Form Follows Function:
Redesigning the School Library Media Center

by *Karen Perry*

New schools are being built and older schools renovated at an amazing pace throughout the United States. According to the *Cincinnati Enquirer*, for example, over $10 billion has been spent on school construction projects every year since the 1991-92 school year.[1] As Michael Resnick, executive director of the National School Boards Association, states, this trend will continue for the foreseeable future: "We're watching a very significant increase in the number of children who are coming to school and will be coming to school for quite a few years."[2] As school districts across the country focus on how to build and/or renovate buildings, one of the main areas tbeing emphasized is school library media centers (SLMCs) and the technologies that will be included in them. Some of the things that must be considered are electronic resources, availability of electricity, furniture, lighting, and acoustics.

The change in media formats to CD-ROM and electronic formats has

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been the most dynamic force in redesigning the look and shape of media centers in the '90s. Space must be found for computers and computer furniture in areas that are often already cramped and crowded. Logically new cable and telephone connections, servers and wiring closets, conduits and network drops often are placed in the media center first, the one location within the school that is centrally located and accessible to the entire student population. Renovation projects that give additional space and upgraded electrical status to media centers are proposed to school boards who must stretch scarce construction dollars. Many proposed bond referendums include media center renovations or new media facilities to be added to older buildings as well as new schools. The transformation of the SLMC is dramatic and global as the new forms for school library media center design follow the functions these facilities are now being asked to accommodate.

In the past several years, school library media center reference collections, in particular, have moved toward a heavy dependence on CD-ROM and electronic sources.[3] The computers and table-top space required have been a stumbling block for older facilities attempting to upgrade while working with the same floor plan. In addition, there is the expectation that *at least* the school library media center will be up-to-date in a school, even when classrooms cannot support

technology. "In no institution does the expectation of electronic miracles make better sense than in libraries."[4] The parents, faculty, and students using a school library media center demand instant dispensation of information. Facility designers and construction engineers must take into account the implications of this mindset when designing traffic patterns, placement of electronics, sound buffering, and providing for visual supervision.

Not only do schools have to plan for the electric power to run computers; they also must make provisions for the cabling that will network computers into building-level (local-area) and district-wide (wide-area) networks as well. Cabling standards continue to change as rapidly as the machines they connect; indeed, building specifications for cabling must be as flexible and as forward-thinking as possible to allow for future technology. Ease of replacement for cabling should always be a major consideration.

Soundproofing and acoustics have become more of a concern with the addition of multimedia computer stations to SLMCs. Electronics call for flexibility in furnishings and sound management. As Nicholas Van Hoffman comments, "You can't whisper shush to a computer keyboard's clicking."[5] Carpeting, choices in types and locations of printers, use of low shelving as dividers for areas, glass walls for offices, and varying ceiling treatments are among the ideas most commonly used to add flexibility and to cope with both sound management and supervision of heavily used areas.

Wiring from numerous pieces of

electronic equipment in SLMCs is hazardous but seems to be the one item that is not standardly controlled. Planners will hide wires inside table legs (wet legs) or run conduit underneath flooring and use grommets in table tops and countertops to feed dangling wires through to floor or wall electrical outlets. Another popular wire management device is the wire tray on the back edge of computer furniture. Mobility and flexibility of furniture arrangement in SLMCs are higher priorities than elaborate wire management.

Furniture for new facilities is often custom designed by building planners. Bid specifications for flexible pieces that can serve any style of computer or control wires, and service the age of the population are being drawn up together by experienced media specialists and furniture designers. Helen Tugwell, Director of Media Services for Guilford County Schools, points out that "When choosing a new circulation desk, I am encouraging media specialists to think smaller and more compact. They don't need the barricade of old."[6] Sue Spencer, Director of Media and Technology for the Randolph County Schools adds, "Although we don't always have control over square footage and placement of the facility within the building, the planning for arrangement of areas and furniture should be done by experienced media specialists. Architects can't know all there is to know."[7]

Lighting adjustment for technology in the school library media center is also important. Areas that can be partially darkened for computer display panels or video presentations, but that allow continued use of the other portions of the facility foster full utilization of the space. Visual supervision with lights down is critical for school library media specialists who are responsible for safety and instruction. Many new schools feature as a standard item multiple control switches for lights with infinitely adjustable dimming switches.

New school library media facilities are being built at a record pace in fast-growing areas of North Carolina. Charlotte-Mecklenburg County Schools, for example , opens two new SLMCs each year. Winston-Salem/Forsyth and Guilford County Schools are likewise opening new schools with state-of-the-art SLMCs. Wake County built four new schools last year and plans to open three more in August 1997. Reusing several prototype designs, the Wake County Schools media facilities have many features that were not included in the quiet reference and study areas of the past. Whole new areas for multimedia usage and production as well as Internet access are included so that SLMCs can function efficiently with today's and tomorrow's technology.

A Case Study

To aid in implementing their construction bond money effectively, Wake County Schools developed a standard for media center design and renovation for elementary, middle, and high schools. These standards reflect the trends, objectives, and activities of the school library media program. Designed by a committee with reference to state and national guidelines and recommendations, these county standards are updated as trends and needs change at the local level.

