Quality in School Library Media Programs: Focus on Learning

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ABSTRACT

THE QUALITY OF SCHOOL LIBRARY MEDIA PROGRAMS is inextricably linked to the quality of education offered in the schools. In a school-reform effort to enhance that quality, schools have evolved to a focus on learning. Following a similar pattern, school library media programs have changed in focus from collections to programs to instruction and, finally, to learning. Research about learning indicates that it must be constructed by the learner and facilitated by a teacher in a caring environment. School library media specialists have pivotal roles in creating a culture in the schools that is learner centered. If that culture is created, validation of the quality of school library media programs will occur in the hearts and minds of children as they discover the joys of learning.

INTRODUCTION

Libraries are educational institutions; their quality may be judged according to their fulfillment of that role. But school libraries, perhaps unlike other types of libraries, cannot be judged independently from the schools in which they exist because they are inextricably linked. The success of school libraries depends on the quality of education offered in the school. The definition of "quality education" has been undergoing challenge and revision since the publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983), which sounded a national alarm about the mediocrity in the nation's schools. The immediate (and continuing) reaction of many policymakers has been to demand

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more in order to boost the quality of the educational system: more time in school, more core subjects, more testing of students, more national curricular standards (Wood, 1992, p. xx).

Many education and management experts have rebutted this policy trend, arguing that what is needed is not *more* low-quality work but a renewed emphasis on high-quality education. One such expert, William Glasser (1992), has recognized the applicability and value for the schools of the emphasis on quality being adopted by the nation's businesses: "In today's competitive world, only organizations whose products and services are high quality thrive, and our schools are far from thriving" (p. 2). Glasser has noted the power of the emphasis on quality that has emerged from the work of W. Edwards Deming, whose ideas transformed Japanese industry and are now being adopted by American business.

Certainly the first step in raising the quality of education is defining the purpose of education. Education cannot be limited to academic pursuits. It must focus on teaching students how to learn, linking them to the community, and showing them that they can make a difference (Wood, 1992, p. 59). Wood has summarized the power of schools to transform lives: "Elementary school can be a place where, in addition to and beyond the mere memorization of facts, children learn to think, to cooperate, and to be actively engaged. It is the place where we can lay the foundation upon which democracy is built" (p. 9). Educators have realized that a focus on learning (as it is broadly defined above) should provide the basis for educational reform; a focus on learning will lead to high-quality schools and student success. Glasser (1992) has summed up this focus in a powerful statement: "Education is the process through which we discover that learning adds quality to our lives" (p. 174).

The organization of schools has not always been built around learning. When public schools first became a national system, they were modeled after factories. Industry had learned how to mass produce items efficiently and effectively; surely children could be most efficiently educated using the same paradigm. Although that model has proven to be flawed for organizing effective education, it has been difficult to replace. Fortunately, the school reform movement has been building in momentum over the past fifteen years. School leaders are again looking at business (as businesses are turning to models based on quality, not mass production); the leaders are blending those ideas about quality with what they know about how children learn and what the primary focus of our educational system should be.

School libraries have evolved in philosophy much as the schools themselves have changed, from a concentration on the "things" of schools (buildings, textbooks, schedules, library collections) that make the system manageable and efficient to an emphasis on individual needs of students and learning supported by caring school communities. The public

schools have been slowly evolving since they became widespread early in the twentieth century; school libraries have changed much more quickly because they essentially did not even exist during the first half of the century.

In 1954, only 37 percent of public schools even had libraries, and there were one-third less school librarians than libraries ("In Service to Youth," 1994, p. 26). In 1991, the number of public schools with library media centers had risen to 96 percent, although 17.9 percent of those had no librarian (Ingersoll, 1994, pp. 14, 21). The well-established public library probably provided a model initially, but today's school library media programs have evolved more in concert with educational reform principles than with changes in public library service. A look at the major developments in school libraries since 1950 reveals the evolution of a learner-centered philosophy that will lead schools into a model of quality education for all students.

Evolution of a Vision

The overall focus of school library programs from 1950 to the present can be characterized in four stages: a concentration on *collections* in the early and mid-1950s; a focus on the library *program* to make the collections useful, which emerged from national standards in 1960 and 1969; a major emphasis on *instruction* as revealed by the 1975 and 1988 standards; and finally the current shift to a focus on *learning* and a complete blending of process and content instruction.

