A set of checklists are provided to assist primary and secondary educators who are planning to build new media facilities or remodel older ones. Separate worksheets are provided for five distinct sections of the media center—the general use area, the circulation area, the administrative area, the large group instruction area, and the individual instruction area—and for a dozen other components of the school. These are: 1) classrooms, 2) the graphics laboratory, 3) the photographic production area, 4) a special use area, 5) the mechanical production area, 6) the language laboratory, 7) the learning laboratory, 8) the planetarium, 9) the dial access retrieval area, 10) the television facility, 11) the special experience laboratory, and 12) the technical repair area. Individual lists of technological facilities and resources are provided for each area, to foster comprehensive planning. A glossary of media terms, a selected bibliography, and instructions for using the worksheets are also included. (LB)
Worksheets
For Planning
Media Facilities

Edited by
Edward A. George
Bureau of Instructional Support Services
Pennsylvania Department of Education
First Printing 1971
Reprint 1973
How to Use Worksheets

Are you building a new school or remodeling existing facilities? This set of worksheets can help you. A multitude of details require consideration. The checklist becomes a useful memory jogger. By selecting the area function from the lefthand column you can determine technological facilities to be considered:

1. Think in terms of areas and functions to be carried on in each area.

2. Use worksheets to check technological facilities, item by item. These are optimum suggestions. Make a selection of those that fit your situation.

3. Make detailed notes in the righthand column on numbers of students, space requirements, equipment and materials needed in each area.

4. Go over listing, step by step, with persons and committees involved. Expert advice should be sought early in the planning process.

It is most important to involve your staff in planning new facilities. They will surprise you with many excellent new ideas. Also, they will always feel the new building, materials and equipment are their own because they had a real part in planning for them.

Audio-visual personnel, librarians and technicians can use the checklist to evaluate present facilities or plan for future expansion of the media center. This type of preplanning insures consideration of many media items easily overlooked and becomes invaluable when working with building committees and architects.
It is vital to secure professional media consultative services from competent representatives of a college, university or the Pennsylvania Department of Education before educational specifications are submitted to an architect. It is also helpful to visit an exemplary school system with superior media facilities and services to get new ideas for planning.

You may want to include items that are not reimbursable. Many ideas that are inexpensive additions to plans will make a difference in the convenience and use of the building in future years. Talk out problems and try to arrive at common decisions within budget limitations. You are building for the future and you will have to convince the school board and the public to include advanced ideas. Larger enrollments in years to come usually make this forward looking adventuresome planning extremely worthwhile.
Definition of Terms

Air brush
Equipment used for spray painting with water colors, lacquers and paint in graphics lab to make signs, posters, stencils. Accessories include compressors, air hoses, pressure gauge and color cups.

Audio-active Comparative
Language lab equipment allowing student and teacher to compare student's responses with prerecorded lessons.

Audio-tutorial equipment
Specially designed equipment for presenting programmed instruction to individual students. Sometimes called a teaching machine.

Card catalog
An index to the varied materials in the media center consisting of printed or typed library cards arranged in alphabetical order with author, title and subject cards interfiled providing access to the collection. Audio-visual materials and equipment are usually included in the central card catalog.

Collator
A machine to place pages in proper order for binding following the printing process.

Degaussing
Electromagnetic eraser for removing sound from magnetic tape recordings -- sometimes called a bulk eraser.

Dial Access
Telephone type dialing system providing student access to audio or audio-visual information stored on magnetic tape or on film.

Diazo printer
Diazochrome projectuals are overhead transparency films that produce a colored dye image on a clear base by
means of an ammonia developing process. These materials reproduce anything written, drawn or printed on translucent material.

Dolly or Dollies
A stand or tripod on wheels used to move heavy objects, such as a large television camera.

Dry mount press
A thermostatically controlled means of applying pressure to seal a photograph or print to a cardboard mount.

Graphic lab
A workshop for many types of graphic art work and reproduction.

Index
Refers to the periodic footage counter on a machine such as tape index on a reel-to-reel tape recorder.

Intercom
A telephone type installation permitting communication between two or more stations, usually using a small loudspeaker for output.

Jacks
Devices used for connecting an electric cord to the sound output of a recording or reproducing machine.

Job-rated
Regulations determining the quality of electrical equipment.