The high school SLMC standard for Wake County specifies a reading-listening-viewing area of 7,150 square feet; an audiovisual equipment room, multimedia distribution center, and teacher's curriculum lab — all with areas of 300 square feet; a transition computer lab of 800 square feet; a media center office and workroom of 450 square feet; and a private toilet of 45 square feet. "Our goal was five square feet per student but the cost of building was so high in our area, we had to cut back," said Jane Parker, Wake County's Director of Media Services.[8] Based on a population of
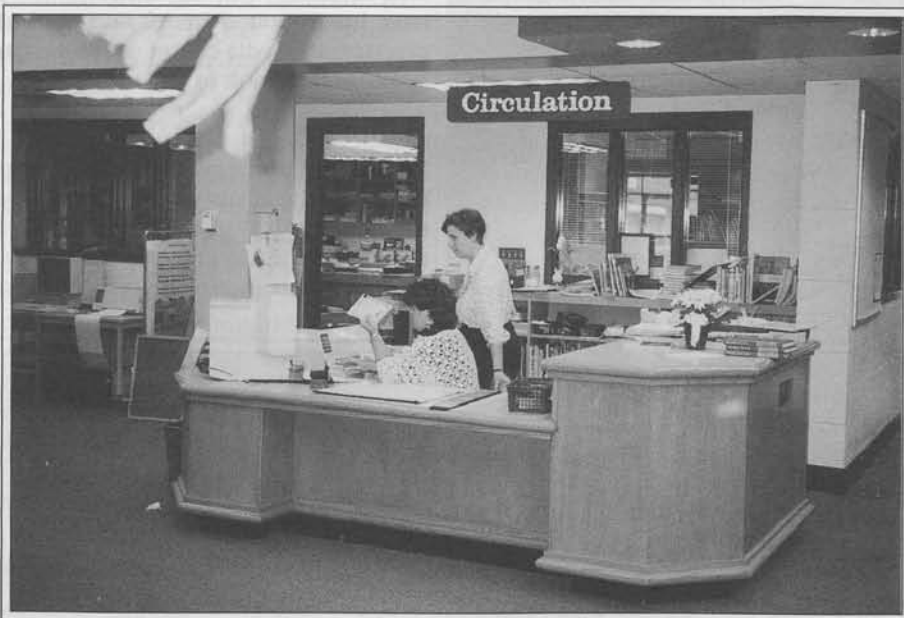
Top: Flexibility is a key element in designing today's school library media center. Mobile shelving, in the media center at Pilot Elementary School in the Guilford County School System, is an example of how flexibility is being achieved. (Photo: Karen Perry)

Bottom: The compact, custom-designed circulation desk at the Lincoln Heights Elementary School in Raleigh is multi-leveled to accommodate a variety of functions and does not present a barrier. Architect: Ramsay, Burgin, Smith Architects, Inc. (Raleigh and Salisbury). Photo: John Ramsay, Jr.

1,600 students, this standard allots 4.46 square feet per student.

Some of the areas in these standards need explanation in terms of the traditional floor plan for media centers. The multimedia distribution area is a new label for a space controlling a conglomeration of services. This room contains the master antenna control for in-house television systems, video retrieval control, storage of videocassettes and laser discs owned by the school, CD-ROM computer servers, and sometimes other computer control equipment. Existing outside the media center is a separate wiring closet containing the hubs, routers, and main file servers for the school computer network. The transition computer lab listed in the standards is adjacent to the media center and designed for research and cooperative group work, but also has exits to the hall for traffic control.

Lessons learned in Wake County can help others with more modest building programs. Lighting needs will require separate circuits for partial room darkening, while acoustical treatments will vary for different types of ceilings. Sources of natural light are needed for students to feel comfortable. And for media specialists working in these new environments, at-a-glance supervision at all times is extremely important.

Jane Parker commented that through experience "We have learned that the window in the office door must begin no more than 42 inches from the floor so that a seated person can see out into the room."[9]

Areas for cooperative group work have become more desirable than

The workroom in the media center at the Riverside High School, Durham County Schools, incorporates privacy with the ability to supervise through counter-height windows. Architect: DTW Architects and Planners Ltd. (Durham). Photo: Karen Perry

study carrels as educational reforms encourage teachers to use varied ways to motivate and instruct students. The SLMC is the most common place where student teams are taught to break larger research tasks into smaller parts, gather information, and come back together to share.[10] In Wake County's standards, there are specific large-table areas for cooperative group work, including at least one terminal for Internet and network access to information resources.

The planning and foresight of administrators in Wake County have helped to make the most efficient use of the construction dollar in their school library media centers. They have incorporated trends and current practices in media center use to design facilities that look to the future.

Summary

Renovation and new library buildings bring out the zealot who believes that the book is "a 19th century relic" and that "we'll soon get all of our information from a computer screen."[11] Even

as networks extend to classrooms and homes, the need for navigators, interpreters, and instructors makes the job of school library media specialists and the facilities in which they work even more important.

"The media center is still the hub — the heart of the whole process in the search for information."[12] The form of the facility may change as the function shifts from bookkeeping to electronic navigation, but the essential role of the school library media center remains the same — to provide locale for resources to be shared within a school.

References
[1] Kathleen Hillenmeyer, "School Growth Building for the Future," *Cincinnati Enquirer* (August 7, 1996), A1.

[2] *Ibid.*

[3] Kim Carter, "Images of Information in a 21st Century High School," *School Library Journal* 40 (February 1994): 28.

[4] Nicholas Van Hoffman, "Checking Out Electronic Libraries: Repackaging Information for the Next Millennium," *Architectural Digest* 53 (October 1996): 130.

[5] *Ibid.*, 134.

[6] Helen Tugwell, Comments on GASL electronic listserv on Guilford County Schools server 10 April 1997.

[7] Sue Spencer, interview, April 15, 1997.

[8] Jane Parker, interview, April 15, 1997.

[9] *Ibid.*

[10] Cindy Darling Codell, "Brick by Brick: Building a School Library from the Ground Up," *School Library Journal* 41 (February 1997): 22.

[11] "Defend the Library as a Citadel of Books," [Editorial] Greensboro *News and Record* (April 20, 1997), F2, column 1.

[12] Spencer.