largest class plus ten

Storage space provided

Professional collection housed somewhere within the building

Production area provided

Phase II

Print and non-print materials combined into an integrated media center program

Remodeled quarters or new facilities planned to meet the needs of the materials collection and program of services in a combined media-library program, including:

1. Space to seat 40 students plus 5% of the school enrollment in the reading area
2. Office and workroom
3. Magazine and audiovisual storage
4. Previewing and listening area
5. Conference room
6. Production area
7. Professional collection area
8. Provisions for expansion

Phase III

Quarters expanded to provide a program of superior service as set forth in the joint American Library Association and Department of Audiovisual Instruction's Standards for School Media Programs.
A balanced, up-to-date collection of materials, is essential to a media center even in its beginning stage. These materials should be carefully selected by a media professional working closely with teachers and consulting authoritative selection aids to determine the quality of the materials. The collection should be tailored to the needs of the pupils and to the curriculum of each school. Constant evaluation of materials by all users will result in a highly effective and qualitative collection.

An annual budgetary allowance should be provided by the school district to maintain and improve the collection. Sufficient quantities of materials and equipment to meet each phase requirement should be purchased through capital outlay. The normal annual budgetary allowance for instruction provides for maintenance and improvement only.
<table>
<thead>
<tr>
<th></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>At least 6,000 volumes representing 6,000 titles or 10 books per pupil, whichever is greater</td>
<td>8,000 volumes representing at least 6,000 titles, or 12 books per pupil, whichever is greater; duplicates as needed to support school curriculum and supply student interests</td>
<td>10,000 volumes representing at least 8,000 titles or 15 books per pupil, whichever is greater; duplicates as needed to support school curriculum and supply student interests</td>
</tr>
<tr>
<td>Magazines</td>
<td>15 - 24 titles</td>
<td>25 - 39 titles</td>
<td>40 - 50 titles</td>
</tr>
<tr>
<td>Newspapers</td>
<td>3 titles</td>
<td>4 titles</td>
<td>6 titles</td>
</tr>
<tr>
<td></td>
<td>Vertical file materials (pamphlets, pictures, booklets, charts, clippings) in abundant supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16mm Films</td>
<td>Ready access to a minimum of 3,000 titles supplemented by duplicates and rentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrips</td>
<td>500 titles or 1 per pupil, whichever is greater</td>
<td>750 titles, representing 1,000 prints or 2 prints per pupil, whichever is greater</td>
<td>1,000 titles, representing 1,500 prints or 3 prints per pupil, whichever is greater</td>
</tr>
<tr>
<td>Recordings</td>
<td>1,000 titles or 2 per pupil, whichever is greater</td>
<td>1,500 titles or 4 per pupil, whichever is greater; duplicates as needed to support school curriculum and supply student interests</td>
<td>2,000 titles or 6 per pupil, whichever is greater; duplicates as needed to support school curriculum and supply student interests</td>
</tr>
<tr>
<td>(Discs &amp; Tapes) (Excluding electronic laboratory materials)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Phase I</td>
<td>Phase II</td>
<td>Phase III</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>8mm film loops</td>
<td>No specific recommendation(^1)</td>
<td>250 titles</td>
<td>500 titles, supplemented by duplicates</td>
</tr>
<tr>
<td>Globes</td>
<td>1 per teaching station plus 2 for media center</td>
<td>Additional special globes as needed</td>
<td>Additional globes as needed</td>
</tr>
<tr>
<td>Maps</td>
<td>Sufficient quantity and variety to meet the needs of the curriculum; may be in various formats, such as transparencies, flat, and wall maps, and must be up to date; number of duplicates will be determined by the number of sections of a particular grade</td>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td></td>
</tr>
<tr>
<td>Transparencies and slides</td>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td>Sufficient quantity and wide variety sturdily mounted to meet the needs of the school curriculum</td>
<td></td>
</tr>
<tr>
<td>Pictures</td>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td></td>
</tr>
<tr>
<td>Study print sets</td>
<td>100 sets or 1 for every 5 pupils, whichever is greater; additional and duplicates as needed to satisfy classroom needs</td>
<td>175 sets or 1 for every 3 pupils, whichever is greater; additional and duplicates as needed to satisfy classroom needs</td>
<td>225 sets or 1 for every 2 pupils, whichever is greater; additional and duplicates as needed to satisfy classroom needs</td>
</tr>
<tr>
<td>Art prints</td>
<td>300</td>
<td>600</td>
<td>1,000</td>
</tr>
<tr>
<td>(Reproductions in color of art works)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Introduce a variety of materials in this area on an experimental basis.
<table>
<thead>
<tr>
<th><strong>Replicas and art objects</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Models, kits, reelia, and dioramas</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient quantity to meet the needs of the school curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Programmed instruction</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Microform</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Videotape</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Dial access</strong></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

