

3.7

PHYSICAL ENVIRONMENT AND FACILITIES

3.7.1 PHYSICAL ENVIRONMENT and FACILITIES
 (Excerpt from Library Learning Walk)

Focus Area	Examples	Wondering/ Observations	Next Steps
Physical environment / facilities	<ul style="list-style-type: none"> • Adequate and flexible space for simultaneous activities (whole group, small groups, individuals) • Library arranged for effective use with designated areas for specific activities (storytelling, research, technology use, etc.) • Location of library in school allows equitable access and fosters collaboration between librarian and teachers 		

3.7.2 PHYSICAL SPACE REQUIREMENTS

Adequate and flexible space for simultaneous activities (whole group, small groups, individuals)

Library Media Centers need:

Space:

- space to separate activities that interfere with each other and for small-group work
- conference rooms, with access to video and data transmission
- staff work areas with locked storage
- space and access to electricity to accommodate and recharge laptop cart

Design for Climate Conducive to Learning:

- open design, few walls
- acoustical treatment on walls, ceilings, and floors
- adjustable lighting in nearly every area

Furniture:

- grade-appropriate furniture

Electricity and Communications Infrastructure:

- many electrical outlets and circuits (walls, floor, and ceiling)
- multiple telephone lines for voice, data, and intercom
- appropriate cable connections to nearly everywhere for video and data transmission
- wireless access to Internet

Considerations:

Careful attention to Americans with Disabilities Act guidelines (e.g., computer desks for students in wheelchairs)

Durability, portability, flexibility, and functionality

Adequate seating to accommodate a minimum of

- One full class for elementary schools
- One and a half full classes for middle schools
- Two and a half full classes for high schools

Computer stations which are in keeping with ergonomic recommendations

Library specific types of furnishings such as the circulation desk, dictionary stands, and shelving

Aesthetics:

- Choose colors, textures and patterns that are conducive to learning.
- Functional design should also be inviting to all users.

Lighting:

- Controls should be located in a convenient, centralized place with dimming light control available in some areas.

Windows

- Should not hinder space utilization.
- Should not admit distracting light.
- Should be able to be opened without step stools or gadgets.
- Should have usable shades.

Climate Control

- Adequate heating and air conditioning.
- Air circulation.

Safety and Supervision:

- Staff should have unobstructed view of patron areas.
- Limit number of entrances and exits.
- Have appropriate locks for windows, doors and storage areas.
- Furniture should be placed to allow free, easy access.
- Avoid throw rugs and slippery, waxed floors.
- Avoid unnecessary steps or changes in floor levels.
- Ensure compliance with local codes.

In terms of student use, the needs differ slightly depending on the level.

Elementary

- Instructional area for whole class.
- Space around computers for 2-3 students to work together.
- Story area with pillows, flexible seating.
- Performance area.
- Display areas for books, interesting objects.

Middle School

- Instructional area for whole class.
- Computer area.
- Comfortable seating area for independent reading.
- Display areas for books, student projects.
- Tables for small groups.

High School

- Instructional areas for whole classes.
- Computer lab attached to library; multiple computers in library.
- Comfortable seating area for independent reading.
- Display areas for books, student projects, community resources, career and college information.
- Tables for small groups.
- Production area.

Campus of Small Learning Communities

- Instructional areas for whole classes.
- Computer lab attached to library; multiple computers in library.
- Comfortable seating area for independent reading.
- Display areas for books, student projects, community resources, career and college information.
- Tables for small groups.
- Production area.
- Designated areas for students from each small learning community to work on projects, have theme books on display (e.g., conference rooms)

