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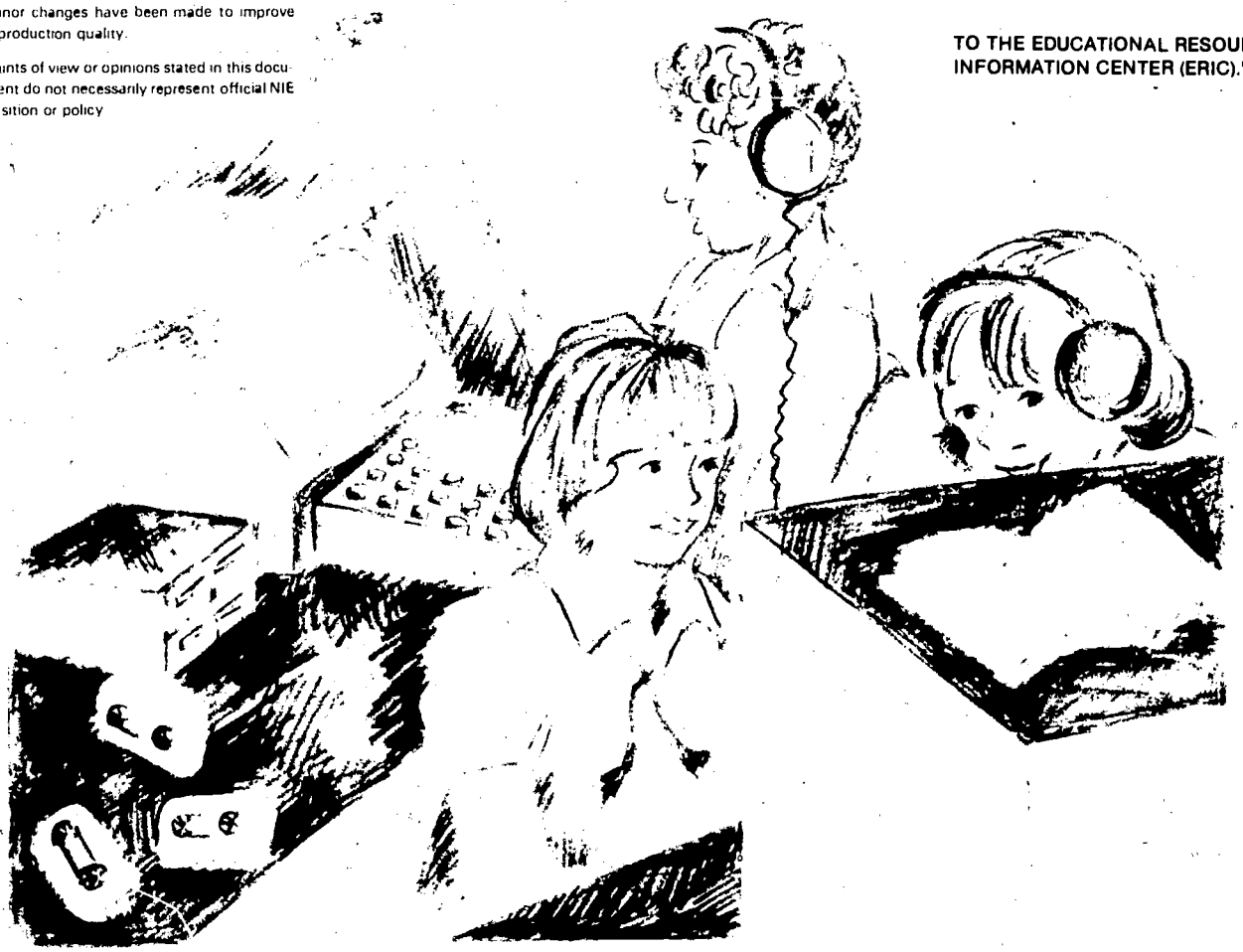
ABSTRACT

The purpose of this guide is to facilitate the work of Georgia planners in systematically determining the size, nature, and functions of spaces needed for the construction or renovation of media center facilities after the minimum requirements for school media centers established by the Georgia Board of Education have been met. The first section outlines the planning process for media center construction and contains a planning form and a checklist. The next section, on renovation, presents the media center requirements, then describes the facility by major functions with tasks, design considerations, technical considerations, and furniture and equipment outlined for each function and subfunction. The appendices contain the requirements for installing the electronic distribution system, specifications and sketches for media center furnishings, a checklist for selecting basic furniture, a checklist for media center facility evaluation, a glossary, and a bibliography. (MLF)

A Guide for Planning and Construction of Public School Facilities in Georgia



Media Center Facilities

Georgia Department of Education

A Guide for Planning and Construction of Public School Facilities in Georgia

Instructional Media Division
Office of Instructional Services

and

Facilities and Transportation Division
Office of Administrative Services

Georgia Department of Education
Atlanta, Georgia 30334
Charles McDaniel
State Superintendent of Schools

Revised 1982

Media Center Facilities

Georgia Department of Education

Acknowledgments

Special appreciation must be expressed to the media center activities guide review committee. This committee, as listed below, represents those involved in and affected by media center facilities design; superintendents, principals, media specialists, Georgia Department of Education School Plant staff and Georgia Department of Education Media Field Services staff.

Input from this group was obtained prior to the revision process through a review of the existing document. Input was again obtained to a draft of the revised document. At the time this input was obtained, the people listed below were in the positions listed. Some now have new responsibilities.

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Contents

Acknowledgments i

Contents ii

Foreword 1

Introduction 3

Planning Process for Media Center Construction 5

Renovation of Media Center Facility 11

Media Center Requirements 11
Functional Area Requirements 11
Minimum Square Footage Requirements 13
Beyond Minimum Requirements 14

General Design Considerations 14

Description of Media Center by Major Functions 15

Appendices 21
A. *Installing the Electronic Distribution System* 23
B. *Media Center Furnishings* 27
C. *Checklist for Selecting Furniture* 37
D. *Checklist for Media Center Facility Evaluation* 39
E. *Glossary* 41
F. *Bibliography* 45

Foreword

The media center is the instructional resource center of the school. It serves teachers and learners in the school and community by providing all forms of instructional media to support the teaching learning process, the instructional equipment necessary to use these media and services to facilitate this use. The well planned media center houses a collection that may include books, pamphlets, newspapers, magazines, pictures, paintings, maps, globes, audio and video recordings, films, filmstrips, slides and microforms, as well as other types of resources, organized for maximum accessibility. The media center should be designed in accordance with the educational philosophy and the instructional program of the school to incorporate maximum flexibility for current use and future expansion and for varied uses individual, group, class. Consideration should be given to whether meeting the standards of the Georgia Accrediting Commission and the Southern Association of Colleges and Schools will be a goal of the school.

Instructional Media

The print and nonprint materials used in support of the instructional process, collectively termed "instructional media," encompass . . . , hardbound books, paper backed and soft bound books; magazines; newspapers, duplication equipment and materials; laboratory equipment and materials (tape and disc recordings, transparencies, filmstrips, and films); instructional television; comprehensive learning systems (which may include a variety of equipment and materials); self-instructional materials; teacher-made materials, and any other materials and equipment that can be used in the delivery of instruction.

Role of the Media Specialist

The media specialist serves as a building level facilitator to link educational goals to school level instructional needs through the application of appropriate instructional media. The media specialist strives to raise the media consciousness of leadership and instructional personnel by supplying them with information and data which demonstrate the role that quality media, when used effectively, plays in enhancing student achievement and by assisting and supporting them in the selection, procurement, and utilization of instructional media. The media specialist is familiar with all available media resources within the school system and manages these resources in a manner which maximizes the availability and the accessibility of appropriate media needed to meet instructional objectives.

Role of the Media Center

The school media center provides appropriate instructional media to support, supplement, and enrich the school's curricular offerings, as well as individual teacher and pupil research and instructional needs. The media center is a facility which is easily accessible to instructional personnel on an as-needed basis, and it is organized to serve as a focal point for the cataloging, procurement, and management of instructional media for the whole school in order to ensure the maximum utilization of available media resources in support of instructional objectives.[1]

[1] Governor's Task Force on Education in Georgia, Phase II Report, 1978.

Introduction

This guide, a publication of the Georgia Department of Education, was developed cooperatively by the Media Services Unit of the Instructional Media Division and the Facilities Section of the Facilities and Transportation Division, as a resource for school systems planning construction of new or renovation of existing media center facilities. Its purpose is to facilitate the work of planners in systematically determining, given the many variables, the size, nature and functions of spaces needed.

One of the state's responsibilities for education is the establishment of **minimum** requirements. A section of this guide describes the requirements for school media centers established by the Georgia Board of Education. Schools or school systems having the capacity to develop media programs beyond minimum level will need to plan for additional space in appropriate areas as their program plans dictate.

Existing building configurations and budgets may limit the space available for renovation of media center facilities. Some flexibility in applying minimum requirements may be exercised in such cases. All required functional areas must be provided within the space available. Relocating a media center within an existing structure is also a possibility.

Media services provided at the central office may affect the space needed in a school building. Services which might be provided by the central office would be processing of materials, duplication and distribution of audio and video tapes, 16mm films, production of locally designed materials, circulation of professional collections, and so forth.

Sections of this guide include a glossary, a list of references, descriptive information about shelving and furnishings, a planning checklist and additional items to be considered.

For consultative assistance in planning a media center, school system personnel may contact either of the following.

Media Services Unit
Instructional Media Division
Georgia Department of Education
Twin Towers East
Atlanta, Georgia 30334

Facilities Section
Facilities and Transportation Division
Georgia Department of Education
Twin Towers East
Atlanta, Georgia 30334

Planning Process for Media Center Construction

Who should be involved in the planning process?

Lay Representatives
Parents
Business leaders
Industrial leaders
Students
Alumni

Education Representatives
System-level administrators
System-level media coordinators
Curriculum directors
Principals
Media specialists
Teachers
Architects
State or other consultants

While the planning group does not need the representation of every category listed, a wide range of interests is desirable and necessary.

What is the major responsibility of the planning group? The planning group must develop educational specifications.

What are educational specifications? Educational specifications provide architects with a detailed analysis of the educational activities to be pursued and the space required for these activities in the proposed or renovated facility. They focus on programs, people, materials and environments.

Why are educational specifications necessary? The planning group comes from differing backgrounds, areas of specialization and with different concepts of a media program. Effective media center educational specifications must be expressed in a common language and should be based on reading pertinent literature in the media field, observation of media programs in operation, consideration of the many variables affecting the physical requirements of the media program in the particular situation and agreement upon requirements that are expressed in a common language to be transmitted to the architect for visualizing in a blueprint. Examination of alternative solutions to problem areas is a major responsibility of the planning group.

How are educational specifications developed? A planning group should take the steps outlined below when developing specifications.

Step 1. Consider the school's philosophy and goals through an analysis of the following.
- Course offerings
- Teaching strategies, i.e., lecture, small group, individualized
- Long range plans for the school program
- Number, age, size and special needs of the student body
- Community trends and patterns
- National trends and innovations
- Co-curricular and extracurricular activities
- Size of staff
- Use of facility outside school hours.

Step 2. Define the philosophy and goals of the media program within the context of the philosophy and goals of the school.