Collection

By the early 1950s, leaders of the field were trying to define the role of the school librarian. A 1953 issue of *Library Trends* on school librarianship included an article by James (1953) that outlined five tasks for librarians: (1) provision of books and audiovisual materials to students and faculty; (2) assistance with curriculum development; (3) class visitations; (4) consultation with departmental groups; and (5) preparation of bibliographies for course units (pp. 316-20).

Despite the illusion of involvement with curriculum, librarians at this time probably maintained the somewhat passive role of assisting students and teachers only when asked. Much of the professional emphasis was placed on building centralized collections, many of which had their origins in pooled classroom collections. The Sputnik launch in 1957 resulted in the release of some federal funding for school libraries with the idea of building collections to turn libraries into resource centers.

Along with the emphasis on collections, there was also a slight movement toward involvement in the school instructional program during the 1950s. The involvement was often characterized in terms of collection use—the librarian might consult with a teacher on the most appropriate

sources for particular units; the librarian might teach students about relevant sources. In 1956, the American Association of School Librarians (AASL) issued a statement about the role of the school library ("a center for print and nonprint") and school librarians ("coordinators, consultants, and supervisors of instructional materials") that again revealed the emphasis on collection use (Craver, 1988, p. 48).

Program

The 1960s were turbulent for schools just as they were for society as a whole. New subjects were added to the curriculum (humanities, fine arts, communication), and new teaching strategies were tried (team teaching, tracking, block scheduling) (Craver, 1988, p. 49). In 1960, AASL(1960) issued national standards for school libraries that emphasized the teaching role of librarians, but the teaching was materials-based. Librarians were to teach students how to use library materials in relation to classroom units. School libraries were starting to develop programs that would make their collections well used.

The 1969 standards, issued jointly by AASL and the Department of Audiovisual Instruction of the National Education Association, placed greater emphasis on curricular and instructional planning with teachers. These standards recognized that the resources and services that formed the library program included use of audiovisual materials: the school library became the media center; the school librarian was renamed the school library media specialist. Although the standards did not recommend changing the nature of library instruction beyond helping students use the media center, the standards did lead the way in establishing with administrators and teachers that instruction and curriculum were primary role responsibilities of school library media specialists, and that nonprint had joined print to make the library a different place with expanded opportunities and resources (AASL and Department of Audiovisual Instruction, 1969).

Instruction

In reaction to the feeling that the 1969 standards did not adequately emphasize the instructional role of the library media specialist, AASL and the Association for Educational Communications and Technology (AECT) jointly issued new standards in 1975 called *Media Programs: District and School* (AASL & Association of Educational Communications and Technology, 1975). These standards advocated a more active instructional role, with the school library media specialist initiating and participating in curriculum development as well as consulting with teachers about the best resources for instructional units. These standards represented a shift in the instructional role from instruction about the library and use of its resources (whether integrated with a unit or not) to involvement in the larger teaching world of the school through instructional and curricular development.

During the 1970s and early 1980s, the literature about instructional development in school libraries was largely written by professionals in academic settings who prescribed levels and types of involvement (Loertscher, 1982, pp. 417-21; Turner & Naumer, 1983, pp. 29-37). They were trying to provide models for school library media specialists who were being called upon to make a major shift in their priorities, from concentrating on their own programs to helping to develop the curriculum of the entire school. But the building-level librarians were faced with overwhelming obstacles in trying to make that shift: no additional support staff was made available; library media specialists were still trying to maintain their independent curriculum of library skills instruction; most elementary libraries were fully scheduled with back-to-back classes; and few librarians had ever received training in either instructional or curricular development. School library media specialists were in an extremely stressful situation. Some got mad but tried to discover how to make instructional development work (Stripling, 1984, pp. 290-96). Others simply gave up and resorted to their secure role in a library program independent from what was going on in the classrooms.

This turmoil over the responsibilities and focus of the school library media specialist caused an increasing differentiation in library programs that has continued to this day. In the same school district today, all across the country, one library program can be actively integrated with the curriculum and instruction of a school while another can be tightly scheduled with classes that serve as teacher planning time in which the librarian teaches library skills in isolation and predetermined order.

Arising from this professional chaos were new national guidelines (not standards) written by AASL and AECT entitled *Information Power: Guidelines for School Library Media Programs* (AASL & AECT, 1988). These guidelines tried to define more clearly the instructional role of the library media specialist, advocating a collaborative partnership among teachers, principals, and library media specialists to design a library program that matches the instructional needs of each school.

In this publication, three roles were specified for the school library media specialist: teacher, instructional consultant, and information specialist. As an information specialist, the library media specialist provides both physical and intellectual access to library resources. This role has dominated school libraries since their earliest days. In the teacher role, the school library media specialist broadens the scope of the traditional retrieval and use-of-information curriculum to include skills of thinking; critical reading, viewing and listening; communication; and lifelong learning.