Keys
The various card catalogs, reader's guides, and other methods providing a student access to the media-center collections.

Keystone eliminator
A device permitting a projection screen to be tilted at an angle perpendicular to the beam of light from the projector so the top and bottom of the image will approximate the same length, and the picture will not "keystone". Keystoning can be either vertical or horizontal, depending upon relation of projector to screen.
Laminator
A machine to apply a thin sheet of plastic over a picture in order to preserve it. Usually this is a heat/pressure process.

Light control
Ability to darken a room by means of window curtaining and/or electric light dimmer for better projection purposes.

Light table
A table with translucent top illuminated by interior lights so transparencies can be previewed. Also used for tracing purposes.

Local production
Audio-visual materials, such as posters, charts, slides, transparencies and tape recordings made by students or teachers themselves in contrast to commercial production.

Master light switch
One electric control for all lights in media suite.

Matte screen
A screen with a smooth flat white reflecting surface.

Media-aide station
Work space for media personnel with desk and files. Commands a view of the media center for supervision purposes.

Media center
A learning center in a school where a full range of print and audio-visual media, equipment and services are accessible to students and teachers.

Media suite
All of the rooms adjacent to one another housing materials and equipment for use by students, teachers and media specialists.

Microfilm
A roll of film, usually 35mm, containing images that have been greatly reduced by a photographic process.
Micro reader
  Equipment to enlarge and project microfilm so it can be read.

Micro reader-printer
  A device to produce a printed copy of a single frame of microfilm.

Microfiche
  A sheet of film usually 4" x 6" containing images greatly reduced by photographic process.

Movieola
  A professional motor-driven film editing machine. The film and magnetic tapes are locked together for cutting. They can be edited separately or in combination for sync-sound pictures.

Multilith
  An offset printing machine for processing various forms of copy.

Overhead projector
  A projector utilizing large 10" x 10" transparencies. Screen is in back of lecturer who faces his class. Overhead can be used under normal lighting conditions.

Opaque projector
  Equipment for reflecting light onto printed copy and projecting it onto a screen. Requires darkened room. Used for tracing maps, cartoons and diagrams.

Press-apply letters
  Lettering method for transferring especially printed letters to other copy by a burnishing process.

Primary typewriter
  A special typewriter that prints large. Six characters to the inch. Manufactured under different trade names by various typewriter companies.

Polaroid
  A camera that takes black and white or colored pictures which can be developed in minutes without a darkroom.
Programmed media
Materials for self-instruction depending on immediate reinforcement. These materials can be prepared in book form or machine format requiring special equipment.

Realia
Real objects used to relate classroom teaching to actual phenomenon.

Rear-screen projection
Projector image comes through from back of a translucent screen. Image may be reflected onto screen from a mirror. Rear projection makes possible a bright image in a normally lighted room.

Silk screen kit
A stencil printing method.

SLR camera
Single lens reflex camera. Image is viewed directly through the "taking" lens.

Story board
A method of scripting a story for an audio-visual presentation. Cards placed in slots on a board contain both picture sketches and words of the text for each logical sequence. Changes can be made by rearranging cards without rewriting entire pages.

Tack board
A bulletin board.

Tacking iron
A small heated iron with built-in-temperature control, used to fasten mounting tissue on a picture or photo in the dry mounting process.

Tele-lecture
Two way telephone loudspeaker system permitting a lecturer to communicate with a class at long distance.

TV TERMINOLOGY

Acoustical control
Floor, wall or ceiling materials that absorb rather than reflect sound waves.
Audio-active
A device used in foreign language study permitting a student to respond by speaking into a microphone, hearing himself through his headset and having his voice recorded on tape.

Audio mixer
A multi-channel input for a tape recorder, allowing voice, music and sound effects to be mixed and placed on tape simultaneously.

Color organ
An organ type keyboard that controls and mixes projected colors on a screen, usually to music.

Degauss
Erasing a recorded program from magnetic tape, either audio or video, by means of a strong electromagnet.

Electric pointer
Special type flashlight to throw an illuminated arrow on the screen.

Film chain
A device for televising a film or slide, consisting of a projector and television camera.

High gain master antenna
A device making possible point-to-point radiated television transmission from a central location to several schools.

Lavalier mikes
A microphone on a neck cord so the broadcaster has freedom of movement while speaking.