Step 3. Translate the media program goals into specific, concise and easily understood educational objectives. Expansion of present activities to include new ideas or innovations should be considered.

Step 4. Consider state minimum requirements for a media center.

Step 5. Develop a description of the media center program that includes the following.
- Activities which will take place, the number of students and teachers who will be involved in various activities and the square feet of space which the activity will require
- Furniture, equipment, materials and storage needed to implement activities. Include numbers, types and sizes of items to be housed.
- Technical requirements for each activity
- Controls and security measures required
- Functional relationships between spaces within the media center and between the media center and the rest of the school. Some activities need to be in closer proximity to one another than do others.
- Maximum flexibility in design to allow for technological innovations, population growth, program changes, automation.

What other responsibilities does the planning group have? After the planning group has developed educational specifications, they continue to work with the architect from schematic designs to working drawings. They also work with the groups planning other areas of the school building. The committees

may work together and at times representatives of subgroups may work together. Succeeding sets of drawings are examined to insure that the architect's interpretation reflects the intent of the educational specifications. Through this continuous interaction, plans should emerge which reflect the best information and objective thinking of all participants and which will provide the most functional facility at the lowest possible cost.

What is the state's approval process for the architect's drawings? After preliminary plans are developed by the architect and approved by the local board of education, they are submitted to the Facilities Section of the Georgia Department of Education. Preliminary plans include floor plan drawings at either 1 16 inch or 1 8 inch scale and large scale drawings at 1 4 inch scale. Plans at all scales show dimensions, length, and width, plus square footage of each room or area. Large scale layouts list all room or area square footages separately in addition to the total square footage of the media center complex. Large scale layouts also include placement of all furnishings, such as tables, chairs, specialized storage cabinets and shelving indicating linear feet of shelving and number of items accommodated.

After review preliminary plans are sent back to the architect with recommendations for changes. The architect then develops a check-set of complete plans which include all architectual and engineering details and specifications of materials and workmanship necessary for construction of the building. The check-set is submitted to the Facilities Section and reviewed with further recommendations if any, for changes where necessary, and the check-set is sent back to the architect. Final plans and specifications are then developed with revisions and submitted to the Facilities Section. Following approval, the final plans and specifications are used by the contractor during construction.

As preliminary plans are submitted to the Facilities Section, appropriate department of education personnel are asked to review the plans. Media center plans are reviewed by the staff of Media Services Unit. When modifications are necessary, recommendations are made in writing from Media Services Unit to the Facilities Section, which transmits recommendations to architects. Architects make the necessary modifications and resubmit plans for final approval.

Media Services Unit personnel are available to work with local planning groups and architects in developing educational specifications. If specifications are submitted to Media Services Unit for review prior to being given to the architect, suggestions can be made that may expedite drafting and approval of the final plans.

Media Center Facilities Planning Form

Date _____

Name of School _____ Grade Levels _____ ADA _____

Architect _____

Media Specialist _____ Principal _____

Planning Committee Chairperson _____ Title _____

Planning Committee Members	Area of Representation

Consider administrative climate, management style, scheduling patterns, instructional strategies, i.e., lecture, small group and individualized.

1. **Philosophy and goals of school**

2. **Philosophy and goals of media program**

3. **Educational objectives of school**

4. **Educational objectives and activities of media center**

5. **Description of proposed media center**

6. **Space needs summary**

Total space required (See chart page 13.)		_____
Circulation, display	_____	
Reading, browsing, listening, viewing and studying	_____	
Conference	_____	
Collection	_____	
Production	_____	
Electronic distribution	_____	
Administration and planning	_____	
Processing	_____	
Periodical and instructional equipment storage	_____	
Total space included		_____

7. **Consideration and plans for future expansion of media center**

8. Specifications for each function

Function	Activities	No. of Users to Accommodate	Space Required	Design Considerations	Technical Considerations	Furniture, Equipment, Instructional Resources

Checklist for Planning Process

	Date completed
1. Establish planning committee	
2. Develop educational specifications	
a. Consider philosophy and goals of the school	
b. Define philosophy and goals of the media program	
c. Translate media program goals into educational objectives and activities	
d. Review minimum facility requirements	
e. Write description of specific media center requirements	
3. Submit plans for review of eductional specifications by Media Services Unit, Georgia Department of Education	
4. Complete architectural plans	
5. Begin formal approval process	
a. Get approval by local board of education	
b. Submit for review by Facilities Section of the Georgia Department of Education and Media Services Unit	
c. Get recommendations from Media Services Unit through Facilities Section to architects (if necessary)	
d. Resubmit plans (if necessary)	
6. Final approval	

Renovation of Existing Media Center Facilities

School buildings may reach the point where existing media center facilities are inadequate to serve the needs of the current school program and population. Without funds for new construction, the alternatives include renovation, expansion or relocation of the media center the existing school structure. When this is the case, the planning process should begin with a representative planning group studying all factors affecting the media program and writing educational specifications as described in the Planning Process for Media Center Construction section.

The planning group has the additional responsibility of identifying architectural barriers when planning media center space in an existing building. Some of these barriers might be fire safety requirements, loadbearing walls, electrical wiring, plumbing and electronic distribution systems.[2]

The total electronic distribution system must be installed in initial construction after June 30, 1982. This should be a priority in renovation projects. (See page 24, Appendix A)

Care should be taken to ensure that all required functional areas are provided within the space available. Priorities may have to be restructured. Some functions may have to occupy overlapping spaces where square footage is limited. Storage functions may have to be placed in less desirable locations to provide sufficient activity space for users. Decisions should be made concerning use of existing shelving and furnishings.[3] The planning group should also consider long-range plans for the school. If the school may be phased out in the near future, less extensive renovation should be considered.

Media Center Requirements

The media center is divided into areas according to functions. While all areas need not be separated by walls, the functional areas should be distinct and those areas where interaction most frequently occurs placed near to one another. Planners should carefully analyze the work and traffic flow of all media program activities to ensure specification of the best possible functional relationships. In some situations it may be logical to combine similar functions for more effective use of space and equipment. While minimum square footage requirements are determined by ADA, note that **an adequate media program may necessitate more than minimum requirements.**

The media center must include the space to accommodate the functions and subfunctions described below, regardless of ADA. The functions must be included within the minimum required total area (page), but relationships between and space allocated to each function are to be determined by the system planning groups.

Functional Area Requirements

Circulation, display in which media is checked in and out and special media are displayed. This area should be near the media center entrance and exit.

Reading, browsing, listening, viewing and studying in which students and teachers use media individually or in small groups.

Conference in which groups use media without disturbing or being disturbed.

Collection which contains shelving to house the media center's instructional resources and the space needed by users. The specific requirements for shelving of the instructional resources follow.

1. **Shelving scaled to the size and age of the users must:**
   a. accommodate 15 print and nonprint items per ADA;
   b. be estimated on the basis of eight items per linear foot;
   c. be placed on the perimeter or in stack areas if over 42 inches in height;
   d. not exceed 42 inches in height in K-4 media centers;
   e. not exceed 66 inches in height in upper elementary and middle schools;
   f. not exceed 84 inches in height in high schools;
   g. be no more than three feet long between supports;
   h. allow a minimum of four feet between rows of shelves;

[2] See Appendix A for technical details to consider when renovating, expanding or relocating a media center in a building in which there is an existing electronic distribution system.

[3] See Appendix B for discussion, description and dimensions of standard shelving and furnishings.

i. allow a minimum of five feet between rows of shelves and furniture involving seating or traffic.

2. **Access aisles allow unobstructed flow of traffic.**

Production provides students and teachers with space, materials and equipment for creation of instructional materials (may include a darkroom).

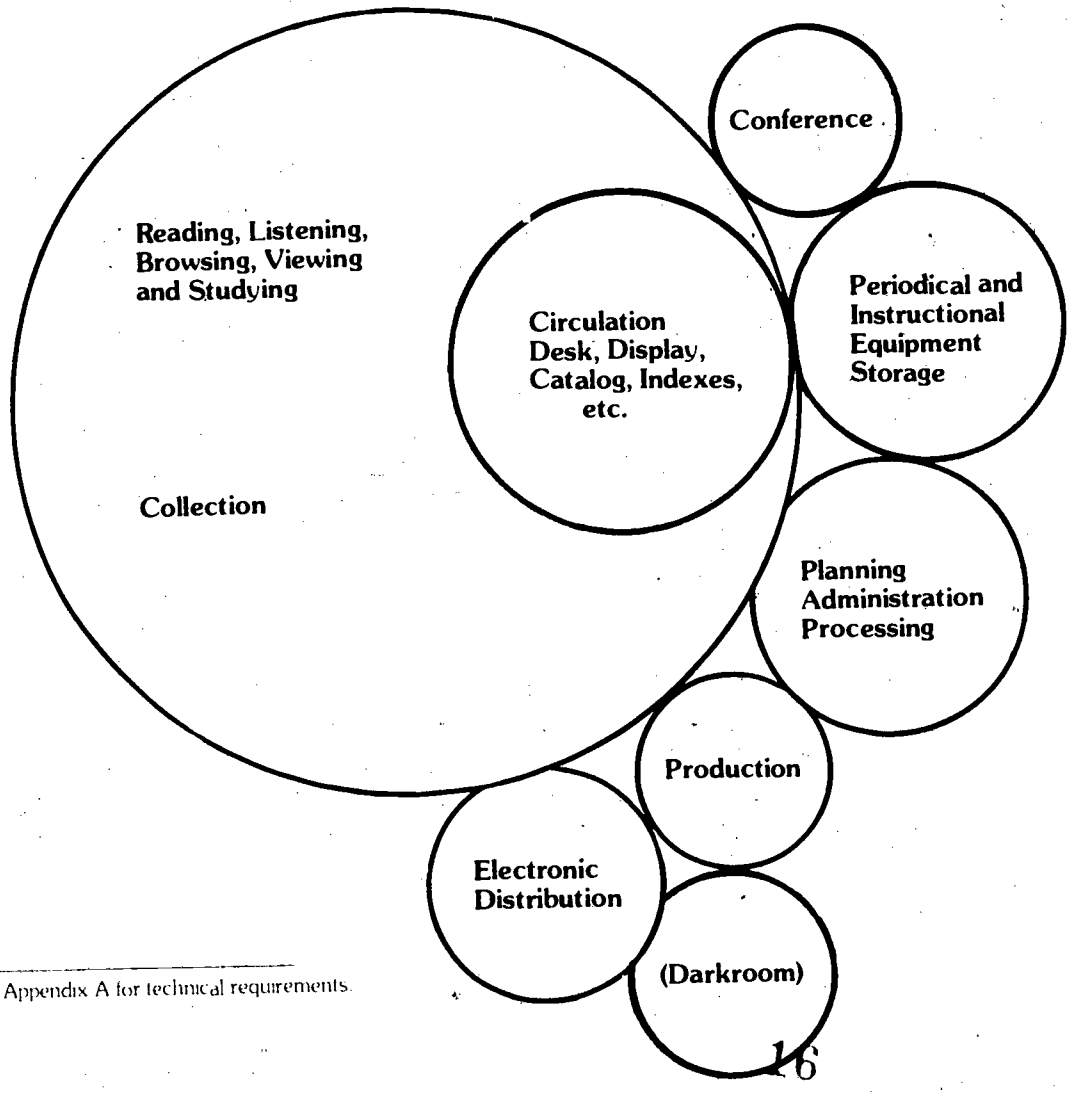
Electronic distribution includes equipment which provides a variety of capabilities. The system can receive television and radio signals and transmit these signals to the appropriate instructional area(s); programs can be recorded for later playback to the appropriate instructional area(s). The head-end of the system must be in the media center in an area set aside for recording and playback of television programs; the walls of this area should not be loadbearing.[4] A drawing showing engineering details of the electronic distribution system must be permanently displayed in this area.