The instructional consultant role takes the library media specialist beyond the library program to integrating the information curriculum throughout the instructional program by collaborating on instructional units and consulting in the development of curriculum. This role

description reflects a professional movement to determine the parameters of a library program based on whole-school needs rather than the needs established for the library program itself. But the guidelines seem to retreat from too radical a stance about the importance of the library media specialist involvement in school curriculum—the librarian is merely a "consultant," not an initiator or co-planner.

Learning

While *Information Power* was being bandied about by library media specialists, other educators were wrestling with school reform issues. A groundswell movement had arisen in our country to transform schools according to principles of effective schools. Sizer's (1985) Coalition of Essential Schools listed nine common principles which seemed to be present in effective schools across the country (pp. 225-27). The essential elements of these nine common principles can be encompassed in four aspects of schools—teaching, learning, atmosphere, and structure. The essential features have been categorized and summarized in Figure 1.

When library media specialists began investigating school reform principles, they discovered that the reform ideas coincided with their own evolving vision of a school library program. Library media specialists were trying:

- to develop in-depth learning experiences in the library on subjects that were personally significant to the learners;
- to emphasize thinking and inquiry skills;
- to foster a community of learners through cooperative learning and group interactions;
- to provide an atmosphere that allowed each student to feel safe and to experience success;
- to help the students complete authentic assessment products;
- to make students responsible for their own learning; and
- to teach through coaching.

As the school reform movement was gaining momentum, the DeWitt Wallace- Reader's Digest Fund decided to support school change by helping elementary and middle schools transform libraries into centers of learning for the school. This Library Power project, begun in the New York City schools in the mid-1980s, has now expanded to twenty communities across the country. Although each community builds its own program according to local needs, the entire project remains focused on building active and engaged communities of learners. Data are now being collected in the various Library Power sites to assess the effectiveness of using the libraries as centers of inquiry in order to transform teaching and learning in the schools. Early indications are that the Library Power project has had measurable and demonstrable impact on both the quality of school library programs and the quality of learning exhibited in the schools.

Teaching	Learning	Atmosphere	Structure
• Help students use minds well • Less is more • Needs of all students; high expectations for all students • Personalized • Generalist first • Teaching through coaching • Address academic, social, and emotional development	• Student as worker (learner) • Community of learners • Ongoing performance assessment • Demonstrations of learning (exhibitions) • Personalized • Meaning constructed from experience	• Nonthreatening • Trusting • Decent • Learner-centered • Parents essential part of school community • Respect and understanding for students	• Collaborative planning • Competitive salaries • Focused on essential tasks

Figure 1. Essential features of Theodore Sizer's Nine Common Principles of Effective Schools

Learning thus became the heart of the school reform movement and the Library Power project. In these reform efforts, school library media specialists had finally found the key to true integration into the instructional life of the school—i.e., centering the library on learning. In the last forty-five years, school library media programs have changed focus from collections to program to instruction and finally to learning. The focus on learning is new but potentially more powerful than any other school library change. There are profound implications for the services, structure, and operations of the library, as well as for the roles of the school library media specialist. The measure of quality of school library media programs has now become how well they establish and extend a culture of learning in the school.

Learning

If the model of a high-quality school library media program is founded on learning, it would be helpful to define learning in terms of current research findings. Much of this research has been labeled "constructivism." Researchers and educational reformers are finding that the constructivist approach to learning produces deeper understanding and more engagement by the learner. In the constructivist approach, the learner constructs his or her own meaning through active participation—i.e., asking questions, finding information, trying out new ideas, modifying and refining ideas based on feedback and reflection, and communicating the new understandings. This approach is contrasted to the old process/product approach of behaviorism in which knowledge is broken down into little segments which are fed to the learner on a predictable schedule.

Kuhlthau (1993) has identified three stages in the evolution of library skills instruction that parallel the evolution of library programs themselves. The first strategy was the source approach; the location and use of specific sources were taught. As library programs began to focus more on instruction, they adopted the pathfinder approach, which outlined each step in finding and using information. The premapped plan was used in the same sequence by every learner. This stage coincides with the behaviorist approach to learning. The third (and presently used) method is the process approach, which engages the learner in constructing his or her own meaning from examining a variety of evidence. The learner is not following a prescribed invariable path nor is he or she seeking one right answer (p. 10).