Microprojector
A device for projecting microscopic pictures.

Mike boom
A microphone fastened to an extendible rod, so the microphone will be invisible to the camera field yet near the speaker.
Monitoring
Ability to hear or see a program while it is being produced to check on operation of transmitter or the transmission system.

Radio frequency modulator
A device used to make the television signal available to a commercial television receiver. Eliminates need for special type television monitors.

Tape deck
A tape recorder manufactured for a built-in facility, as compared to a self-contained portable recorder. Tape decks often require additional amplifying equipment.
Worksheets for Planning Media Facilities
for School Buildings K-12
Printed and Audio-Visual Services

General Use Area

Media Center  This area provides students and teachers with a place to read, study, think, write, browse and make simple audio-visual material. Equipment and materials are provided for research, previewing, auditioning and local production. Facility should have central, convenient location taking into account supervision and traffic flow.

Technological Facilities and Resources

- Seating
  - Chairs and tables
  - Carrels (electrified)
  - Picture book tables and stools for elementary class. Story-telling cushions
  - Index reference tables for secondary classes.

- Shelving
  - Adjustable
  - Perimeter
  - Double faced
  - Full and counter height
  - Sized for standard books, reference books and paper books.
  - Newspaper display racks
  - Shelf backing
  - Section labels
  - Bookends
  - Step stools

- Art prints (reproductions)

- Microforms
  - Microfilm/microfiche
  - Readers
  - Reader-printer
  - Microfilm storage
General Use Area

Media Center (Continued)

Technological Facilities and Resources

- Stacks for magazine storage
- Floors
  - Sound deadening carpeting
  - Dictionary and atlas stands
  - Globes
  - Folding maps
  - Tackboard/bulletin board
  - Exhibit cases
  - Blueprint file and cabinet

Circulation Area

The "keys" to the collection are located in this area, within card catalogs and indexes. Charge out desk should be placed in a strategic place to control main area.

Media Center

Technological Facilities and Resources

- Card catalogs
  - Expandable. 1,000 cards per drawer
- Charge out desk. Two level, for elementary.
- Book depository
- Charging machine
Circulation Center (Continued)

Technological Facilities and Resources Checklist

- Book truck. Four wheel swivel, flat tilt-top
- Storage bins
- Intercom control center
- Master light switch
- Reserve stack
- Storage lockers
- Hi-model posture chair
- Copying machines
- Filing cabinets, three drawer and jumbo
- Pencil sharpener
- Coin changer

Adjustable storage for:

- Books
- Magazines
- Films, slides and transparencies
- Filmstrips
- Film loops
- Tapes. Reel and cassette
- Disc recordings

Administration Areas

Media Center

This space will be provided for the staff for study, dictation, individual interviews and small conferences.

Technological Facilities and Resources Checklist

- Office desks for professional staff
### Administration Area
#### Media Center (Continued)

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desks for secretaries</td>
<td></td>
</tr>
<tr>
<td>Posture chairs</td>
<td></td>
</tr>
<tr>
<td>Conference table and chairs</td>
<td></td>
</tr>
<tr>
<td>Files</td>
<td></td>
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<tr>
<td>Shelving</td>
<td></td>
</tr>
<tr>
<td>Telephones</td>
<td></td>
</tr>
<tr>
<td>Intercom system</td>
<td></td>
</tr>
<tr>
<td>Coat racks</td>
<td></td>
</tr>
<tr>
<td>Typewriters</td>
<td></td>
</tr>
<tr>
<td>Adding machines</td>
<td></td>
</tr>
<tr>
<td>Dictating equipment</td>
<td></td>
</tr>
<tr>
<td>Thermal copier</td>
<td></td>
</tr>
<tr>
<td>Mimeograph</td>
<td></td>
</tr>
</tbody>
</table>

#### Large Group Instruction
This space is provided for lectures, multimedia presentations and demonstrations.

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfortable seating</td>
<td></td>
</tr>
<tr>
<td>Large screen, minimum 10 x 8</td>
<td></td>
</tr>
<tr>
<td>Auditorium type overhead projector</td>
<td></td>
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</tbody>
</table>
Large Group Instruction
(Continued)