Administration and planning needs to be accessible to staff members at all times. Media specialists need a space for planning with teachers and students.

Processing is used by staff for ordering, processing, organizing and inventorying the media center collection.

Periodical and instructional equipment storage includes specially designed shelving, movable carts for instructional equipment and standard adjustable shelving to accommodate back files of periodicals. For maximum use the room should be long and narrow and have two doors, one to the media center and the other to an outside hallway so that equipment can be taken and returned to the storage area after use elsewhere in the school. For security this door should have a locking system on both sides so the media specialist will be involved any time the door is opened. The door should be considered an emergency exit only.

Function influences the kind, size and position of these spaces. The following diagram names some of the needed spaces and points out the interrelation of the areas. The size of the circles approximates possible size relationships. Some schools combine compatible functional areas in their plans.



[4] See Appendix A for technical requirements.

Minimum Square Footage Requirements

The minimum required square footage per average daily attendance (ADA) representing the minimum space within which the given ADA can function, is listed in the following chart. This square footage includes the total media center area.

ADA	Minimum Square Footage	ADA	Minimum Square Footage	ADA	Minimum Square Footage
0-250	1900	1001-1025	4425	1751-1755	6675
251-275	1995	1026-1050	4500	1776-1800	6750
276-300	2090	1051-1075	4575	1801-1825	6825
301-325	2185	1075-1100	4650	1826-1850	6900
326-350	2280	1101-1125	4725	1851-1875	6975
351-375	2375	1126-1150	4800	1876-1900	7050
376-400	2470	1151-1175	4875	1901-1925	7125
401-425	2565	1176-1200	4950	1926-1950	7200
426-450	2660	1201-1225	5025	1951-1975	7275
451-475	2755	1226-1250	5100	1976-2000	7350
476-500	2850				
501-525	2925	1251-1275	5175	2001-2025	7425
526-550	3000	1276-1300	5250	2026-2050	7500
551-575	3075	1301-1325	5325	2051-2075	7575
576-600	3150	1326-1350	5400	2076-2100	7650
601-625	3225	1351-1375	5475	2101-2125	7725
626-650	3300	1376-1400	5550	2126-2150	7800
651-675	3375	1401-1425	5625	2151-2175	7875
676-700	3450	1426-1450	5700	2176-2200	7950
701-725	3525	1451-1475	5775	2201-2225	8025
726-750	3600	1476-1500	5850	2226-2250	8100
751-775	3675	1501-1525	5925	2251-2275	8175
776-800	3750	1526-1550	6000	2276-2300	8250
801-825	3825	1551-1575	6075	2301-2325	8325
826-850	3900	1576-1600	6150	2326-2350	8400
851-875	3975	1601-1625	6225	2351-2375	8475
876-900	4050	1626-1650	6300	2376-2400	8550
901-925	4125	1651-1675	6375	2401-2425	8625
926-950	4200	1676-1700	6450	2426-2450	8700
951-975	4275	1701-1725	6525	2451-2475	8775
976-1000	4350	1726-1750	6600	2475-2500	8850

Schools over 2500 ADA should add 75 square feet per 25 students beyond the 8850 footage figure.

Beyond Minimum Requirements

As specifications for a new media center are developed, seriously consider providing ways to expand the media center based on new programs, altered organizational patterns and population changes.

The media center must be designed to provide for the media use dictated by the prevailing teaching and learning organizational pattern(s) of the school. Some current organizational patterns include open education, team teaching, individualized instruction, independent study, and exploratory programs. New technologies and refinements of existing technologies will continue to impact strongly on media centers. Microcomputers, for example, are rapidly becoming instructional tools. New technologies reflect the importance given to systematic education, increased individualization and increased independent learning. As these needs increase and the cost of new technology begins to decrease, many new and highly sophisticated products will be within the realm of media center collections.

General Design Considerations

The following list is a general guide in designing the media center. Each functional area within the media center should be analyzed for specific requirements. Additionally, the total media center and the relationship of each functional area to the others should be considered, as well as the relationship of the media center to the rest of the school. In all cases furniture and shelving should be scaled to the size of the users.

Appearance

1. Interior attractively and harmoniously designed
2. Colors, textures and design coordinated
3. Display areas plentiful
4. Spaces varied in size, shape and visual control

Comfort

1. Temperature and humidity control
   a. *Temperature and humidity comforts year round in all areas*
   b. *Controls available only to authorized personnel*
   c. *Humidity controls linked to temperature control*
2. Accoustical treatment
   a. *Media center located away from the noisy areas of the school, yet centrally located within school*
   b. *Walls, floors and ceilings finished to aid in lowering noise level*
   c. *Special need spaces, as taping area, soundproofed*
   d. *Cut-off switches for public address speakers in taping areas*
3. Lighting
   a. *Illumination at working surfaces adequate for tasks*[5]
   b. *Illumination in stack areas adequate to allow titles on lower shelves to be read*[5]
   c. *Control for use of audiovisual equipment by use of dimmers, drapes and/or darkening shades*
   d. *Windows placed to prevent glare and allow space use*

Safety

1. Fire resistant or nonflammable furnishings used
2. Electrical equipment U.L. approved
3. Hazards eliminated (specified in bidding and purchasing)
   a. *Sharp corners or edges eliminated*
   b. *Installations easily reached by users*
   c. *Static electricity eliminated*
   d. *Tempered glass or clear, unbreakable plastic used*
   e. *Carts and furniture well-balanced*
   f. *Shelving securely installed*
   g. *Wires or power cords across traffic lines eliminated*
   h. *Electrical outlets - adequate - elimination of potential dangers provided*
   i. *Traffic areas free of furniture or other obstacles*

Security

1. All areas within visual control of staff
2. Reserved materials shelving located at circulation desk
3. Instructional equipment storage designed for maximum security
4. Security system capability provided
5. Exits placed with checkout stations away from stack area

[5] Consult *Lighting Standards for Georgia Public Schools*, December 1980.

Flexibility

1. Expansion potential considered in location and design
2. Space designed to adapt to changing needs
3. Multiresource use capability provided

Access

1. Materials and equipment easily available to students
2. Handicapped accessibility requirements observed
3. Instructional areas placed for easy access
4. Delivery zones located to provide easy access
5. Audiovisual equipment movable
   a. *Between buildings*
   b. *Between levels of a multistoried building ramps or elevators should be used*

Preservation of Materials[6]

1. Year-round temperature maintained at 65° - 75° F
2. Year-round relative humidity maintained at 40-55 percent

Furnishings

1. Shelving (See Appendix B.)
   a. *Accommodate 15 print nonprint items per ADA*
   b. *Placed on the perimeter or in stack areas if over 42 inches in height*
   c. *Varied configurations for special purposes*
2. Furniture (See Appendices B and C.)
   a. *Colorfully and aesthetically coordinated*
   b. *Selected for durability, attractiveness and comfort*
   c. *Light color*
   d. *Conformity to safety needs and specifications*
   e. *Contain normal use warranties*
   f. *Type and geometrical shape varied for different purposes*
3. Floor coverings
   a. *Based on activities of each area*
   b. *Carpet used in accoustical control areas*
   c. *Carpet accoustical performance, wearing qualities, color and texture, fire resistance - qualities considered prior to purchase*
   d. *Ceramic tile for darkroom areas*
   e. *Ceramic tile for wet areas and other special needs*

Description of Facility by Major Functions

The following section outlines tasks, design considerations, technical considerations, furniture and equipment for each function, and subfunction. It is a starting point for planners to use in developing educational specifications. Planners should not restrict themselves to these, but should identify others which could enhance the facility and make possible maximum contribution to the media program.

[6]Temperature and humidity guidelines are provided in order to protect materials and equipment from damage. Especially sensitive are all film materials and phono discs. These materials can develop fungus and shrink, discolor and or lose resiliency. Consult your architect to determine the specific needs in your geographical area and specific temperature and humidity requirements. It is possible to obtain desirable results by balancing a slightly lower humidity with a slightly higher temperature. Plans could also include the protection of media through the storage of these sensitive materials in other locations when the school is not in use if temperature and humidity guidelines will not be met during that time.

Description of Facility by Major Functions

Functions	Tasks	Design Considerations	Technical Considerations	Furniture and Equipment
Circulation	Supervising media center Displaying and exhibiting Consulting card catalog and indexes Circulation materials Entrance and exit by users Shelving to accommodate reserved materials	Near main entrance Visual supervision Adjacent to or within the reading/browsing/studying/viewing/ listening area Elementary school media centers should have elementary height circulation desks Carpet	Electrical service to circulation desk, display/exhibit area and possibly index (card catalog, etc.) Media center master light switch	Card catalog cabinets Index table Book truck Reserve shelves Circulation desk Bulletin board Display equipment
Reading, browsing, listening, viewing, studying	Reading Browsing Listening Viewing Researching Group (large and small) instruction Individual listening and viewing Independent studying	Corridor access Area for new and special materials Space for users to interact with each other one-to-one and in groups of varying sizes Flexibility in arrangement Easy traffic flow Visual supervision Sound absorbent floor coverings and building materials Space for screen or smooth wall space for projection Well-planned placing of furniture, no "crowded" appearance Elementary media centers should provide storytelling area for large and small groups Carpet Handicap accessibility	Electrical service throughout area for individual use of instructional equipment and materials Lighting and accoustical control Electrical and TV reception in some carrels	Clock Seating suitable to size of student Chalkboard/tack board, portable Table and chairs Display table Carrels (with electrical wiring) light controlled, maximum privacy; some with provision for use of instructional equipment and materials, with shelf Individual projection surfaces Record/tape player with listening station capability Projectors and viewers

Functions	Tasks	Design Considerations	Technical Considerations	Furniture and Equipment
Collection	Organizing and displaying all media Defining areas (separating types of activities) Professional collection	Easy access Use by handicapped Visual supervision Carpet	Electrical outlets Lighting strategically placed to illuminate media on shelves	Dictionary stand Atlas stand Cabinets for slides and film-strips Bins or picture book type shelving designed for disc recordings (shelved vertically), framed or mounted pictures Flat files for maps, charts, study prints, etc. Filing boxes, notebooks, shelf inserts or cartons for placing nonprint media on shelves Newspaper display rack Microreader Microreader - printer Periodical shelving Book shelves - picture, paperback, oversized Legal size filing cabinets
Media production	Performing the following techniques to create instructional materials. Illustration Mounting and laminating materials Coloring materials Lettering materials Reproducing Storage of supplies for production Individual and small group use (adults and students) Audio and video recording Slide production	Access to general use area Generous work counter with adequate electrical outlets Double sink - hot and cold water Table work space Work surfaces, smooth and stain resistant Space for screen or smooth wall area for projection Cutting surfaces Wall storage area Flooring - stain resistant, cushioned tile Visual supervision	Adequate electrical circuits (120V and outlets to accommodate the use of several pieces of production of equipment in use at one time) Area lighting Sinks, running water Exhaust, ventilating fans Soundproofed space	Drafting table and stool Work tables and chairs Shelves, storage cabinets Typewriter (regular and primary type) Typewriter desk and chair Thermal copier Mimeograph Spirit duplicator Photocopier Multilith Collator Spiral binding equipment Cameras: 35mm, 16mm, 8mm, 35mm still, rapid process, Polaroid camera Overhead projector Sign making equipment Three-hole punch Drying racks Paper cutter Slide copier with stand Slide producer Flood lighting equipment Light box Film rewind Film splicers Tape splicers Dry mount presses Lettering kit