An examination of research about learning reveals a few underlying principles; these ideas must form the structure of our schools and our school libraries. These principles have been previously described by the author in a Chattanooga, Tennessee, *Power News* newsletter article (Stripling, 1994, pp. 1-2).

Self-Knowledge

The early years of a child's life are spent in self-discovery as the child steps out and tries to make his or her way. In the Western philosophy of learning, called by the educator Howard Gardner the "transformative" approach, the child is encouraged to teach himself/herself through discovery; the caretaker's role is to provide opportunities for engagement with the world. Gardner contrasts that approach to the Chinese philosophy of teaching, the "mimetic" approach, in which the caretaker provides models and careful guidance on specific tasks. The child does not find his or her own way to create art, for example; instead, he or she is taught specific techniques.

Cognitive research in the Western world shows that, unless children are given the opportunity to get to know themselves and to discover their own world, they cannot relate learning to the outside world. A student must progress through both self-knowledge and an understanding of the outside world before he or she can wrestle with universal issues. That progression from personal to social to universal has obvious implications for the curriculum.

Cognitive research has also made clear that learning related to real life is more relevant, powerful, and long lasting for a student. The real-life aspect of the classroom that is important, then, probably follows the same progression, from personal to social to universal.

Core Understandings/Learning How to Learn

Students do not learn effectively from collections of facts; new information must be put into a meaningful context for it to become knowledge. As information proliferates and student access explodes, the challenge to

educators is to discern core ideas that students should understand and revolve the curriculum around these ideas. The movement to map curriculum around concepts is an expression of this approach to learning. Once concepts have been defined, students and educators should mutually decide essential questions that will help them grapple with key ideas embedded in the concept.

Throughout learning, students reflect on understandings they have gained. Each understanding should lead to new questions so that the students become involved in a thoughtful learning cycle. As they experience this cycle, they are learning how to learn.

Personal Need

Research certainly shows that students learn better when they are intrinsically motivated. That motivation must stem from personal interest. The job of the educator is to help students find that personal hook to the essential understandings of the curriculum, not to relinquish all responsibility for deciding what students should learn.

We also know that each student learns differently. Students have different strengths and, according to Gardner (1983, 1993), a number of different intelligences. One student may be particularly talented verbally, another may excel artistically, and another physically. Since each student's approach to a learning task will vary, educators cannot predetermine the path; they must simply provide challenges and scaffolding to help students along their own paths.

Active Learning

Active learning is an absolutely basic learning principle. Research is clear that if students are passive receptacles for information, little or no learning takes place. That is probably why, when adults are asked what they remember about their elementary schooling, they most often cite the projects they did by themselves.

The key to turning isolated facts into understanding pivots on the connections that the child makes with what he or she already knows or believes, with his or her own persona, and with his or her world. No one but the child can make those long-lasting connections. Through active learning, each student will develop essential learning skills:

- asking good questions
- identifying prior knowledge
- selecting and evaluating information
- drawing conclusions based on evidence
- communicating decisions and understandings
- creating new knowledge based on learning.

Facilitation of Learning

With all the emphasis on the student's role in learning, the teacher seems peripheral to the process. Research, however, emphasizes the importance of facilitative teaching to learning. The catalyst for changing

ideas is confrontation with a contradiction. The teacher's role is to confront students with the possibilities, to keep pushing at the edge of the student's potential for learning. That constant modeling and confrontation lead to modification of ideas.

Once we acknowledge the facets of learning that have been highlighted through research, our task is to undergird our reform efforts with that understanding. Our emphasis should not be on simply providing flexible access to the library; it should be on using flexible access to foster active learning, in-depth pursuit of core ideas in the curriculum, and students' use of information as they learn how to learn. Educational reforms will have greater effect if they are based on research-proven principles of learning.

In each school, a cadre of teachers, the administrators, and the library media specialist must assume responsibility for integrating the principles of learning into the library-based curriculum of the school.

Roles of the School Library Media Specialist

The three roles of a school library media specialist as they were outlined in *Information Power* were designed for a focus on instruction in the library. The paradigm borders on the traditional teacher-in-control classroom atmosphere: as information specialist, the school library media specialist is the authority on sources and their use; as instructional consultant, the school library media specialist works with teachers to plan the school curriculum and library-based instructional units; as teacher, the library media specialist teaches students the information curriculum integrated with the school's curriculum. All of these roles revolve around the library media specialist as the central figure in the library program. There is no question about "Who's in charge here?" These roles are portrayed in Figure 2.