3.7.3 ESSENTIAL AREAS FOR ALL LIBRARY MEDIA CENTER FACILITIES

Library Media Center Space	Functions/Activities/Special Considerations	Equipment // Furnishings
Circulation	Area where media and materials are checked in and out. Area for returns (book drop). Should include information desk. Usually located near the library media center's main entrance.	<ul style="list-style-type: none"> * network access * electrical outlets * charge desk and staff work area * public access catalogs * circulation computer * shelving for reserves and special collections * book carts/trucks * security system (optional at elementary level) * display * telephone/intercom * book drop * copier
General Reading, Browsing, Listening and Viewing	Central room of library media center for student and faculty use. Allows adequate space for shelves (wall and free standing). Visible supervision by library personnel is a consideration. Creative use of shelving and furniture may be used to define areas in the library which accommodate a variety of functions and different sized groups. The areas described below need not be discrete areas, but may overlap or flow into one another.	<ul style="list-style-type: none"> * network access * electrical outlets * adequate lighting (natural and artificial) * acoustical treatment * variety of seating (such as carrels, lounge chairs, standard tables and chairs) for reading, quiet study, viewing, listening and research for individuals and groups of different sizes * computer stations for information retrieval using current and emerging technologies * individual audiovisual equipment with headphones * clock * display
	Circulating Collection: Core collection (fiction and non-fiction)	<ul style="list-style-type: none"> * network access * electrical outlets * shelves (adjustable and movable, with consideration given to height of students in the building, librarian line of sight, and necessary accommodations for ADA regulations) * public access catalog(s)
	Reference and Electronic Information: Non-circulating materials used for research (e.g., encyclopedias, dictionaries, gazetteers,	<ul style="list-style-type: none"> * network access * electrical outlets * shelves (adjustable) * atlas and dictionary stands * computer stations for information retrieval using

	atlases) and to include Internet and telecommunications access, and emerging technologies	current and emerging technologies * storage space * printers
	Periodicals: Display area for print and on-line issues of serial publications (e.g., magazines, newspapers, journals).	* electrical outlets * display rack for current periodicals * newspaper rack
	Audiovisual Software: Commercially and locally produced software for student and teacher use (e.g., videotapes, DVDs, CD-ROMs, CDs, audio cassettes)	* adjustable shelving (open and closed) * storage cabinets
Group Instruction Room	Area for direct instruction, reading aloud, storytelling, book talks, puppet shows, video conferencing, meeting space	* network access * electrical outlets * lightening and darkening capabilities * carpeted risers or stairs * flat area with chairs and tables * Smart Board * bulletin board * flannel board * podium or lectern * provision for audio / video recording * projection capabilities for computer images, VCR/DVD, overhead and other resources * projection screen * computer with appropriate interface * television monitor (27" minimum)
Story Area or Independent Reading Area	Area for reading stories in elementary schools and for comfortable, independent reading for middle and high school students	<u>Elementary:</u> * cushions for sitting on floor * story chair for librarian <u>Secondary:</u> * comfortable seating * paperback racks, book displays
General Storage	Storage area for back issues of periodicals, media and seldom used materials	* adjustable shelving * cabinets
Workroom	Technical services area for minor repairs, materials processing, sorting, cataloging; may also include area for equipment storage and distribution and/or media production.	*adjustable shelving – deep, for storage of audiovisual equipment *cabinets for storage of supplies *work counters *sink *production equipment

Office for Media Center Administration	Room for administrative tasks, storage of administrative records and files, meetings and conferences which allow open view of the media center.	*desk, filing cabinets *computer with Internet access, printer *table for consultation and collaborative planning with teachers *shelving for professional collection
Equipment Room	Secure area accessible to hallway, preferably adjacent to workroom, for storage, distribution, maintenance, and repair of hardware and software	*electrical outlets *area for previewing videos

ADDITIONAL AREAS TO BE CONSIDERED

Library Media Center Space	Functions/Activities/Special Considerations	Equipment // Furnishings
Listening and Viewing Area	Area where students can listen to books on tape and view videos and DVDs for class assignments.	* electrical outlets * soundproofing * earphones, tape players, CD players, television monitors, DVD players
Production Center	Area for students to create written, visual, audio and video products to demonstrate their learning.	* production equipment and supplies * access to copy machine
Conference Rooms	Small rooms for small groups to work together – students, teachers, small learning community groups, clubs	* table and chairs * bookshelves
Reception Area	Welcoming, open area near the entrance to the library that invites everyone to come in and sets a comfortable climate conducive to learning	* comfortable seating * display boards

3.7.4 FURNITURE AND SUPPLIES

FURNITURE

Requirements

Tables

Chairs

Shelving for books, AV, software, equipment, laptop carts, magazines, paperbacks

Calculating Shelving Requirements

The following information is presented with permission of the authors and is taken from *Planning School Library Media Center Facilities for New Hampshire and Vermont* by Susan C. Snider and Leda Schubert, published in 1989 by the States of New Hampshire and Vermont's Departments of Education.