2 Introduce these facilities on an experimental basis and expand the ones which are suitable to the school's situation as determined by the school staff and administration.
A professional library is a necessity. A central collection of print and non-print materials should be housed in each building and be easily accessible to all staff members. The building collection should emphasize current materials and basic reference tools while the district collection would contain such items as examination copies of textbooks and specialized materials in various fields of education.

Materials to include in a building professional collection.

- Professional books and magazines
- Courses of study and curriculum guides
- Community resources guides
- Textbooks and teachers' manuals for basic and supplementary materials used within the system
- Films, filmstrips, recordings, and other non-print materials
- Pamphlets
- Information and announcements of workshops, college courses, institutes, etc., for continuing education
- Professional organizations' newsletters, meeting announcements, and miscellaneous releases
- Government documents

An annual budgetary allocation will provide for an adequate collection and for keeping it up to date. Faculty members should be consulted for recommendations of materials to include.

Phase I

- 200 - 600 books (titles)
- 10 - 29 magazines
- Audiovisual materials, pamphlets, etc., as needed

Phase II

- 600 - 1,000 books (titles)
- 30 - 49 magazines
- Audiovisual materials, pamphlets, etc., as needed

Phase III

- 1,000 books (titles) and more as needed
- 50 or more magazines
- Audiovisual materials, pamphlets, etc., as needed
An annual budgetary allocation is necessary to maintain a collection of materials and equipment in a media center. Additional funds should be appropriated for building the collection and for providing the equipment needed to reach each phase.

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
<td><strong>Equipment</strong></td>
<td><strong>Supplies</strong></td>
</tr>
<tr>
<td>3 per cent of the current national per pupil cost* (including operational costs) as per pupil expenditure to maintain the collection; sufficient capital outlay to reach Phase I</td>
<td>Sufficient capital outlay per year to provide for reaching the goals of each phase</td>
<td>Sufficient yearly allocations to provide adequate quantities of supplies to handle all materials and equipment.</td>
</tr>
<tr>
<td>5 per cent of the current national per pupil cost* (including operational costs) as per pupil expenditure to maintain the collection; sufficient capital outlay to reach Phase II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 per cent of the current national per pupil cost* (including operational costs) as per pupil expenditure to maintain the collection; sufficient capital outlay to reach Phase III</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Several factors such as central distribution, the number of floors in a building, an elevator in multi-level buildings and closed-circuit devices, may affect the amount of audiovisual equipment needed by a school. In the case of closed-circuit devices, plans must be made so that the individual classroom will receive the service it needs at the appropriate time.