Functions	Tasks	Design Considerations	Technical Considerations	Furniture and Equipment
Instructional equipment storage	Storing, securing and distributing, maintaining and repairing of instructional equipment Storing of AV maintenance supplies and parts, projection lamps and cleaning compounds	Storage space for large and small equipment, adjustable, 18-inch deep Space for projection carts Space for repairs Security Flooring - stain resistant, cushioned tile Visual supervision	Electrical outlets Shelving	Work bench Cabinets for parts and supplies 16mm projectors Cabinet for projectors Overhead projectors Opaque projectors Filmstrip projectors Slide projectors Tape recorder/players, audio and video Record players Slide and filmstrip viewers 8mm projectors TVs - receiver/monitors Listening stations Globes, maps, portable screens Projection carts Microfiche/microfilm readers Carts with extension cords for large items
Administration and planning area	Planning Conferring with teachers and students Administrative functions Media committee meetings	Visual supervision Carpet Space for furniture Storage of personal items such as coats Size of staff, including volunteer workers	Telephone Electrical outlets Safety glass windows	Desks and chairs Occasional chairs Filing cabinets Shelves Telephone
Electronic distribution	Receiving signal from master antenna, CATV, a prerecorded tape recording and/or distributing of program to desired instructional area - classrooms, media center, conference room, carrels Taping Replaying Storing tapes	Separate room with nonload-bearing walls Separate temperature and humidity control (equipment generates heat) Storage for tapes Flooring - stain resistent, cushioned tile	Heavy duty power outlets TV outlet at each VTR/monitor station Termination of conduit for entrance cable in head-end Limit of four runs of equal or as near equal length as practical Placement of conduit along hallways with a junction box close to instructional areas TV outlet in each instructional area TV outlets in media center, carrels and conference rooms Safety specifications for equipment meeting UL or state and federal regulations Designed so that computer terminal link-up can be made	Lockable cabinet for head-end Amplifiers Converters Modulators Shelf/cabinet for tape storage, etc. Drawing of engineering details of the electronic distribution system permanently displayed See Appendix A

Functions	Tasks	Design Considerations	Technical Considerations	Furniture and Equipment
Conference area	Small group projects Small group listening and viewing Audio and video recording Typing (student) Seminars	Access to reading area Soundproofing Flexible arrangement Room(s) capable of being subdivided Visual supervision Space for users to interact with each other one-to-one and in groups of varying sizes. Movable partitions Carpet	Dimmers for lights TV outlets Electrical outlets (120V) Windows of safety glass	Tables such as trapezoidal which can be arranged according to need Shelving for special collections, group projects Supply of wall screens, chalkboards and tackboards Typewriter(s) Tape recorder(s)
Processing	Selecting, ordering, receiving new media Processing new media Repairing media Inventorying Evaluating Storing Previewing	Visual supervision of media center Space for clerical staff Table work space Work counter and cabinets around sink Storage for processing supplies Easy access for materials, equipment delivery Wall storage Flooring Work surfaces smooth and stain resistant Clerical work area Carpet	Plumbing Stainless steel sink - hot and cold water Electrical outlets for all work stations Safety glass panel	Card catalog cabinet for shelflist Typing desk, chair Work table and stools and chairs Shelving for receiving media Typewriter Adding machine Labeling machine Filing cabinets Book trucks Legal size filing cabinets Storage cabinets Pencil sharpener Stapler
Periodical storage	Storing for 3 - 5 years of back issues Shelving for nonprint items not housed in reading area Shelving for (microfiche/microfilm) microform NOTE: Planners need to weigh the cost of microform format for periodical storage against the cost of building space to accommodate hard-copy format.	Shelving (some counter height - provides work surface) Carpet		Shelving Princeton files

Functions	Tasks	Design Considerations	Technical Considerations	Furniture and Equipment
Darkroom	Photographic production and reproduction Serving media production needs of media program, journalism, science, yearbook, fine arts and vocational arts	Stainless steel/fiberglass double sink-hot and cold water-corrosive resistant tray Stain and corrosive resistant counter Working arrangement from left to right Ceramic tile floor and baseboard Floor drain Storage for small equipment Space for instructor and students to move about as necessary	Special darkroom lighting Lightproof room Light lock entrance Timer Electrical outlets Ventilation - intake and exhaust with filter (must be dust free) Light safe storage for chemicals and papers, lock Waste disposal Red "in use" light outside darkroom 22-V - print dryer	Dryer Easels Contact printer Enlarger Other miscellaneous photographic items

Appendices

Appendix A
Installing the Electronic Distribution System

The electronic distribution[7] system must originate in the media center. This distribution system will deliver electronic signals from all available sources to all areas of the school.

The range of frequencies used in an electronic distribution system requires the use of coaxial cable. Conduit must be properly installed to protect this cable.

All electronic distribution system conduit must end at the head-end location in the media center electronic distribution area.

The layout of the trunk line conduit must

- conform to radio frequency distribution design practices.
- provide, in single building facilities, a maximum of four runs outside the media center within the building that houses the media center.
- in multiple buildings, provide dedicated conduit runs that will accommodate RG-11/F coaxial cable from the head-end to each of the outlying buildings by the shortest possible route.
- end each dedicated run in a centrally located junction box. Distribution from this junction box must conform to the same requirements as those for any single building facility. These requirements must be adhered to at any time that additional instructional units are constructed.
- follow hallway ceilings for future distance verification.
- exhibit in each run, as nearly as is practical, the same radio frequency loss factor. Generally, the length of the run will determine its loss factor.
- provide access to the trunk lines by way of 6" x 6" x 4" junction boxes. Locate the junction boxes at points in each trunk line that are equal distance from up to four teacher stations.

Feed-line conduit must

- run from the trunk line junction boxes to duplex-type outlet boxes at each teacher station.
- accommodate RG-6/F type coaxial cable.

Outlet boxes must be mounted within three feet of AC outlets.

TV outlets at the teacher stations must provide access to both television and FM radio.

Sharp bends must be avoided.

The head-end should be mounted on a permanent wall in the media center electronic distribution area. Mount two lockable head-end equipment housings of the 19-inch relay rack type, with a minimum of 24 inches of mounting panel space in each housing, one foot from the finished ceiling. Each equipment housing should be no smaller than 20¾ inches wide x 29 inches high x 9½ inches deep. The housings should be connected with two-inch conduit. Each housing should connect directly to one or more suitable wireways with 1¼ inch long conduit nipples with locknuts and insulating bushings. Distribution system conduit must end in the wireway of one of the cabinets. Provide a minimum of six duplex AC outlets in each equipment housing. The second equipment housing will be reserved for the modulators in the closed-circuit system.

Where MATV is used, provide two-inch conduit from the head-end equipment housing, where the distribution conduit ends, through the ceiling to extend one foot above the roof with a weather head. Install a base-plate, suitable for an antenna mast, beside the conduit on the roof and anchor bolts 20 feet away on 120° radials with the base-plate as a reference point.

Where CATV is the known source of external signals, the two-inch conduit may be replaced with conduit suitable for RG-6/F coaxial cable. The route of this conduit must be from the head-end to a logical point of entry of the CATV drop. Provide weather-head.

The area housing the head-end of the electronic distribution system and the closed circuit origination equipment should be separated from the rest of the media center with nonload-bearing walls and should not contain any plumbing fixtures. Place a door with a double glass upper panel in the wall opposite the head-end. Provide quadroplex AC outlets at a height of four feet every three feet of wall space and duplex

[7] This information on electronic distribution should be provided to the architect along with the educational specifications as developed by the planning committee.

outlets at a height of six feet every three feet of wall space. All AC outlets should supply 120V only. Provide a TV outlet beside each AC outlet. Provide a suitable outlet box at a height of 5 feet every three feet of wall space with conduit runs to the second head-end equipment housing. The cover plates for these outlet boxes must have four female video connectors and four phone jacks with cable and wires connected. The conduit from each of these boxes must carry four RG-59 coaxial cables and four shielded audio pairs.

Adequate environmental control must be provided in this area to protect heat-generating equipment.

Furniture in this area, which can be purchased or included in construction, should include the following.

- One cabinet with doors, one shelf and a table top
  Dimensions - 36 inches high x 30 inches wide x 26 inches deep
- One videocassette tape storage cabinet Dimensions - 88 inches high x 36 inches wide x 8 inches deep
- One console for four videocassette machines and one TV monitor
  Console Dimensions - 72 inches high x 30 inches wide x 26 inches deep
  The TV monitor will extend the height to approximately 92 inches. The monitor shelf should be stationary and the VTR units should have pull-out sliding shelves with 12 inch safety stop. The console should have five inch casters (two locking).

Minimum space required for this area is 5.5′ x 6.5′ = 36.75 sq. ft. or 5.5′ x 6.5′ x 8′ = 286 cubic ft. (excluding space required for door swing).

The suggested ratio of videocassette machines to instructional units is one machine for each group of seven instructional units or any part thereof. The space requirements listed above are adequate for four machines. An increase in instructional units which requires additional machines will increase space requirements by 16.25 square feet for each group of four machines or any part thereof. Videocassette storage cabinets should provide space for a minimum of 17 tapes for each videocassette machine.

Distribution Inside the Media Center

Trunk-line conduit must end at the head-end location in the media center.

Locate 6" x 6" x 4" junction boxes at points that are equal distance from viewing stations. Trunk-line and feed-line conduit must accommodate RG-6/F coaxial cable.

Mount TV outlet boxes vertically within three feet of AC outlets.

Renovation

Conduit installation for electronic distribution in renovated areas must conform to the same requirements as those of new construction. This conduit must end at the existing head-end.

If the renovation of one area of a school causes a break in the cable feeding another area of the school, place a 6" x 6" x 4" junction box at the point of the break.

Provide a dedicated conduit from the junction box to the existing head-end. The conduit must accommodate two runs of trunk line cable. One cable is needed to restore the signal to previously wired areas of the school. The second cable will feed the distribution system of the renovated area.

Additions

Conduit installation for electronic distribution in new additions to existing buildings must conform to the same requirements as those of new construction.

Renovated areas and new additions must always receive signals from the existing head-end by way of dedicated cable runs. Attempts to add-on to existing trunk lines can not be attempted.

Equipment

Equipment must be the most current offering of the manufacturer; discontinued models are not acceptable.