Shelving

If possible, shelving should be movable rather than built-in. It is available in wood and in metal, and combinations of wood and metal. All shelving must have a full back and be fully adjustable. In determining type and placement of shelving consider the following:

- Freestanding double-faced stacks placed in rows of 4-6 sections are the most preferred stack arrangement.
- Single-faced units placed around outside wall are recommended only in very small library media centers.
- Counter height shelving may be used for picture books, reference books and to create special interest areas.
- Special shelving will be needed for periodicals, audiovisual software, displays and equipment.
- Shelves should not be more than two thirds full. It is recommended that the top and bottom shelves be initially reserved for collection expansion or used for display
- To insure continuity, purchase enough shelving to meet future needs.
- Backstops should be added to open shelving to avoid books sliding to the shelf behind.
- Shelves that are longer than 36" may warp.
- Shelves should be able to accommodate a variety of formats, including videos, audiotapes, CDs, DVDs, and equipment.

Dimensions:

To calculate the linear feet of shelving needed use the following:

- Picture/thin: 20 books per foot/ 60 books per shelf length
- Standard size: 10 books per foot/ 30 books per shelf length
- Reference books: 6 books per foot/ 18 books per shelf length

- Periodicals: 1 per foot for display purposes

To calculate how many linear feet of shelving are required for a collection, take the total number of volumes to be housed and divide by the number of books per foot. For example, a primary collection of 5,000 volumes consisting of picture and thin books would require a total of 250 linear feet of shelving (5,000/20). Remember -- shelves should only be two-thirds full. To allow for this, multiply the number of linear feet required times 1.33.

Example: $250 \times 1.33 = 332.5$, or 333 linear feet of shelving.

Use the following chart to determine how many linear feet there are per standard size unit of shelving:

Number of Shelves per unit	Linear Feet per Single Faced Unit	Linear Feet per Double-Faced Unit
3	9	18
4	12	24
5	15	30
6	18	36
7	21	42

When arranging spaces it is necessary to know how many volumes can be housed per unit. To determine how many volumes per unit use the following chart.

Number of shelves per unit	Type of Book	Single-Faced	Double-Faced
3	picture/thin	180	360
	standard size	90	180
	reference	54	108
4	picture/thin	240	480
	standard size	120	240
	reference	60	120
5	picture/thin	300	600
	standard size	150	300
	reference	90	180
6	picture/thin	360	720
	standard size	180	360
	reference	108	216

7	standard size	210	420
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When determining depth of shelving, consider the following:

- Use 10-inch shelf depth for standard size books.
- Use 12-inch depth for picture books, reference books, and periodical and audiovisual storage.
- Equipment storage will require 18-24-inch shelf depth.

Adapted from **Maine School Library Facilities Handbook**
Maine Association of School Libraries Facilities Committee, copyright 1999

SECURITY SYSTEM

Many high school libraries install security systems to prevent loss of books. All security systems involve the installation of a device in the books as well as a checkout machine to activate and de-activate the device and detection gates for each entrance and exit. After the initial expense of purchasing the security system and installing the device in every book, the system can be maintained by ordering the security device to be installed as a part of the purchasing/processing from a vendor.

SUPPLIES

Supplies must be kept in stock to complete the processing of materials, accommodate student use of computers and printers, and keep the library operating smoothly. The following are essential supplies:

- Book repair tape
- Classification and genre labels (tape, dots, labels)
- Call number labels
- Writable CDs
- Toner for laser printers
- Paper for printer, copy machine
- Display items (background paper, colored paper, display racks)
- Bookends
- Signage

VENDORS

Library Furniture and Supply Vendors

The Division of Contracts and Purchasing maintains a current list of furniture and supply vendors with a DOE contract.

Vendor catalogs may be obtained by calling the companies directly. Consult your school secretary about preparing furniture and supply orders.

3.7.5 LAYOUT

Library arranged for effective use with designated areas for specific activities (storytelling, research, technology use, etc.)

Space/Layout

Reading space should be based on 10-15% of # of students

Computers

Story Corner/Independent Reading

Circulation

Library Office

Reference

Storage

Other Considerations

Line of Sight

AV/Computer Usage

Square Footage Chart

Enrollment	STUDENT USABLE SPACE			NON-STUDENT SPACE		TOTAL	
	Elementary	Middle/Jr. High	Secondary	All levels	Elementary	Middle/Jr. High	Secondary
250 or less	1846	2106	2600	950	2796	3056	3550
300	1988	2268	2800	950	2938	3218	3750
350	2160	2490	3000	950	3110	3440	3950
400	2304	2656	3200	950	3254	3606	4150
450	2482	2856	3400	950	3432	3806	4350
500	2665	3066	3650	1050	3715	4116	4700
550	2811	3234	3850	1050	3861	4284	4900
600	2957	3402	4050	1050	4007	4452	5100
650	3103	3570	4250	1050	4153	4620	5300
700	3249	3783	4450	1050	4299	4833	5500
750	3468	4038	4750	1100	4568	5138	5850
800	3663	4208	4950	1100	4763	5308	6050
850	3811	4378	5150	1100	4911	5478	6250
900	3959	4610	5350	1100	5059	5710	6450
950	4107	4773	5550	1100	5207	5873	6650

3.7.6 SIGNAGE, DISPLAYS AND DÉCOR

SIGNAGE

The mission of school libraries is to build empowered, independent learners. Clear and attractive signage will enable students to use the library both efficiently and effectively.