A carefully planned program will provide for optimum use of equipment presently available and, at the same time, allow sufficient flexibility to make use of innovations as soon as they have demonstrated their worth in the improvement of instruction. The equipment listed below, therefore, is merely a minimum recommendation, and schools should feel free to expand in those areas where their particular needs are greatest.
<table>
<thead>
<tr>
<th></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>16mm projectors</td>
<td>1 per 10 teaching stations or 1 per floor plus 1 in media center</td>
<td>1 per 4 eaching stations plus 2 in media center</td>
<td>1 per 2 teaching stations plus 5 in media center</td>
</tr>
<tr>
<td>8mm projectors</td>
<td></td>
<td></td>
<td>1 per building</td>
</tr>
<tr>
<td>8mm loop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>projectors,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(if materials are available)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2x2 slide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>projectors,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>remotely controlled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrip or</td>
<td>5 per center</td>
<td>1 per 3 teaching stations plus 15</td>
<td>1 per teaching station plus 15</td>
</tr>
<tr>
<td>combination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>filmstrip-slide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>projectors</td>
<td>1 per building</td>
<td>1 per 5 teaching stations plus 2</td>
<td>1 per 3 teaching stations plus 5</td>
</tr>
<tr>
<td>Sound filmstrip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>projectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10x10 overhead</td>
<td>1 per 10 teaching stations or 1 per building plus 15</td>
<td>1 per 5 teaching stations plus 1</td>
<td>1 per teaching station plus 4</td>
</tr>
<tr>
<td>projectors</td>
<td>1 per 2 teaching stations plus 2</td>
<td>1 per teaching station plus 2</td>
<td>1 per teaching station plus 4</td>
</tr>
<tr>
<td>Equipment Type</td>
<td>Phase I</td>
<td>Phase II</td>
<td>Phase III</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Opaque projectors</td>
<td>1 per floor</td>
<td>1 per 25 teaching stations plus 1 per floor</td>
<td>1 per 15 teaching stations</td>
</tr>
<tr>
<td>Filmstrip viewers</td>
<td>1 per 2 teaching stations in media center</td>
<td>1 per teaching station plus 1 per 2 teaching stations in media center</td>
<td>3 per teaching station plus 1 per teaching station in media center</td>
</tr>
<tr>
<td>2x2 slide viewers</td>
<td>1 in media center</td>
<td>1 per 5 teaching stations plus 1</td>
<td>1 per 24 pupils plus 1</td>
</tr>
<tr>
<td>TV, minimum 23-inch screen</td>
<td>1 per floor on cart and classrooms equipped with antenna lead-in</td>
<td>1 per teaching station where programs available</td>
<td>1 per 24 pupils plus 1</td>
</tr>
<tr>
<td>Micro-projectors</td>
<td>1 per building</td>
<td>1 per 20 teaching stations</td>
<td>1 per 2 grade levels</td>
</tr>
<tr>
<td>Record players</td>
<td>1 per teaching station (K-1), 1 per 2 teaching stations (2-3), 1 per grade level (4-6) plus stereo record player in media center</td>
<td>1 per teaching station (K-3), 1 per grade level (4-6) plus stereo record player</td>
<td>1 per teaching station (K-6) plus 5, and stereo record player</td>
</tr>
<tr>
<td>Audio tape recorders</td>
<td>1 per 7 teaching stations plus 1</td>
<td>1 per 2 teaching stations plus 2</td>
<td>1 per teaching station plus 10</td>
</tr>
<tr>
<td>equipped for case with earphones</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Projection carts:** 1 per portable piece of equipment, purchased at the time the equipment is obtained, and equipped with power cord.
<table>
<thead>
<tr>
<th>Listening stations</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 per floor plus 1</td>
<td>Po-table listening station with 6-10 sets of earphones at a ratio of 1 per 3 teaching stations (suitable for use with record player or tape recorder)</td>
<td>Same as Phase II, but 1 per teaching station plus 1</td>
</tr>
<tr>
<td>Closed circuit television</td>
<td>All new construction and major modification of buildings should include provisions for installation at each teaching station and the media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projection screens</td>
<td>1 permanently mounted screen per classroom plus portable screens as needed—no smaller than 70x70 with keystone eliminator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio receivers</td>
<td>1 per media center</td>
<td>1 per media center plus central distribution—AM-FM</td>
<td>3 per media center plus central distribution—AM-FM</td>
</tr>
<tr>
<td>Micro-recorders</td>
<td>As materials become available</td>
<td>1 per 10 teaching stations to be located in media center</td>
<td>1 per 5 teaching stations to be located in media center</td>
</tr>
<tr>
<td>Video tape recorders</td>
<td>Accessible for experimentation</td>
<td>Available in school district</td>
<td>1 per building</td>
</tr>
<tr>
<td>Telelecture equipment</td>
<td>Available within the school district</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copying machines</td>
<td>1 per center</td>
<td>1 per 30 teaching stations plus 1</td>
<td>1 per 20 teaching stations plus 1</td>
</tr>
<tr>
<td>Duplicating machines</td>
<td>1 per center</td>
<td>1 per 30 teaching stations plus 1</td>
<td>1 per 20 teaching stations plus 1</td>
</tr>
</tbody>
</table>
## Equipment Needed for Local Production

### Phase I
- Dry mount press
- Tacking iron
- Large paper cutter
- Thermal copier
- Simple slide camera (Ektographic)
- Spirit duplicator
- Primary typewriter
- Tape splicer
- Manual lettering kit
- Portable chalk/bulletin board
- Film splicer, 8mm and 16mm
- W's-k table
- Drawing board
- Transparency production kits
- Tools for repair
- Storage and check-out facilities