A shift to a learner-centered library changes the roles of the school library media specialist. First, the learner is the center of the program, not the library media specialist. Second, the library media specialist is not making all of the decisions. In a constructivist learning environment, the learner has primary responsibility for determining the direction and scope of the learning. Glasser (1992) says that, in a quality school, the work to be done is established through a conversation between the teacher and the student based on the needs of the student (pp. 31-37). The students must set their own standards for learning, reflect on their performance, and work hard until both they and their teachers agree that they have succeeded in reaching the standards (pp. 89-103).

The library media specialist and classroom teachers have essential roles in the learning process. Research on learning indicates that learning occurs in an atmosphere of confrontation and support. The learner must be supported as he or she tries out new ideas and new strategies, but he or she must also be confronted with ideas that he or she would never think of independently. The learner must be provoked to expand the

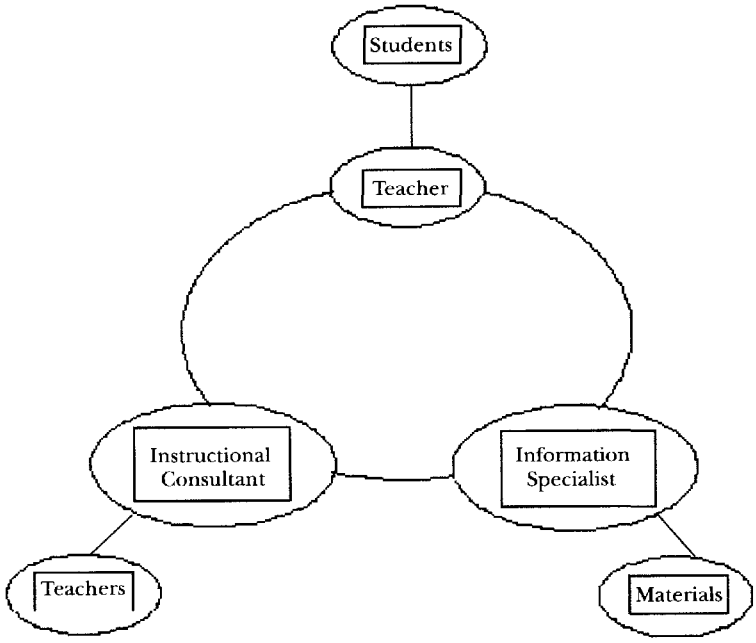

Figure 2. Traditional roles of the school library media specialist

Zone of Proximal Development (ZPD), as it is called by Vygotsky (1978), which is defined as the distance between the understanding a student would reach working independently and the depth of understanding able to be gained with expert guidance (p. 86). If libraries are learning-based, then it makes sense that the roles for the library media specialist would encompass both confrontation and support.

In today's quality library media programs, library media specialists have four roles (caregiver, catalyst, coach, and connector), all of which mediate with the learner who is at the center of the learning (Stripling, 1993a). These new roles are depicted in Figure 3.

Caregiver

The caregiver role fulfills one of the five conditions that Glasser (1992) has identified for creating a quality organization: "Quality is always a product of warm, caring human relationships" (p. 177). The relationship between a student and the library media specialist is developed as

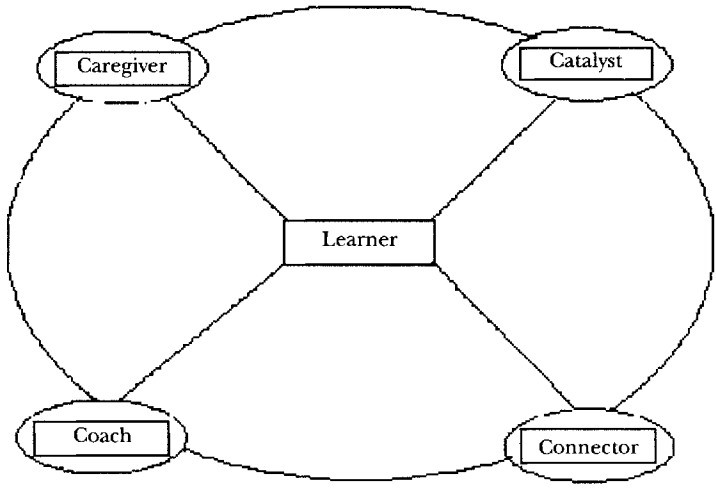

Figure 3. New roles of the school library media specialist

they work together to find the student's personal connection to learning. The importance of that connection has already been established. In fact, research indicates that students learn when they identify their own personal understandings and modify those understandings as they work with new experiences and information. Each student must construct his own understandings. Library media specialists and classroom teachers share the role of caregiver. They provide the opportunities through resource-based learning for students to pursue their own areas of interest (within content parameters). Starting an inquiry project with students by identifying "What do I know?" is a strategy often used by library media specialists to help students identify their own mental models.