Signs may be used to designate:

- Locations and Directions (e.g., areas of the collection, areas of service);
- Information (e.g., chart of Dewey Decimal System);
- Research processes (e.g., graphic of inquiry process);
- Codes of conduct (e.g., expected behaviors); and
- Current awareness (e.g., upcoming special programs, new books).

General Guidelines

Color - Contrast is the important aspect in choosing colors for background and lettering. Most libraries prefer either a white background with black lettering or a dark background with light lettering. School libraries may use brightly colored signs to add visual interest in the library, but signage should never be obtrusive. The signage colors should be consistent throughout the library.

Graphics - Elementary libraries should consider adding visual pictures or symbols to the words on the signs for easy recognition by all students.

Size - The signs for locations and directions should be large and easily visible from a distance. The size of other types of signs should depend on their location and use. The relative size of signs communicates a philosophy of service. If the signs designating codes of conduct are larger than the signs about the inquiry process or Dewey Decimal System, that difference in size subtly tells students and teachers that rules are more important than student investigation.

Font - The most readable and commonly used font in library signage is upper and lower case Helvetica Medium.

Materials - Signs can be printed or engraved on every type of surface from paper to plastic to wood. If money can be raised, durable signs should be purchased from library supply vendors. You can also make your own computer-generated or handmade signs that you laminate for durability. You may use Velcro to secure signs to bookcases so they may be moved easily.

Attention to Students with Disabilities

To accommodate students with visual disabilities, signage should have high contrast, a non-glare surface, and raised lettering or Braille on shelf labels.

To accommodate students in wheelchairs, signage should be placed at a readable height.

Signage in Spanish or Other Languages

If your school has a high Spanish-speaking or other-language population, you may want to consider providing some signage in that language. Web Junction provides a Web site that will be helpful for Spanish-language signage – *Library Signage: Tips and Resources that You Can Use to Create Spanish Language Signage for Your Library* at: <http://webjunction.org/do/Navigation?category=10565>.

DISPLAYS

Displays can be a very effective tool for building a climate conducive to learning in the library. Many of the merchandising techniques used by bookstores can be equally successful in the library. Librarians can use displays to promote, provoke, support and build a community of learning.

The most common use of library displays is to promote new materials or special library programs (“Vote for YOUR favorite mystery.”). These promotional displays can provide a cornerstone for reading motivation programs, library contests, student book clubs, after-school programs, author visits, or themed activities like a poetry slam.

Library displays can also provoke students to engage in personal exploration and inquiry. Featuring books on little-known but interesting topics, on areas of high student interest, on current issues, and on curriculum topics may induce students to investigate ideas they would not have thought about otherwise.

Library displays can support students and teachers by making the resources for curriculum units more accessible. A combination of books and real objects may bring a topic to life for students (e.g., samples of rocks, barbed wire, telescope replica).

Finally, library displays can reflect and build a community of learning. Student work should be displayed whenever possible and changed frequently. The heritage and background of students and parents in the school community should be honored by special displays.

LOCATION OF DISPLAYS:

Be creative in finding places to mount displays. Many librarians use the top shelf of wall units for displaying interesting objects and face-out books. The tops of low bookshelves can be used for showing student projects and special book displays. Librarians have also used window sills, tables, slotted walls, and freestanding display units.

DISPLAY TIPS:

- Make sure that each display has visual appeal (professional-looking labels, books displayed face out, colorful background or tablecloth).
- Provide variety in your displays by using tiered book easels, crates, and real objects combined with books.
- Try to build in some interactivity to your display (letting students contribute reviews, vote on choices, add their own comments)
- Change the displays regularly.
- Let students and teachers suggest topics for displays.

DÉCOR

To provide a warm and welcoming environment, consider the following tips:

- A color theme that is consistent and runs throughout the library
- Bright accent pieces that reflect the community's culture
- Live or artificial plants
- Framed reprints of fine art
- Framed library-related posters
- Donated student artwork
- Age-appropriate decorative items