### Phase II
- Equipment in Phase I
  - 35mm camera
  - Close-up lens
  - Copy stand
  - Polaroid camera
  - 35mm viewer box
  - Mechanical lettering devices
  - Film rewind
  - Photocopy machine
  - Slide file

### Phase III
- Equipment in Phases I and II
  - 8mm camera
  - Darkroom and equipment
  - Mimeograph
Furniture

Standard library furniture from a reliable manufacturer should be considered for initial purchase. When facilities are expanded, additional furniture of the same style can be obtained, thus preserving a unified, pleasing appearance.
Shelving

Width of section on centers .................................. 3 feet

Depth
  Narrow .................................................. 8 inches
  Standard ................................................. 10 inches
  Oversize ............................................... 12 inches

Thickness .................................................. 13/16 inch
Height ...................................................... 5-6 feet
Height of counter section ................................. 30-42 inches
Space between adjustable shelves....................... 10-10½ inches
  (Adjustable feature takes care of oversize books)
No trim on uprights, shelves, or cornices

Periodical shelving
  Depth of slanting shelves ................................ 16 inches
  Depth of shelves, straight across ...................... 12 inches
  Depth of storage shelves ................................ 12-15 inches

Picture book shelving
  Depth of shelves ......................................... 12 inches
  Space between adjustable shelves...................... 14-16 inches
  ¼ inch upright partitions 5 inches high and 7-8 inches apart on each shelf

Phonograph record shelving
  Depth of shelves ......................................... 16 inches
  Space between adjustable shelves...................... 14-18 inches
  ¼ inch upright partitions 5-6 inches high and 2½-3 inches apart on each shelf
  (Display bins, now frequently preferred, are not yet as fully standardized as shelving)

Capacity estimates:
  Number of books per 3-foot shelf when full:
    Books of average size .................................. 30
    Reference books ....................................... 18
    Picture books (with dividers) ....................... 60
Tables (Variety of heights)

- Height: 25-28 inches
- Width: 3 feet
- Length: 5-6 feet
- Diameter (round): 4 feet

Chairs (Variety of heights)

- Height: 14-17 inches
  Chairs with curved backs and saddle seats are most comfortable.

Files

- Pamphlets, clippings, small pictures and maps: Legal size with hanging folders
- Other: Vary with size of material

Audiovisual Materials & Equipment Storage

Storage units for these materials and equipment items are not as standardized as library furniture, so specifications are not included.
Bibliography

Standards


Planning Aids


Administering the Instructional Materials Center


Selection Aids for Materials


Cataloging Tools


Materials for Teaching the Use of the Instructional Materials Center


Periodicals Useful to the Professional Personnel of a Media Center


Audiovisual Instruction, Department of Audiovisual Instruction, National Education Association, 1201 Sixteenth Street, N.W., Washington, D.C. 20036. Monthly, membership or $6.00.


Educational Screen and AV Guide. 434 S. Wabash Avenue, Chicago, Illinois 60605. Monthly, $6.00 a year.

Horn Book. Horn Book, Inc., 585 Bylston Street, Boston, Massachusetts 02116. 6 issues a year, $6.00 a year.


State Board of Public Instruction

LESLIE D. BRINKE — President, Calumet
JOHN D. WARIN — Vice President, Maloy
MRS. RICHARD G. COLL. — Decorah
RICHARD H. DELANEY, Burlington
DR. JACK D. FICKEL, Red Oak
OLDEN L. GENTRY, Des Moines
MRS. VIRGIL E. SHEPARD, Allison
MRS. EARL G. SIEVERS, Avoca
DR. JAMES M. WALTER, Ames

Department of Public Instruction

Administration
PAUL F. JOHNSTON—Superintendent of Public Instruction and Executive Officer of State Board of Public Instruction
DAVID H. BECHTEL—Administrative Assistant
W. T. EDGREN—Assistant Superintendent, Administration
L. N. JENSEN—Assistant Superintendent, Instruction
WM. M. BALEY—Assistant Superintendent, Area Schools

Curriculum and Instruction Branch
William J. Edgar, Director of Curriculum
Betty Jo Buckingham, Handbook Coordinator and Library Consultant

Art work and layout ......................... Vicki Carver

Price $.40 per copy. Order from Publications Section, Department of Public Instruction, Grimes State Office Building, Des Moines, Iowa 50319.