All cable must be 72 or 75 ohm coaxial. **Three hundred ohm cable is permitted between antenna and balun only, provided balun is mast mounted at antenna.**

UHF converters, where required, must be of the single channel type. Conversion may take place at the antenna or at the oscillator; however, UHF preamplification is required where an unfavorable signal-to-noise ratio results due to extreme antenna-to-converter cable length.

Converters essential to the reception of the Georgia Educational Television stations are to be of the crystal-controlled oscillator type.

TV outlets must be 72 or 75 ohm out with quick-disconnect provision.

Ten foot, 72 or 75 ohm receiver connecting cable, with impedance matching device, if necessary, must be provided for each outlet.

System Design

The systems must provide reception of color or monochrome TV and distribution of a picture deemed best obtainable at site by the owner and his or her consultants.

The system must be designed for a 50 db signal-to-noise ratio. The outlet at the end of the longest cable run must meet this requirement without receiver overload at outlet nearest the distribution amplifier.

System must provide for a signal level of a minimum of +6 dbmv and a maximum +20 dbmv at each outlet.

The hum modulation of the picture signal observed at any point throughout the system must be less than one percent.

Cross channel intermodulation components must be such that no visible components appear when any receiver is at picture black-level on any channel of the system with all other channels operating with modulation at their rated levels.

The system must be designed and equipped for Sub channel, VHF and mid-band TV channel distribution with FM, using the same coaxial cable, receptacles and splitters specified for TV signal distribution.

All UHF channels must be converted to VHF channels (2 through 13).

The system and all equipment must be designed and rated for 24-hour-per-day continuous operation.

The echo or ghost content in the picture received over the system must be no more annoying than a single well-displaced video echo 30 db down.

System must conform to FCC Regulations regarding incidental radiation.

Installation

All amplifiers, converters and power supplies, except those units mast mounted, must be installed in the media center electronic distribution area.

Equipment must be positioned such that any indicator lights are visible.

Provision must be made for removing power for extended periods of time when equipment is not in use.

All materials exposed to weather must be specifically designed for outdoor use.

Cable runs between buildings must be in dedicated conduit.

TV outlets must be located within three feet of electrical outlets and compatible with suitable viewing location of television receiver.

Provide the owner with "as built" plans showing locations of all cabling, active **and** passive devices and actual signal strength readings at the input and output of each device for all channels used on the system.

A copy of this drawing must be sealed in plastic and permanently mounted beside the head-end.

All maintenance material and installation data accompanying system equipment must become a part of the information package in which the system drawings will be included.

Spare keys for lockable equipment housings and television receivers must be included with information package, and key numbers must be noted on system drawings.

System Proof of Performance

Upon completion of the system installation, it shall be the responsibility of the installer to perform the necessary mixing and matching of all input signals and amplifier level controls to eliminate any co-channel, adjacent channel and intermodulation interferences.

Before the contract is considered completed, the contractor must conduct an operating test for approval. The system must be demonstrated to operate in accordance with the requirements of the specifications. The test must be performed in the presence of an authorized representative of the school system. The contractor must furnish all equipment and personnel required for the test as follows.

A. Using a field strength meter, measure the signal level at any outlet in the system at random. The signal on each channel must read not less than +6 dbmv nor more than +20 dbmv. Connect a TV set to an outlet in the system at random. Picture and audio quality must be equal or superior to reception normally available in the area.

B. Signal-to-noise test must employ a Jerrold Model 720B, 704B or equivalent field strength meter from other manufacturers. Measurements must be made at the output of the last amplifier in the system. With the normal levels in the system the field strength meter must be tuned to the picture carrier of each channel in turn and the reading noted. The input to the head-end amplifier must then be terminated in 75 ohms. Read the field strength meter again in the absence of the signal and add a meter correction factor of 4 db to the reading. The difference between the two readings will give the system's signal-to-noise ratio, and must not be less

than 50 db; 43 db where broadband amplifiers must be cascaded in the system to accomplish distribution.

C. Cross channel intermodulation tests must be made by applying normal signals into all channels. No visible components of cross channel intermodulation must appear on the screen of a receiver tuned to any normal signal, and the receiver is at picture black-level.

Should such a demonstration of performance show that the contractor has not properly balanced the system and that picture degradation is present, a second performance demonstration will be arranged.

Should a second performance demonstration fail, the contractor agrees to correct the system deficiencies under the supervision of the owner's technical staff at no cost to the owner.

The burden of proof that the completed system meets or exceeds all general and specific requirements will fall on the contractor as a condition of the original contract.

Appendix B
Media Center Furnishings - Specifications

Since it would be impossible to include all furnishings from all manufacturers, basic pieces are included in this appendix. Dimensions may vary slightly from one manufacturer to another. Basic furnishings are also made in several sizes to accommodate children from the primary grades to adults. All furnishings should be scaled to the size/age of the users. Requirements are starred*.

1. Standard Shelving

a. Shelving should

be adjustable.

have back and ends.

meet standards for dimensions.

have leveling capacity.

(Metal shelving should have support posts of at least 16 gauge steel measuring at least two inches by two-and-a-half inches and should have no sharp corners or edges.)

b. Capacity estimate

Standard adjustable shelving is generally available from commercial suppliers in the following dimensions. *Total needed should be based on a minimum of 15 print or nonprint items per ADA. Capacity is computed on the basis of eight items per linear foot.

c. Expansion shelf space should be provided for at least one third of collection.

d. Height standards

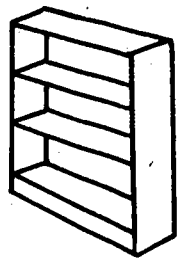
Base—four to six inches

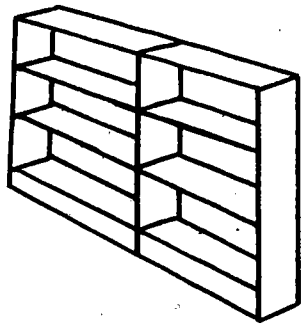
- *Kindergarten - fourth grade maximum allowable — 42 inches
- *Upper elementary and middle school maximum allowable — 66 inches
- *Secondary maximum allowable — 84 inches

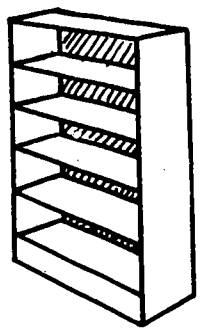
Height of counter sections — 42 inches

e. Length of shelves between supports

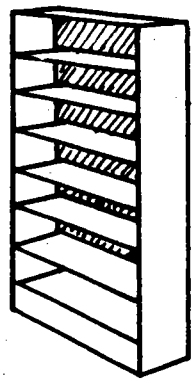
no more than three feet

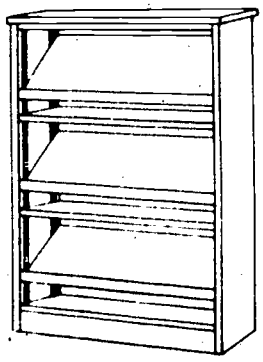


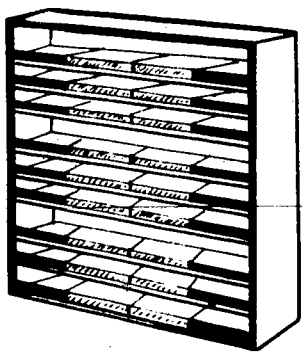


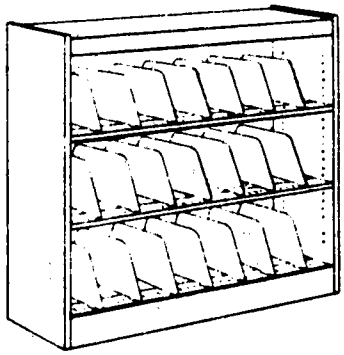


Height	Width	Number of Shelves	Average Item Capacity: Single-faced	Average Item Capacity: Double-faced
42″	36″	3	72	144
60½″	36″	5	120	240
66″	36″	5	120	240
78″	36″	6	144	288
82″	36″	7	168	336









f. Shelving range

no more than nine feet without breaks or aisles, if located in interior areas of media centers.

g. Depth of shelving

standard - 12 inches; oversize - 15 inches

h. Thickness of shelving

- Metal shelving with laminated surface is an economical alternative in shelving and eliminates wood thickness considerations.
- Wood veneer with solid wood or three-quarter inch plywood core, or wood veneer on solid wood with one-inch hardwood plywood core.

i. Space between adjustable shelves

10 to 11½ inches

j. Shelving may be single faced (12 inches deep) or double faced (24 inches deep).

2. *Special Shelving - Current Periodicals*

a. Depth of slanting shelves — 16 inches

Depth of straight shelves — 12 inches

b. *Overall height

42 inches, 66 inches or 84 inches depending on grade level of students

c. Alternative shelving

narrowly spaced flat shelves or microfilm cabinets if microfilm is used.

3. *Special Shelving - Picture or Easy Books*

a. Depth of shelves — 12 inches

Height of each shelf - 14 inches to 16 inches

b. Dividers

five inches to six inches apart in each section

c. Capacity

60 books per three linear feet

d. *Overall height

42 inches, 66 inches, or 84 inches depending on grade level of students.

4. Special Shelving - Paperback Books

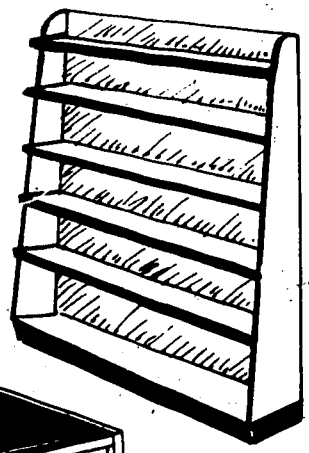
a. **Racks should display front covers**

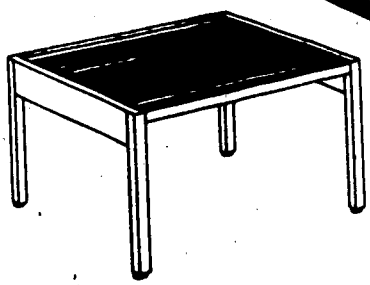
b. ***Overall height**

42 inches, 66 inches or 84 inches depending on grade of students

c. **Alternative**

Revolving wire racks





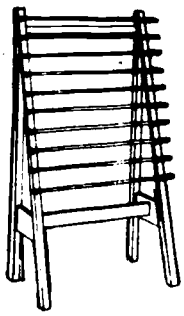
5. Newspaper Display

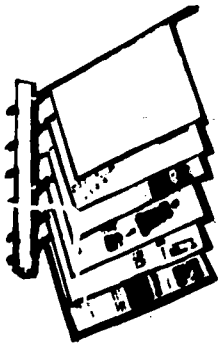
a. **Newspaper table**

24 inches high, 39 inches wide and 26 inches deep

b. **Newspaper sticks within a shelf unit**

c. **Newspaper stick base attached to shelving support**





6. Art and Study Prints, Posters, Maps, Charts

a. **Legal file cabinet**

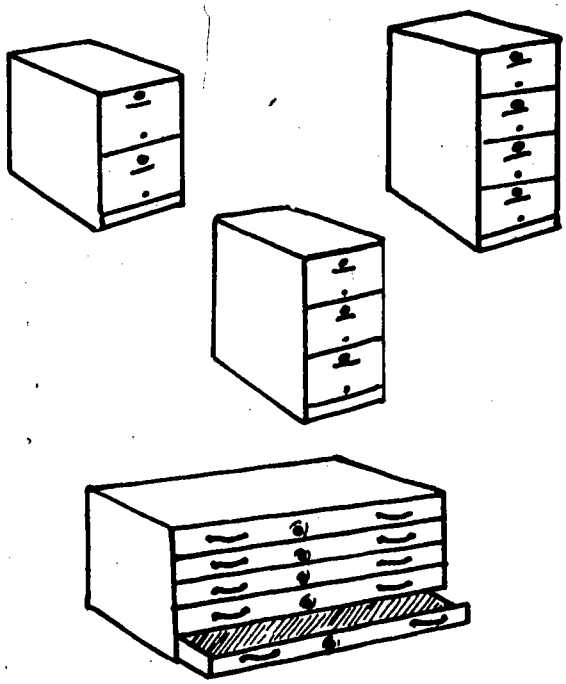
two, three, four, or five drawer depending on grade level of students (Two drawers will fit unobtrusively under windows placed for visual supervision.)