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projection booth</td>
<td></td>
</tr>
<tr>
<td>Light control</td>
<td></td>
</tr>
<tr>
<td>Television receivers</td>
<td></td>
</tr>
<tr>
<td>Electrical outlets</td>
<td></td>
</tr>
<tr>
<td>Rear projection booth</td>
<td></td>
</tr>
<tr>
<td>Screens</td>
<td></td>
</tr>
<tr>
<td>Film, filmstrip and slide projectors</td>
<td></td>
</tr>
<tr>
<td>Platform for projectors (folding)</td>
<td></td>
</tr>
<tr>
<td>Spotlights</td>
<td></td>
</tr>
<tr>
<td>Mikes</td>
<td></td>
</tr>
<tr>
<td>Sound system wired to projector stations and</td>
<td></td>
</tr>
<tr>
<td>to building intercom</td>
<td></td>
</tr>
<tr>
<td>Ventilation Regulation: 15 cubic feet of air</td>
<td></td>
</tr>
<tr>
<td>change per occupant per minute</td>
<td></td>
</tr>
<tr>
<td>Ramps</td>
<td></td>
</tr>
<tr>
<td>Minimum noise level</td>
<td></td>
</tr>
</tbody>
</table>
Individualized Instruction This area a student is encouraged to work by himself with both print and nonprint materials. Carrels provide solo space to use a variety of portable or stationery equipment such as the items mentioned below.

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer equipment</td>
<td></td>
</tr>
<tr>
<td>Microfilm reader/reader printer</td>
<td></td>
</tr>
<tr>
<td>Listening systems:</td>
<td></td>
</tr>
<tr>
<td>Earphones for use with record players and tape recorders</td>
<td></td>
</tr>
<tr>
<td>Television monitors</td>
<td></td>
</tr>
</tbody>
</table>

See Graphics Lab for local production facilities to be incorporated in the media center

- Radio receivers
- Cassette tape recorders
- Microphones
- Patch cords

Classroom Areas Another definition of this type of area is "teaching station." This is any area in a school where formal instruction prevails. Media centers are not included in this definition, although it is recognized that instruction is part of the media program.
### Classroom Area
(Continued)

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Matte wall screen installed at eye level, 70&quot; x 70&quot; minimum</td>
<td></td>
</tr>
<tr>
<td>Keystone eliminator</td>
<td></td>
</tr>
<tr>
<td>Overhead projector, classroom type</td>
<td></td>
</tr>
<tr>
<td>Adequate electrical circuits</td>
<td></td>
</tr>
<tr>
<td>Movable chairs and desks</td>
<td></td>
</tr>
<tr>
<td>Storage cabinets</td>
<td></td>
</tr>
<tr>
<td>Chalk boards: Regulation: 18 linear feet, installed at convenient height for pupil age group.</td>
<td></td>
</tr>
<tr>
<td>Tack boards: Eye level, cork and felt. Hook and loop Magnetic</td>
<td></td>
</tr>
<tr>
<td>Maps and charts Mounting rails installed above chalk boards or tack boards</td>
<td></td>
</tr>
<tr>
<td>Television outlets At least two outlets provided from both closed circuit and open circuit systems in every instructional area designed for television reception and origination.</td>
<td></td>
</tr>
</tbody>
</table>
Classroom Area
(Continued)

Technological Facilities and Resources Checklist

Tables

Shelving

Podium lectern

Forced ventilation:
Regulation: At minimum noise level, 10 cubic feet of outside air per pupil per minute when classroom is at full student load.

Intercom system

Projection table on wheels with shelf or shelves

---

Graphics Lab
A work area used for local production of educational materials such as printing and duplicating, making signs and posters, transparencies, bulletin board displays, demonstrations and exhibit preparation.

