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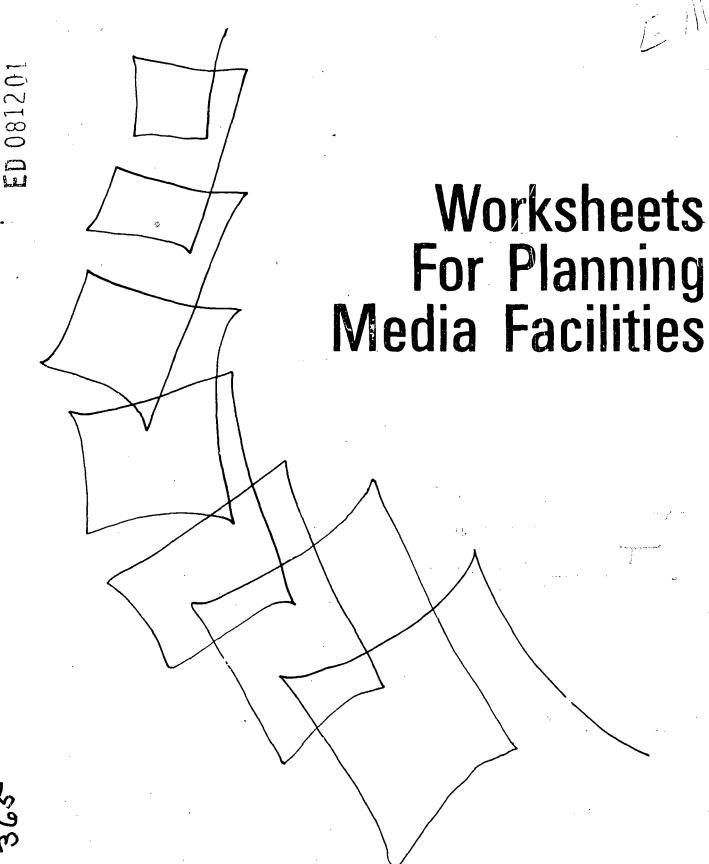
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ABSTRACT

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)



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Worksheets For Planning **Media Facilities**

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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:

- Think in terms of areas and functions to be carried on in each area.
- Use worksheets to check technological facilities, item by item. These are optimum suggestions. Make a selection of those that fit your situation.
- 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 <u>before</u> 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 programed 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 Acless

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 <u>index</u> 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.

Programed 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.

Rearscreen r ojection

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.

TY 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 avialable to a commercial television receiver. Eliminates need for special type television monitors.

Tane 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

Checklist

 Seating Chairs and ta Carrels (elec

Chairs and tables Carrels (electrified) Picture book tables and stools for elementary class. Storytelling cushions Index reference tables for secondary classes. Space, equipment and material for students

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

Checklist

- · 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

Media Center

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.

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

Pi-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.

Technicological Facilities and Resources

Checklist

Office desks for professional staff



Administration Area Media Center (Continued)

Technological Facilities and Resources

Checklist

Desks for secretaries

Posture chairs

Conference table and chairs

Files

Shelving

Telephones

Intercom system

Coat racks

Tynewriters

Adding machines

Dictating equipment

Thermal copier

Mimeograph

Large Group Instruction

This space is provided for lectures, multimedia presentations and demonstrations.

Technological Facilities and Resources

Chacklist

Comfortable seating

Large screen, minimum 10° x 8°

Auditorium type overhead projector



Large Group Instruction (Continued)

Technological Facilities and Resources

Checklist

Projection booth

Light control

Television receivers

Electrical outlets

Rear projection booth

Screens

Film, filmstrip and slide projectors

Platform for projectors (folding)

Spotlights

Mikes

Sound system wired to projector stations and to building intercom

Ventilation Regulation: 15 cubic feet of air change per occupant per minute

Ramps

Minimum noise level



Individualized Instruction Media Center

In this area a student is encouraged to work by himself with both print and nonorint materials. Carrels provide solo space to use a variety of portable or stationery equipment such as the items mentioned below.

Technological Facilities and Resources

Checklist

Computer equipment

Microfilm reader/reader printer

Listening systems: Earphones for use with record players and tage recorders

Television monitors

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

Radio receivers

Cassette tape recorders

Mi crophones

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.



lassroom Area (Continued)

Technological Facilities and Resources

Checklist

Matte wall screen installed at eye level, 70" x 70" minimum

Keystone eliminator

Overhead projector, classroom type

Adequate electrical circuits

Movable chairs and desks

Storage cabinets

Chalk boards: Regulation: 18 linear feet, installed at convenient height for pubil age group.

Tack boards: Eye level, cork and felt. Hook and loop Magnetic

Maps and charts Mounting rails installed above chalk boards or tack boards

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.