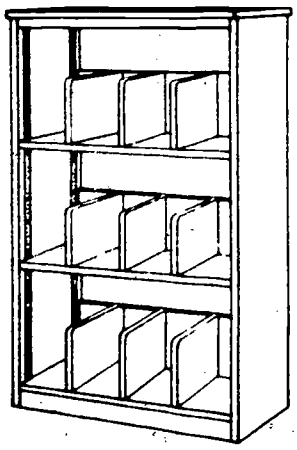
b. **Alternatives**

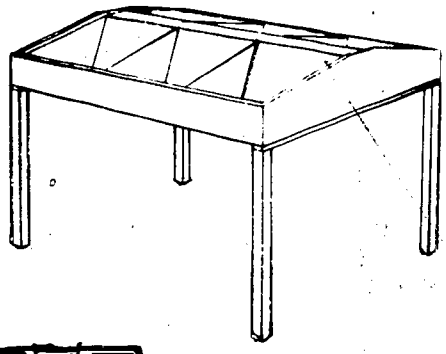
flat files or map files

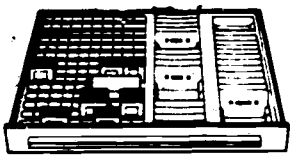
art print cabinets

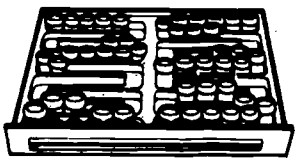
blueprint cabinets

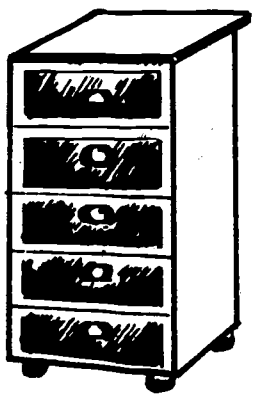


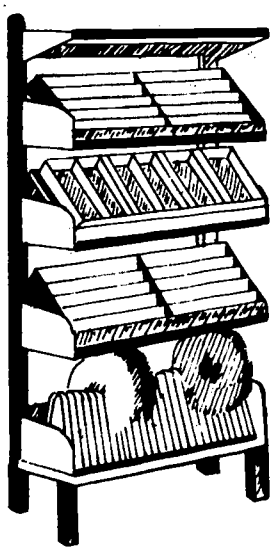












7. Records

a. Depth of shelves

16 inches

b. Shelving or table format

c. *Overall height of shelving units

42 inches, 66 inches or 84 inches depending on grade level of students

8. Films, Filmstrips, Slides, Transparencies, Models, Realia, Programmed Materials, Kits

a. Special materials such as these require special storage equipment. The materials should be accessible for use and, when possible, interfiled with printed material.

b. Disc recordings

Should be stored vertically

c. Tape recordings

Should be stored vertically

d. Microfilm or 8mm loop

can be stored in cartons on shelves, expandable cabinets or on shelf inserts.

9. VTR Cabinets

a. Videocassette tape storage cabinet

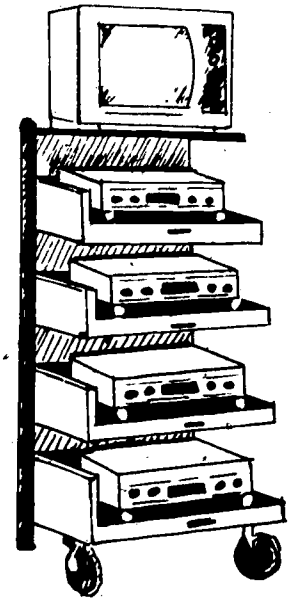
88 inches high by 36 inches wide by 8 inches deep

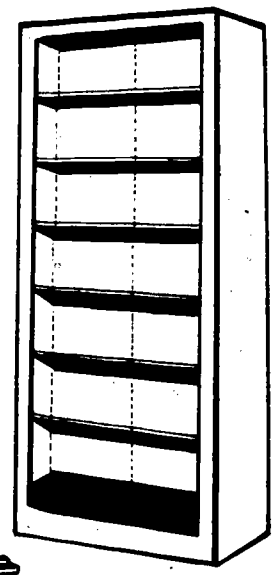
b. Videocassette machine and TV monitor console

72 inches high by 30 inches wide by 26 inches deep

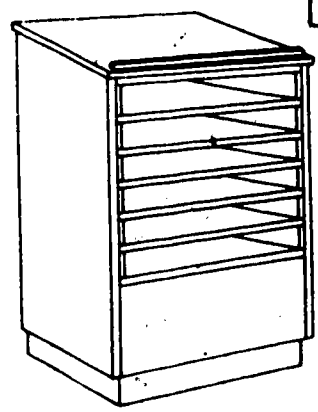
TV monitor will extend to a height of approximately 92 inches

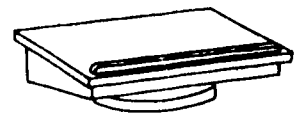
console must hold TV monitor and four videocassette machines

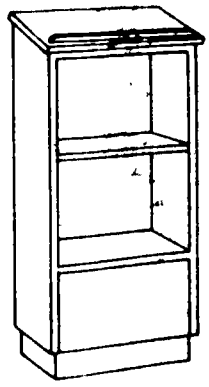


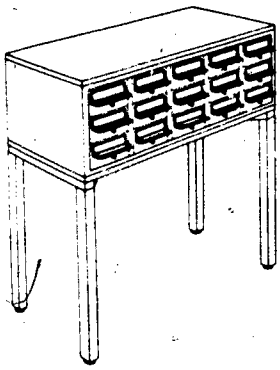


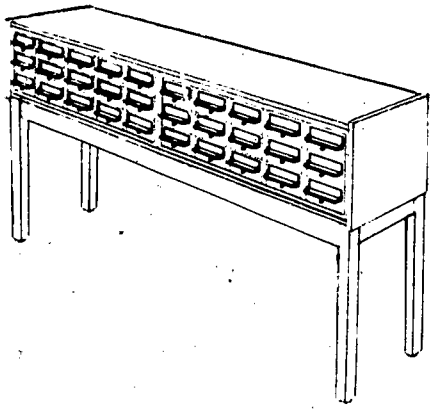
10. Special Reference Materials

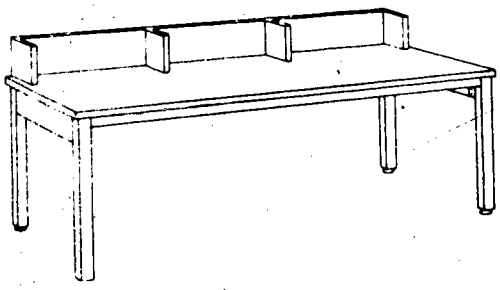


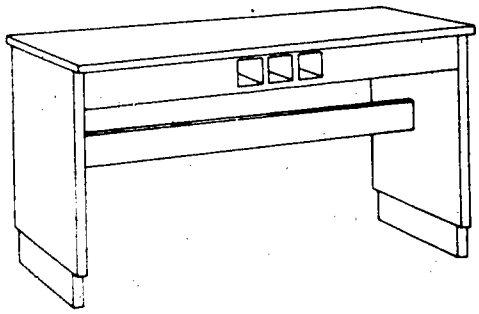












11. Card Catalog Cabinets/Reference

a. Capacity estimate

Six cards per media item

1,000 cards per tray

b. Overall height

Kindergarten - fourth grade
36 to 40 inches

Upper elementary and middle school
36 to 48 inches

Secondary
40 to 54 inches

c. Trays per unit

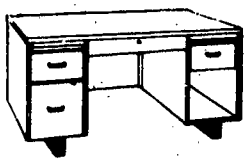
May be purchased in sizes ranging from 15 trays per unit to 60 trays per unit

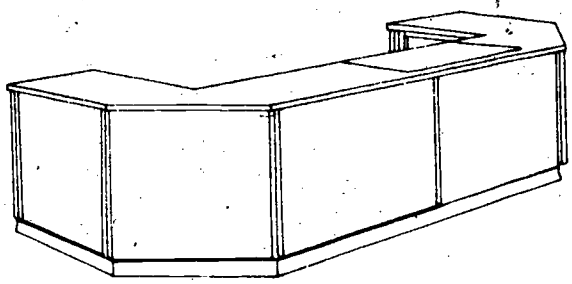
d. Silhouette model

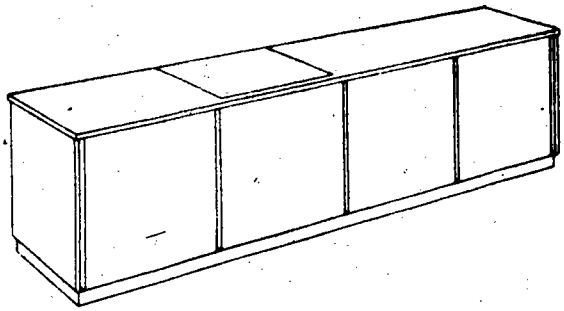
silhouette (26 inch high) can provide work space for media/reference activities