---

Technological Facilities and Resources Checklist

Job rated electrical wiring

Sinks. Running hot and cold water

Exhaust ventilating fans

Cabinets, shelving
<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bins, drawers</td>
<td></td>
</tr>
<tr>
<td>Counters, work surfaces</td>
<td></td>
</tr>
<tr>
<td>Light table</td>
<td></td>
</tr>
<tr>
<td>Files</td>
<td></td>
</tr>
<tr>
<td>Standard and jumbo</td>
<td></td>
</tr>
<tr>
<td>Special for posters</td>
<td></td>
</tr>
<tr>
<td>Study prints</td>
<td></td>
</tr>
<tr>
<td>Primary typewriter</td>
<td></td>
</tr>
<tr>
<td>Stencils</td>
<td></td>
</tr>
<tr>
<td>Mimeo-scone</td>
<td></td>
</tr>
<tr>
<td>Stencil files</td>
<td></td>
</tr>
<tr>
<td>Spirit duplicator</td>
<td></td>
</tr>
<tr>
<td>Thermo-copier</td>
<td></td>
</tr>
<tr>
<td>Large paper cutter</td>
<td></td>
</tr>
<tr>
<td>Three hole punch</td>
<td></td>
</tr>
<tr>
<td>Transparency production system</td>
<td></td>
</tr>
<tr>
<td>Diazo printer</td>
<td></td>
</tr>
<tr>
<td>Transparency viewer</td>
<td></td>
</tr>
<tr>
<td>Overhead projector and screen</td>
<td></td>
</tr>
<tr>
<td>Opaque projector</td>
<td></td>
</tr>
<tr>
<td>Drymount press and tacking iron</td>
<td></td>
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</tbody>
</table>

-18-
 Graphics Lab (Continued)

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drymount tissue</td>
<td></td>
</tr>
<tr>
<td>Mounting board</td>
<td></td>
</tr>
<tr>
<td>Pressure weight set</td>
<td></td>
</tr>
<tr>
<td>Silk screen kit</td>
<td></td>
</tr>
<tr>
<td>Mechanical enlarger</td>
<td></td>
</tr>
<tr>
<td>Collator</td>
<td></td>
</tr>
<tr>
<td>Electric stapler</td>
<td></td>
</tr>
<tr>
<td>Drawing board, T-square</td>
<td></td>
</tr>
<tr>
<td>Sign making equipment</td>
<td></td>
</tr>
<tr>
<td>Mechanical lettering</td>
<td></td>
</tr>
<tr>
<td>brushes</td>
<td></td>
</tr>
<tr>
<td>Poster paint</td>
<td></td>
</tr>
<tr>
<td>Poster board</td>
<td></td>
</tr>
<tr>
<td>Multilith equipment</td>
<td></td>
</tr>
<tr>
<td>Laminator</td>
<td></td>
</tr>
<tr>
<td>Air brush</td>
<td></td>
</tr>
<tr>
<td>Press apply letters</td>
<td></td>
</tr>
<tr>
<td>Waste disposal</td>
<td></td>
</tr>
<tr>
<td>Ample storage</td>
<td></td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td></td>
</tr>
<tr>
<td>Media specialist station</td>
<td></td>
</tr>
</tbody>
</table>

-19-
Photographic Production Area. A complete dark room and photo studio is useful for educational purposes. Many uses for photography will be found in the school by both faculty and students.

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameras with close-up accessories</td>
<td></td>
</tr>
<tr>
<td>Camera tripod, elevator type</td>
<td></td>
</tr>
<tr>
<td>Variety of film</td>
<td></td>
</tr>
<tr>
<td>35mm single lens Reflex camera for taking 2 x 2 slides</td>
<td></td>
</tr>
<tr>
<td>16mm motion picture camera</td>
<td></td>
</tr>
<tr>
<td>Super 8mm camera</td>
<td></td>
</tr>
<tr>
<td>Rapid process Polaroid camera</td>
<td></td>
</tr>
<tr>
<td>4 x 5 copy camera and stand</td>
<td></td>
</tr>
<tr>
<td>Slide copier</td>
<td></td>
</tr>
<tr>
<td>Photoflood lighting equipment</td>
<td></td>
</tr>
<tr>
<td>Flash equipment</td>
<td></td>
</tr>
<tr>
<td>Editing equipment including:</td>
<td></td>
</tr>
<tr>
<td>Film splicers, 16mm and Super 8mm</td>
<td></td>
</tr>
<tr>
<td>Tape splicers, reel-to-reel and cassette</td>
<td></td>
</tr>
</tbody>
</table>
Photographic Production Area
(Continued)