In the caregiving role, library media specialists also help students individualize their learning and use of resources according to their learning styles or areas of strength. The dual tasks of support and confrontation which are necessary for learning certainly come into play when library media specialists work with learning styles. Well-planned units should lead students through all learning styles, with the recognition that all students will need extra support at certain phases. For example, if a student loves to collect facts, he will flourish during that stage of learning. That same student, however, may have great difficulty seeing the larger picture and drawing personal conclusions from those facts. The library media specialist (or teacher) has scaffolding (support strategies) already planned to lead that student through a decision-making process.

Some students love words; others approach ideas more visually. All students should have opportunities for expressing their ideas in both words and pictures. For example, if students have researched a decade in American history, they can be expected to express the trends they discovered in synthesis statements for "A Decade in Review," and they can be asked to symbolize their decade in one visual symbol that they can explain. In the caregiver role, library media specialists use both personal and academic support and confrontation to help students find meaningful connections to their learning.

Coach

If students are responsible for constructing their own learning, then library media specialists and classroom teachers must serve as coaches, supporting students when they become confused and confronting students when they become complacent. Most experts agree that quality learning never occurs through coercion; in fact, that premise forms the basis for much of the work of Glasser. Teachers cannot make students learn, nor can they provide all of the information, nor can they do all the work of learning. As a coach, the library media specialist makes it possible for the learner to discover the sources, strategies, and answers that satisfy the learner's needs. The library media specialist creates a culture of learning in the library. That culture has been compared to living on the horizon; learners are "drawn and challenged by the faint ambiguities just visible at an emerging edge of the mind's own story" (Carr, 1991, p. 217). Carr (1991) emphasizes the importance of learners creating their own meaning in libraries, having opportunities to struggle and be lost:

> School libraries ought to be created as places where the individual can articulate, pilot, and direct the personal experience of knowledge, places where a person can look at anything for as long as necessary and as deeply as necessary in order to get lost, find a useful way, and make it into a path for the mind. (p. 220)

The role of coach also implies co-learner. If the library media specialist is engaging fully in the process of discovery alongside the student, a climate of learning pervades the library. Students will be more willing to take risks, to keep searching, to ask additional questions, and to think in greater depth if learning is a shared experience with the teacher.

Connector

The roles of caregiver and coach are mutual responsibilities of classroom teachers and the library media specialist. But school library media specialists must add a third role not often assumed by classroom teachers—that of connector. The school library media specialist provides connections in several ways: process with content skills; teachers with each other

and with the library; students with each other through cooperative learning; and students and teachers with the world of information, both within and beyond the school walls. High-quality learning must always be connected to real life; it must be useful (Glasser, 1992, p. 177).

Research has shown that students do not learn *process* skills in isolation from *content.* Every library media specialist has already discovered this through practice; students do not learn how to use an index unless they need it to find something they want. Consequently, the thrust of library media programs has been to "integrate" with the curriculum. Teachers have tolerated the intrusion of research skills into their content-teaching time, depending on the personal charisma of the library media specialist and the willingness of the teacher to go beyond the textbook.

What research is starting to show now is that students cannot learn *content* skills without *process.* In other words, students cannot gain new understandings about the Civil War or the humpback whale unless they can identify their previous understandings, ask penetrating questions, identify relevant information, wrestle with ideas to draw conclusions, present their new understandings to others, evaluate their own learning, and ask new questions. Both process and content skills need to be integrated and practiced throughout the process of learning in order to produce thoughtful understanding. A model for this integration is illustrated in the Thoughtful Learning Cycle in Figure 4 (Stripling, 1995, p. 165). The connections the library media specialist makes between process and content are absolutely essential to good learning.

The library media specialist is a leader in connecting through collaboration. Collaboration between the classroom teacher and the library media specialist is fundamental to good school libraries. Beyond working with individual teachers, the library media specialist weaves a web of collaboration among teacher teams (grade level or interdisciplinary). Interdisciplinary collaboration can be approached in different ways. The whole language approach, in which literature is used as the core of interdisciplinary connections, revolutionized the teaching of reading, particularly in elementary school, because it used real literature and it made connections among different subject areas. Unfortunately, because everything revolved around one piece of literature, the connections to different content areas were somewhat tenuous at times. Reading *The Very Hungry Caterpillar* (Carle, 1969) would lead to the study of caterpillars and butterflies even if the science curriculum did not include them at that grade level. In music, students would sing songs about caterpillars; in math, students would solve word problems about caterpillars; in social studies, students might study butterflies of the world. Content standards were sometimes bypassed in order to make interdisciplinary connections.