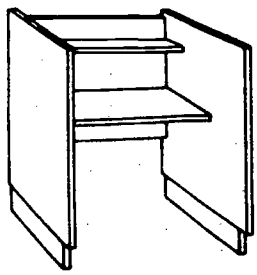
40

12. Circulation Desks









13. Carrels

a. Appropriate heights of working surfaces

Kindergarten - fourth grade
25 to 28 inches

Upper elementary and middle school
26 to 30 inches

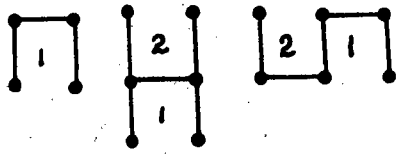
Secondary
29 to 30 inches

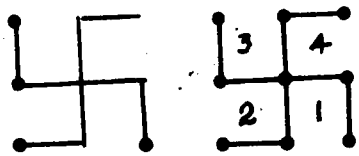
b. Type

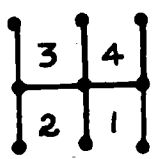
With power supply

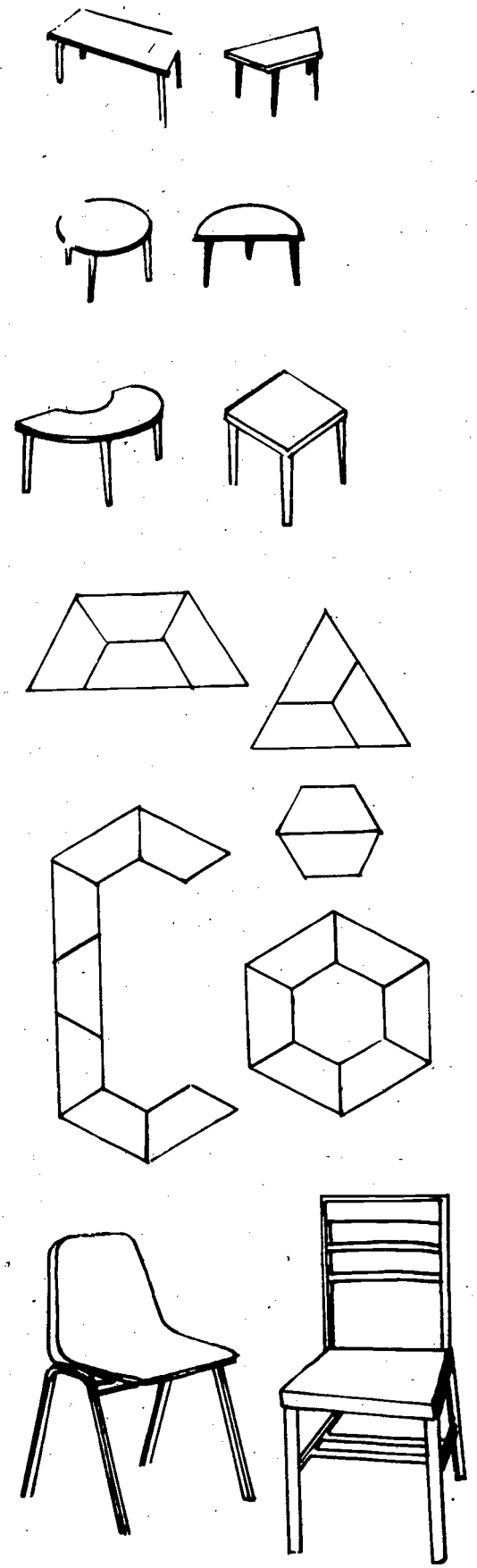
c. Arrangement

Carrels are versatile and can be arranged in many forms within existing space.









14. Tables and Chairs

a. Appropriate working surface heights

Kindergarten - fourth grade
25 to 28 inches

Upper elementary/middle schools
26 to 30 inches

Secondary
29 to 30 inches

b. Appropriate sizes of chairs and other seating

Kindergarten - fourth grade
14 to 17 inches

Upper elementary and middle schools
16 to 18 inches

Secondary
18 inches

c. Tables may be purchased in a variety of shapes

Square, rectangular, trapezoidal, round, half-round and kidney. The trapezoidal table can be arranged in many interesting and creative ways. Tables are most flexible when they seat no more than six students each.

d. Chairs may be purchased in several materials. Many polyproplyene chairs are stackable.

15. Display Cases/Racks

a. Vertical and horizontal glass display cases

Available where protection of items is necessary.

b. Display racks

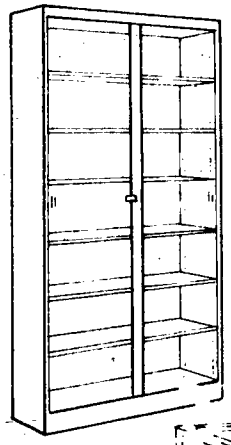
A variety of display racks are also available with attached bulletin boards

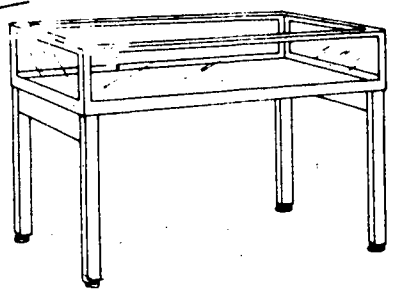
c. Display Units

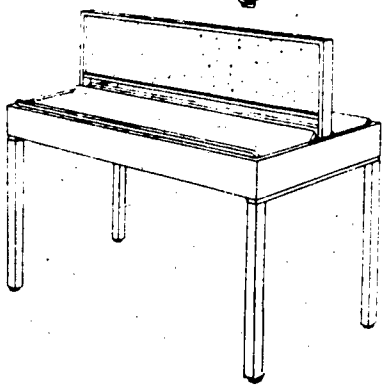
All display units should be chosen based on requirements for the various school grades to be served. (See table sizes and shelf sizes for specific height requirements.)

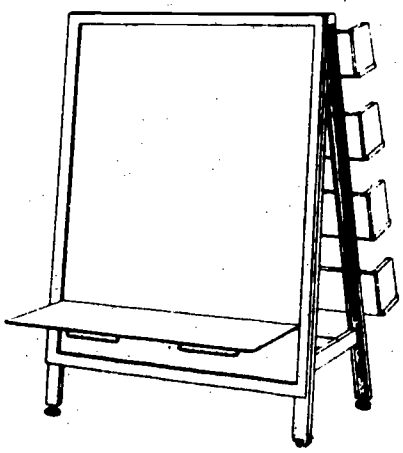
d. Modular display units

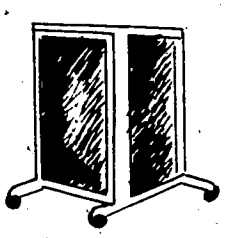
Available with many options, including wheels for movability, display shelf attachments, book supports, bulletin boards and lock-up acrylic showcases

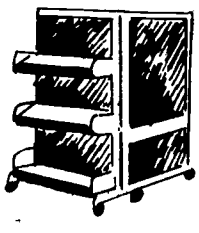












16. Storage Shelving

a. Style

Available in open (for closed storage areas only) or closed units

b. Adjustable shelves

Should have clip-type adjustable metal shelves

c. Sizes

Depth	Width	Height
12″	36″	85″
18″	36″	85″
24″	36″	85″
30″	36″	85″
36″	36″	85″

d. Advantage

Relatively inexpensive and sturdy, sometimes called industrial shelving

e. Depth

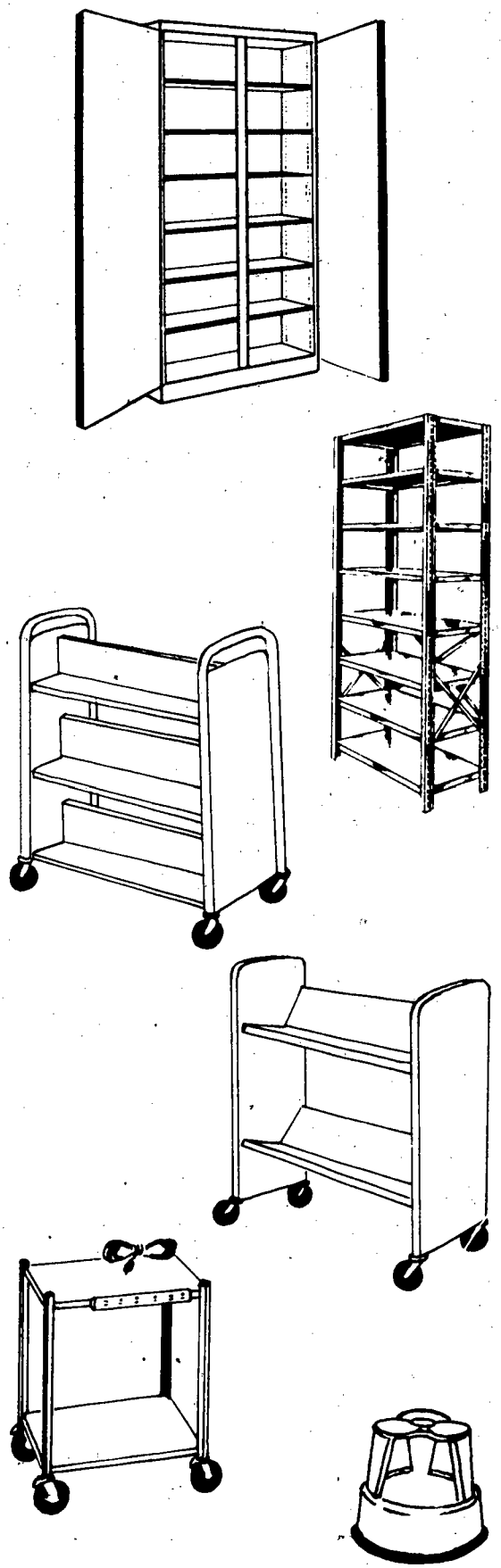
18 inch depth and 26 inch depth shelving accommodates most instructional equipment

17. Miscellaneous Furnishings

a. Book trucks

b. Kik-step stools

c. Equipment carts, with extension cords.



Appendix C
Checklist for Selecting Basic Furniture

Functions	Size	Quantity
Circulation		
Card catalog cabinets		
Index table		
Book truck		
Reserve shelves		
Circulation desk		
Display cases, racks		
Reading, Listening, Browsing, Viewing, Studying		
Study tables (specify shapes)		
Carrels (single, side-by-side, quadruple, back-to-back)		
Seating, standard		
Seating, lounge or casual		
Conference Area		
Tables		
Shelving for special collection		
Chairs		
Collection		
Dictionary stand		
Atlas stand		
Cabinets for slides or filmstrips		
Picture book type shelving		
Flat files for maps, charts, etc.		
Newspaper display rack		
Periodical shelving		
Book shelves		
Legal size file cabinets		
Paperback racks		
Reference shelving		
Audio and video shelving/cabinets		

Functions	Size	Quantity
Media Production		
Drafting table and stool		
Work tables		
Chairs		
Typing desk and chair		
Cabinets, storage		
Darkroom		
Tables		
Chairs		
Easels		
Electronic Distribution		
Videocassette tape storage cabinet		
Console for monitor and four videocassette machines		
Work table with doors underneath and one shelf		
Processing		
Card catalog cabinet for shelf list		
Typing desk, chair		
Work table and stools		
Shelving		
Filing cabinets		
Storage cabinets		
Instructional Equipment Storage		
Cabinets for parts and supplies, with adjustable shelving		
Cabinets for projectors and AV equipment		
Equipment carts with extension cords		
Administration and Planning		
Desks		
Chairs		
Filing Cabinets		
Shelving		

Appendix D
Checklist for Media Center Facility Evaluation

I. *The media center is*	Yes	No
A. in compliance with overall space requirements.		
B. centrally located within the school.		
C. designed to appeal to age of users.		
D. equipped with		
adequate temperature and humidity controls		
adequate ventilation		
acoustical ceiling		
fire resistant or nonflamable furnishings		
visual access to all areas by staff		
sufficient electrical outlets		
conveniently placed electrical outlets		
sufficient shelving to house collection and allow for growth		
sufficient shelving to house periodical collection		
adequate storage space		
easily accessible equipment storage		
sink with running water		
work areas		
furniture scaled to size of users		
telephone		
intercom		
production area		
TV distribution area		
darkroom		
E. hazard free.		
F. flexible in space and equipment to meet special needs.		
G. accessible to the handicapped.		
H. designed for open access to all media.		
I. designed for movability of AV equipment.		
J. in compliance with shelf height requirements for size of users.		
K. in compliance with the requirement to permanently display an electronic distribution schema.		