Technological Facilities and Resources

<table>
<thead>
<tr>
<th>Movieola</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewind and viewer</td>
<td></td>
</tr>
<tr>
<td>Dark room- light lock</td>
<td></td>
</tr>
<tr>
<td>Dark room equipment</td>
<td></td>
</tr>
<tr>
<td>Sink, running water,</td>
<td></td>
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<tr>
<td>temperature regulator</td>
<td></td>
</tr>
<tr>
<td>Floor drain</td>
<td></td>
</tr>
<tr>
<td>Film developing tanks</td>
<td></td>
</tr>
<tr>
<td>Large paper cutter</td>
<td></td>
</tr>
<tr>
<td>Story board materials</td>
<td></td>
</tr>
<tr>
<td>Enlarger</td>
<td></td>
</tr>
<tr>
<td>Drying racks</td>
<td></td>
</tr>
<tr>
<td>Timer, thermometer</td>
<td></td>
</tr>
<tr>
<td>Chemicals and printing paper</td>
<td></td>
</tr>
<tr>
<td>Washer, dryer</td>
<td></td>
</tr>
<tr>
<td>Drymount press</td>
<td></td>
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<tr>
<td>Tacking iron</td>
<td></td>
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<tr>
<td>Drymounting tissue</td>
<td></td>
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<tr>
<td>Cardboard mounts</td>
<td></td>
</tr>
<tr>
<td>Refrigerater for film storage</td>
<td></td>
</tr>
</tbody>
</table>
### Special Use Area

An audio-visual facility which allows students and faculty to preview films and filmstrips, audition recordings, both tape and disc. Also, for viewing microfilm to receive telelectures and educational television programs.

### Technological Facilities and Resources Checklist

**Previewers**

- Silent
- Sound
- Slide/tape
- Loop film
- Acoustical treatment
- Phono, disc record players
- Reel-to-reel tape recorders
- Cassette tape recorders
- Maps
- Globes
- Charts
- Models
- Posters
- Photographs
- Diagrams
- Kits
- Replicas
- Realia
Special Use Area
(Continued)

Technological Facilities and Resources

Auto-tutorial equipment
Professional books and journals
Tele-lecture equipment
Resource files
Carrels, wet and dry

Television receivers
minimum 23" screen
Listening stations

Mechanical Production Area
Opportunities are provided in this area for individuals and classes to construct models, dioramas and stage sets.

Technological Facilities and Resources

Work benches
Tools, hand and power
Spray paint
Sink, running water
Heating equipment
Dollies
Hand truck
Mechanical Production Area (Continued)

Technological Facilities and Resources

Checklist

- Construction materials
  - Cardboard
  - Paint and brushes
  - Wire
  - Paper
  - Tissue
  - Wood
  - Canvas

Ample storage space

Language Lab or Learning Lab
A room with equipment available for use in foreign language instruction, music instruction, speech and business education. Capability of expansion should be considered.

Technological Facilities and Resources

Checklist

1. Simple System

   One tape recorder or cassette player and a headphone listening center.
Language Lab Area
(Continued)

Technological Facilities and Resources

Checklist

2. Advanced System

- Console containing tape decks and record players.
- Jacks for external input
- Student stations
- Instructor monitoring from console
- Headphones for each student with microphone boom
- Recording capability on separate track, at least half audio-active comparative. Regulation: 50 to 11,000 Hz.

3. For Individualized Study

- Repeating type cassette recorder. Playback with fast forward and rewind modes.
- Tape and record storage cabinets
- Individual television screens
- Coaxial cable
- Screen, projector, light control

-25-
Language Lab Area
(Continued)

Technological Facilities and Resources

Checklist

Degaussing equipment (tape erasing machine)

Tape recorder cleaning and head demagnetizing kit with instructions

Planetarium

This scientific device, essential to the study of modern astronomy and space science, requires a special room. It is possible to locate this equipment in a multiple use room. (See Special Experience Lab.)

Technological Facilities and Resources

Checklist

Planetarium projector

Control panel

Complete light control

Domed ceiling room

Special seating equipment

Electric pointer

Dial Access Retrieval Area

In this area, students are able to dial an audio or video educational program of their choice. Programs are often posted daily.


Dial Access Retrieval Area
(Continued)

Technological Facilities and Resources Checklist

- Tape equipment for audio and video retrieval system
- Electronic switching system
- Console
- Ventilation system
- Wet carrels
- Headphones
- Connecting cables
- Tape storage area
- Media aide station
- Bulletin board for program listing

Television
Complete educational television facilities will have both broadcast origination and distribution systems including a well equipped studio with provision for future expansion.