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



Technological Facilities and Resources

Checklist

Bins, drawers

Counters, work surfaces

Light table

Files
Standard and jumbo
Special for posters
Study prints

Primary typewriter

Stencils

Mimeo-scope

Stencil files

Spirit duplicator

Thermo-copier

Large paper cutter

Three hole punch

Transparency production system

Diazo printer

Transparency viewer

Overhead projector and screen

Opaque projector

Drymount press and tacking iron



Technological Facilities and Resources

Checklist

Drymount tissue

Mounting board

Pressure weight set

Silk screen kit

Mechanical enlarger

Collator

Electric stapler

Drawing board, T-square

Sign making equipment

Mechanical lettering brushes

Poster paint

Poster board

Multilith equipment

Laminator

Air brush

Press apply letters

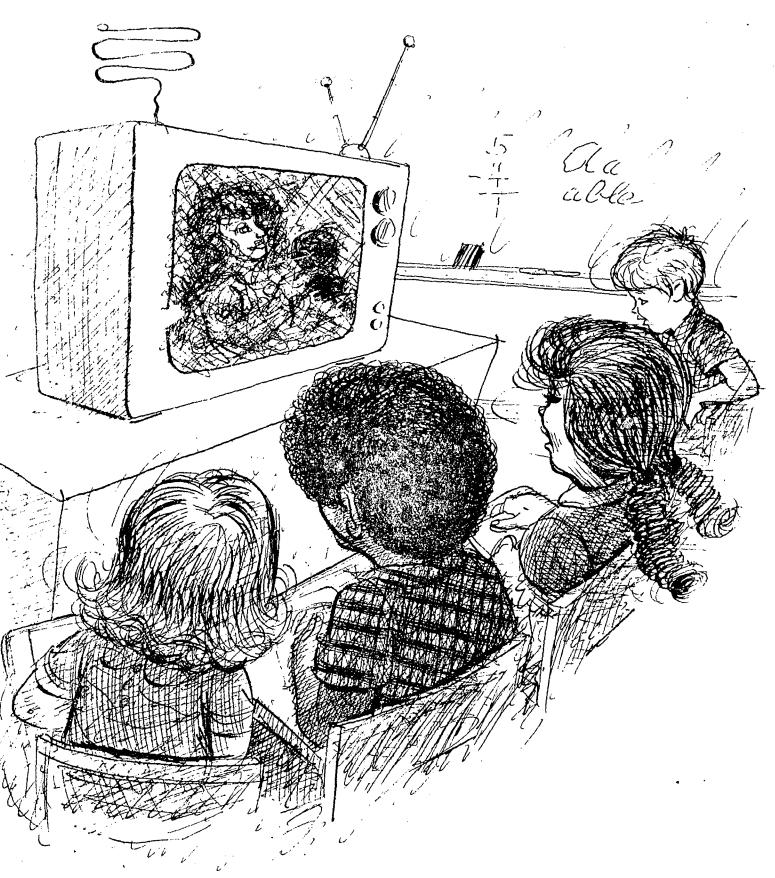
Maste disposal

Ample storage

Fire extinguisher

Media specialist station







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.

Technological Facilities and Resources

Checklist

Cameras with close-up accessories

Camera tripod, elevator type

Variety of film

35mm single lens Reflex camera for taking 2 x 2 slides

16mm motion picture camera

Super 8mm camera

Rapid process Polaroid camera

4 x 5 copy camera and stand

Slide copier

Photoflood lighting equipment

Flash equipment

• Editing equipment including:

Film splicers, 16mm and Super 8mm

Tape splicers, reel-toreel and cassette



Photographic Production Area (Continued)

Technological Facilities and Resources

Checklist

Movieola

Rewind and viewer

Dark room - light lock

Dark room equipment

Sink, running water, temperature regulator

Floor drain

Film developing tanks

Large paper cutter

Story board materials

Enlarger

Drying racks

Timer, thermometer

Chemicals and printing paper

Washer, dryer

Drymount press

Tacking iron

Drymounting tissue

Cardboard mounts

Refrigerater for film storage



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

Mndels

Posters

Photographs

Diagrams

Kits

Replicas

Realia



Special Use Area (Continued)

Technological Facilities and Resources

Checklist

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

Checklist

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.



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



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.



Uial 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 tapoffs
 Receiver-monitor
 Color capability
 Ability to record off the-air



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.

Technological Facilities and Resources

Checklist

Hemispheric room, 40' in diameter

360° projected environment

Carpeting

Ventilation

Entire dome treated as a projection screen

Total light control

Soundproof

Six floor level loudspeakers

Amplification system

Multiple slide projection

Overhead projector

Space-transit planetarium

Computer control console for planetarium



Special Experience Laboratory (Continued)

Technological Facilities and Resources

Checklist

Color organ

Battery of 16mm sound motion picture projectors

Super 8mm loop projectors

Programing control unit for all projectors

Stereo tape and cassette recorders

Inflatable or foam cushions

Color wheel

Record player

Planning area

Large library of 2 x 2 slides

Film library

Tape library

Storage space

Shelving and files

Director's office

Secretarial office

Desks, phones, book cases

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

Checklist

Work benches

Tools

Shelves, cabinets

Professional test instruments

Spare parts, projection bulbs

Storage for equipment awaiting repair

Adequate electrical, power, properly fused

Media station

Desk, chair, files



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