II. *The media center has designated areas for all of the following.*		
A. Reference		
B. Browsing		
C. Viewing and listening		

	Yes	No
D. Individual study	_____	_____
E. Use by an entire class	_____	_____
F. Administration	_____	_____
G. Production workroom	_____	_____
H. Conferences	_____	_____
I. Professional collection	_____	_____
J. Electronic distribution	_____	_____
K. Circulation, card catalog, etc.	_____	_____
L. Displays	_____	_____
M. Processing of materials	_____	_____
N. Periodical storage	_____	_____
O. Equipment storage	_____	_____

Appendix E
Glossary

ADA
Average Daily Attendance, rather than enrollment, is the legal basis used in Georgia for the allocation of funds and space.

Accessibility
A consideration which makes the media center and its resources readily available to the instructional areas and to persons with handicapping conditions.

Acoustical control
The planned use of design, construction materials and furnishings to produce sound-dead qualities.

Adjustable shelving
Shelving in which all shelves except the bottom shelf can be moved up or down to accommodate materials of varying sizes.

Amplifier
An electronic device that increases the amplitude of a signal fed to it.

Audio recording
A sound (only) recording usually produced on a reel-to-reel or cassette magnetic recorder. Also produced on disc.

Audio taping
The recording of sound (voice, music, sound effect) with magnetic tape via a tape recorder.

Bidding specifications
Minimum acceptable requirements for any item to be purchased through the competitive bid process, including a detailed listing of all required data; e.g., dimensions, materials, manufacturer if essential, finish style, performance expectations.

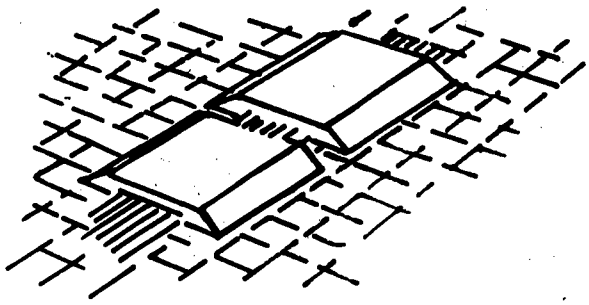
Building level
Pertaining to an individual school rather than to a school system.

CATV
Community Antenna Television. A redistribution system that receives TV programs from regular broadcast stations, then replays them via a televised closed circuit to cable service subscribers in a particular area. Also cablevision.

Cablevision
See CATV

Card catalog
A card index of the media center's collection. (Traditionally indexes have been on cards. There are trends toward microfiche catalogs and computer terminals linking networks of collections.)

Cable ramp
Nonpermanent method used to run wires on floor surface. Can be moved as needed.



Carrel (wired)
Sometimes referred to as wet carrel. A unit of furniture designed for individual study, wired for power to accept a light fixture as well as various pieces of audiovisual equipment.

CCTV
Closed Circuit Television. A transmission system that distributes television programs, live or tape, both audio and video, to a limited network connected by cable. The network may consist of one school, a whole school system and so forth. The telecast cannot be received by other TV sets outside the selected network.

Channel
1) An isolated signal path. 2) A specific band of frequencies assigned to each radio or television station.

Charge desk
See Circulation desk.

Charging
See Circulation.

Check-set
An architect's completed drawing showing all architectual, engineering details, and specifications which are submitted to the Facilities Section, Georgia Department of Education, for review. Except for minor necessary changes, they usually become the final plans used during construction of the facility.

Circulation desk
Either a stationary or movable desk equipped for transactions such as media check out and return.

Circulation
1) Refers to the process of checking items from the media center's collection to and from users. (Also called charging.) 2) Also refers to the movement of traffic through a facility.

Climate control
The systems for controlling the temperature and humidity of the media center (heating and air conditioning systems).

Closed circuit television
See CCTV.

Coaxial cable
A cable that consists of two concentric conductors separated by an insulator (usually plastic or air). The center conductor may be a single wire or it may be stranded. The outer conductor may be braided metal, a metal foil or a solid metal tube and serves as a shield against interference from external fields. The cable is covered with a protective plastic coating.

Conduit
The small hollow tube which protects wires and cables. An attempt is made to install sufficient conduit during initial construction to handle future demands.

Converter
A device used in the processing of a TV signal that changes the signal from one channel to another.

Distribution system
An installation to transmit from one central location to all or selected classroom receivers.

Duplex outlet (duplex-type outlet boxes)
A receptacle that permits access to the same electrical power for two separate uses.

Educational specifications
Written statements that serve as vehicles of communication between media planning committees and architects; they provide a detailed analysis of the educational activities to be pursued and the spaces required for these activities in the proposed new or renovated facility.

Functional relationships
Interrelationships of the various functions which determine the kind, size and position of spaces.

Head-end
Refers to the basic equipment of the electronic distribution system which receives, processes and transmits television signals.

Indexes
Refers to basic media center tools such as the card catalog, Reader's Guide, Education Index, Biography Index, etc.

Instructional media
The print and nonprint materials used in support of the instructional process, encompassing all equipment and materials. Instructional media incorporates hardbound books; paper-backed and softbound books; magazines; newspapers; duplication equipment and materials; laboratory equipment and materials (tape and disc recordings, transparencies, filmstrips, and films); instructional television; comprehensive learning systems; self-instructional materials; teacher-made materials; and any other materials and equipment which can be used in the delivery of instruction.

Junction box
A box with a removable cover that is inserted in a conduit run to provide access to cable and a point where other conduit runs may be interconnected.

MATV
Master Antenna Television. One or more outside antennas mounted on a common antenna support structure for off-the-air reception of television. Received signals are processed and distributed to instructional areas of the school.

Master Antenna Television System
See MATV.

Media
Refers to the instructional resources, print and nonprint, which are organized and circulated by the media center to users.

Media center
A learning center in a school where a full range of print and audiovisual media, necessary equipment and service from media specialists are accessible to students and teachers.

Media specialist
The media specialist serves as a building level facilitator to link educational goals to school level instructional needs through the application of appropriate instructional media. The media specialist strives to

raise the media consciousness of leadership and instructional personnel by supplying them with information and data which demonstrate the role that quality media, when used effecively, plays in enhancing student achievement and by assisting and supporting them in the selection, procurement and use of instructional media. The media specialist is familiar with all available media resources within the school system and manages these resources in a manner which maximizes the availability and the accessibility of appropriate media needed to meet instructional objectives.

Microcomputer
A computer with major computational capabilities concentrated in one electronic component called a "chip", for use in instructional programs and in program management.

Microfiche
A term meaning miniature index card, microfiche transparencies permit the concentration of large amounts of textual and visual data in very little space. Usually a four inch by six inch sheet of film containing space for a large number of frames (60 to 1000 miniature pages).

Microfilm
Narrow photographic film, usually 35mm or 16mm width, on which various types of images are stored. The usual process involves photocopying only one to two pages of a document on a single frame.

Microforms
The general term for various types of information-storage film that maximizes efficiency of storage and retrieval of printed materials, documents, pictures by miniaturization through photography and using the final derivatives from it. Examples: microfiche, microfilm.

Modulator
Device that converts picture and sound signals to a television channel that may be observed on a television set.

Monitor
A device that can display pictures, sound or both pictures and sound from video and audio sources. A monitor cannot receive signals off-the-air.

Open scheduling
A pattern of flexible scheduling encouraging the use of the media center by teachers and students as their needs dictate, both on a preplanned and spontaneous basis.

Pamphlet
An unbound printed publication with no cover or with a flush paper cover.

Periodicals
Magazines, newspapers.

Preliminary plans
Preliminary plans include floor plan drawings at either 1/16" or 1/8" scale and large scale drawings at 1/4" scale. Plans at all scales show dimensions, length x width, and square foot area of each room or area. Large scale layouts list all room or area square footage separately in addition to the total square footage of the media center complex. Large scale layouts also include all furnishings such as tables, chairs, specialized storage cabinets and shelving indicating linear feet of shelving and number of items accommodated.

Princeton file
A filing container, open at top and back, for upright periodical and pamphlet storage on shelves.

Production
The design, layout and development of inexpensive teaching materials at the building or system level. A production area provides the space, materials and equipment for this function. Generally used to encompass the function of reproduction such as photocopying.

Professional collection
Instructional resources designed for the use of teachers in developing and improving the competencies necessary for the performance of their jobs.

Pull wire
A nonactive wire placed in conduit to facilitate the placement of an active cable at a later time.

Rabbit ears and UHF loop antennas
Indoor-type TV antennas, useful only in high signal level areas.

Radio frequency distribution
The delivery of television signals to outlets throughout a school by way of coaxial cable and other components.

Range
A section of shelving at least six feet long composed of two or more tiers of shelving.

Schematic drawing
A line drawing in which functional relationships of component parts are represented by simple easily drawn symbols.

Separate antenna installations
One or more antenna installations located so that each antenna serves one or two TV sets. These antennas are not interconnected.

Signal
The desirable information or intelligence conveyed in (or by) a communication system. The signal may take as its form a variety of energy types such as radio waves, audible sound waves and light waves.

Simulations
Learning processes which involve pupils as participants in role presentations and/or games simulating real-life situations or environments.

System level
Refers to matters pertaining to a school system rather than an individual school.

Teaching station
Refers to a classroom or other instructional unit.

Tier
A section of shelving three feet long containing two or more shelves.

Trunk line
The principal transmission cable in a system designed to deliver signals over a wide area. Shorter runs of cable branch from the trunk line to feed specific points.

Underwriters laboratory
A testing center developed and supported by stock insurance companies for the purpose of setting safety standards for devices that use electrical current. The laboratory tests all such items that are manufactured for the consumer and institutional markets.

Unified media program
A media program in which the selection, acquisition, processing, organization, circulation and use of print and nonprint media are given equal consideration in meeting the needs of the instructional program.

VTR
Videotape recorder — a device which can record images and sound on videotape and play back the videotape for viewing on a TV monitor or special receiver.

Video recording
Recording or duplicating video signals using a videotape recorder. (Also called videotaping)

Videotaping
Recording or duplicating video signals using a video tape recorder. (Also called video recording)

Videotape recorder
See VTR.

Visual control or supervision
Refers to the capabilities for observing all areas of the media center by staff.

Weatherhead
An attachment that is placed on the end of conduit that is exposed to the weather. The weatherhead permits cable to enter conduit while moisture is kept out by rubber seals.

Wood fiber core
A wood board produced by converting wood chips into wood fiber which is formed into panels under heat and pressure. May be covered with paint, thin plastic coating or wood veneer. Also known as fiberboard, composition board and particle board. Not recommended for media shelving or furniture.

Appendix F
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