Technological Facilities and Resources Checklist

- Distribution System
  - Antennas
  - Head-end amplifiers
  - Cables and classroom tap-offs
  - Receiver-monitor
  - Color capability
  - Ability to record off-the-air
Television (Continued)

Technological Facilities and Resources Checklist

- Classroom Origination
  Camera
  Microphone
  Audio-visual modulator
  Television receiver
  Monitor on stand

- Television Studio
  Two television cameras with zoom lenses
  Tripods and dollies
  Switcher
  Special effects generator
  Console
  Sync generator
  Three video monitors
  Microphones
  Audio mixer and amplifier
  Film chain for 16mm
  2 x 2 slides

- Audio tape recorder
  Radio frequency modulator and transmitter unit for combining video and audio for RF transmission on a given channel frequency.

  Headsets and intercom
  Video tape recorders with modulator
  Studio control room
  Cable connections

  Electronic editing accessory built into video tape recorder.

Curtains and scenery, props
Light equipment
Adequate storage
Acoustical control

Proximity to teacher
Preparation and graphic production facilities
Special Experience Laboratory

This room is specially built and equipped. It is designed to arouse the curiosity for learning. Total involvement of the senses is provided to supplement textbook and content oriented curriculum. Types of offerings may include astronomy instruction, art presentations, geology, the seasons, zoo animals, city streets and sounds, culture contrasts and space flight.

<table>
<thead>
<tr>
<th>Technological Facilities and Resources</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemispheric room, 40' in diameter</td>
<td></td>
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<tr>
<td>360° projected environment</td>
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<tr>
<td>Carpeting</td>
<td></td>
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<tr>
<td>Ventilation</td>
<td></td>
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<tr>
<td>Entire dome treated as a projection screen</td>
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<tr>
<td>Total light control</td>
<td></td>
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<tr>
<td>Soundproof</td>
<td></td>
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<tr>
<td>Six floor level loudspeakers</td>
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<tr>
<td>Amplification system</td>
<td></td>
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<tr>
<td>Multiple slide projection</td>
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<tr>
<td>Overhead projector</td>
<td></td>
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<tr>
<td>Space-transit planetarium</td>
<td></td>
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<tr>
<td>Computer control console for planetarium</td>
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<tr>
<td>Technological Facilities and Resources</td>
<td>Checklist</td>
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<tr>
<td>---------------------------------------</td>
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<tr>
<td>Color organ</td>
<td></td>
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<tr>
<td>Battery of 16mm sound motion picture projectors</td>
<td></td>
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<tr>
<td>Super 8mm loop projectors</td>
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<tr>
<td>Programming control unit for all projectors</td>
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<tr>
<td>Stereo tape and cassette recorders</td>
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<tr>
<td>Inflatable or foam cushions</td>
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<tr>
<td>Color wheel</td>
<td></td>
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<tr>
<td>Record player</td>
<td></td>
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<tr>
<td>Planning area</td>
<td></td>
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<tr>
<td>Large library of 2 x 2 slides</td>
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<tr>
<td>Film library</td>
<td></td>
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<tr>
<td>Tape library</td>
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<tr>
<td>Storage space</td>
<td></td>
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<tr>
<td>Shelving and files</td>
<td></td>
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<tr>
<td>Director's office</td>
<td></td>
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<tr>
<td>Secretarial office</td>
<td></td>
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<tr>
<td>Desks, phones, book cases</td>
<td></td>
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</tbody>
</table>

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Technical Repair Area

In this room technicians work to keep the school's audio-visual equipment in good repair. This function becomes essential to cut down time as equipment multiplies.

Technological Facilities and Resources

<table>
<thead>
<tr>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work benches</td>
</tr>
<tr>
<td>Tools</td>
</tr>
<tr>
<td>Shelves, cabinets</td>
</tr>
<tr>
<td>Professional test instruments</td>
</tr>
<tr>
<td>Spare parts, projection bulbs</td>
</tr>
<tr>
<td>Storage for equipment awaiting repair</td>
</tr>
<tr>
<td>Adequate electrical, power, properly fused</td>
</tr>
<tr>
<td>Media station</td>
</tr>
<tr>
<td>Desk, chair, files</td>
</tr>
</tbody>
</table>
Audio-Visual Planning Aids
A Bibliography


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