An alternative emerged to the early interpretation of whole language; this strategy encouraged connections to be made on the basis of topics or themes. For example, students might study the westward movement. In

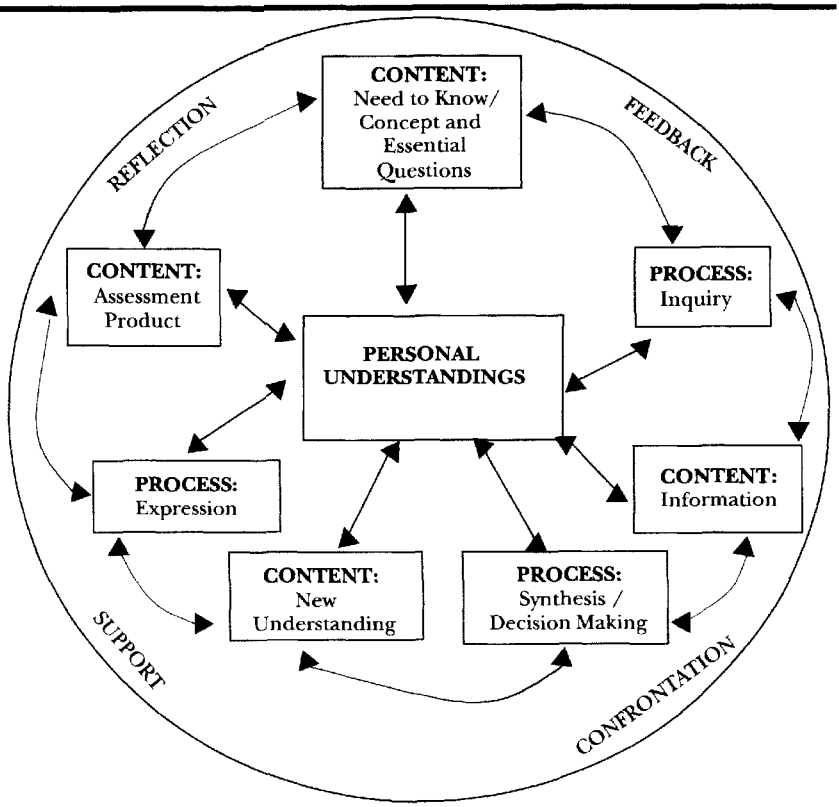

Figure 4. Thoughtful learning cycle

English, they would read a book about the westward movement, in science they might study inventions in the West, in social studies they would concentrate on the westward movement, and in math they might study distance or measurement. This approach to collaboration helped to establish firmer connections among subject areas but still resulted in some areas having to ignore their own curriculum to tie in.

A third method of connecting subjects has arisen which has great potential for building solid connections among different subjects without sacrificing the integrity of any subject. By basing units or curricula on concepts, educators are able to increase the thought level and provide a depth of focus on subjects traditionally "covered." If, for example, the library media specialist helps the teachers identify "risk taking" as a concept, then the westward movement can be studied in terms of risk taking. Essential questions are identified that could apply to any subject area:

What does it mean to take a risk? Who tends to take risks? Why do people take risks? What happens when you take a risk? How can the perils of risk taking be lessened?

In connecting English with the social studies unit of risk taking in the westward movement, the library media specialist and teachers select a novel about risk taking—personal, professional, or social. No longer do the teachers have to select a book about the westward movement. The whole process of scientific experimentation is risk taking, so any science topic can be investigated along those lines. Risk taking in math lends itself to probability or estimation. Risk taking even brings out depth in the study of art, both in the practice and history of art. Why do artists take risks? What changes in art have resulted from risk taking? The connection between art and the westward movement has been made without sacrificing the important ideas in either subject area.

The concepts-and-essential-questions approach has been suggested by a number of educators and explained well by Jacobs (1989). Library media specialists are using this as the basis for their collaborative efforts with teachers as they develop units and map the curriculum.

As important as helping teachers to collaborate is the idea of fostering cooperative learning among students. Learning is social. Students must have the opportunity to share their ideas with others, to listen to the variety of perspectives that social learning brings, to solve problems in a group situation, to profit from the expertise of others, and to coach others in areas of their own strength. The interplay of ideas brings about depth of understanding; students' ideas are both supported and confronted as they interact with others.

Good social learning situations do not happen on their own. They must be planned and supported by master teachers. The school library media specialist and classroom teacher must work together to structure cooperative learning groups; to teach group and individual responsibility skills; to offer support and coaching when needed; to set high standards for performance; and to devise individual and group accountability.

As information continues to explode, the library media specialist's role of connecting students and teachers to ideas may predominate over any other role. Carr (1991) expressed the importance of school library media specialists providing access to the world through their libraries: "Librarians in schools have a particularly important challenge: to demonstrate the library as an empowering link to a world of experience, thought, and information that lies well outside the school" (p. 220). It must be very clear that library media specialists provide not just physical access to information but intellectual access. Elementary through high schools are the last structured learning environments in which everyone participates; school librarians have the opportunity to teach each young citizen strategies for intellectual access. If school libraries fail in that

mission, students will not acquire fully developed lifelong learning skills, nor will they likely be users of information through academic, public, or special libraries.

Two issues are of primary importance in providing intellectual access. First, school library media specialists must be sure that their definition of information skills includes thinking, organizing, questioning, evaluating, concluding, communicating, and presenting. In fact, the term "information skills" should probably be abandoned in favor of the more applicable "process skills." It is not enough to teach students how to access the Internet; they must also be taught how to select relevant information in an electronic environment, how to evaluate electronic sources, when to use which type of source, how an electronic environment actually changes the information that is readily available, and how people interact differently with information received electronically.

A second issue that emerges with the idea of intellectual access to information beyond the walls of the school library is equity. As information access becomes more dependent on technology and the funding level of libraries remains the same or decreases, inequality in the availability of resources increases dramatically. A common saying is "Information is power," but the power is becoming increasingly concentrated in those areas with money for technology. There are profound implications for school library programs in this equity issue, which will be dealt with in the "Implications" section of this article.

Catalyst

The fourth role of the school library media specialist involves being a catalyst for change in the school. Because library media specialists understand the curriculum of the entire school and work through the learning process with all teachers and students, they have a unique perspective. They are in a position to effect change in both teaching and learning through their collaborative planning, curriculum development, and facilitation of learning. But before library media specialists can be catalysts, they must absolutely understand the principles of learning; school reform with the library as the center of inquiry; facilitative teaching; and their roles as caregiver, connector, and coach. All change efforts must be learner driven. Change supported by the library media program will be systemic as opposed to change forced upon a school by central administration or even by the principal. New ideas will take seed in the library and grow throughout the school, being nourished by continuing support and provocation by the library media specialist.

As a catalyst, the library media specialist can exert considerable pressure and support for teachers and students to work together to create a quality school. Two conditions of a quality school may be met in this way: "Quality is the best that everyone in the organization, working both

separately and together, can achieve at any particular time....A quality organization is always alert for ways to improve what it does and how it does it" (Glasser, 1992, pp. 177-78).

Because not everything can change at once, the library media specialist would be well-advised to pick one area of focus at a time. For whole-curriculum change, an effective place to start is with concepts and essential questions. Individual teachers can build single units around concepts and essential questions; the result will be an increase in inquiry-based learning through the library because textbooks are not comprehensive enough to allow students to study a topic from a concept perspective. Once teachers have worked through a successful unit by themselves, they will be more likely to try interdisciplinary connections through concepts. They will also begin looking at their curriculum and remapping it according to concepts and in-depth learning.

An area for change which has a powerful effect on student learning is assessment. Schools are moving from traditional, pencil-paper, rote-learning tests to authentic assessment. The underlying foundation of authentic assessment is that it is connected to students' real lives; it lets students discover and display the essential usefulness of their learning. Authentic assessment has the following characteristics:

- involves a high level of thinking;
- creates a learning experience in itself;
- puts information in a real-life context;
- continues throughout the process of learning;
- derives from content that is important, appropriate, and connected to real life; and
- involves reflection by teacher and student.

Several types of authentic assessment have emerged: portfolios, performances, exhibitions, personal contact (observations and interviews), and authentic tests. All of these involve reflection and student responsibility for learning, which have been identified as critical elements in producing high quality learning. In authentic assessment, students have the opportunity to demonstrate what they know and think instead of showing what they do not know, as often happens on a traditional test.

Because authentic assessment instruments involve in-depth independent learning, they often can be completed only with access to a library. Well-designed library assignments can easily result in authentic assessment pieces. If the library media specialist hopes to use authentic assessment to impact student learning, several strategies can be followed. First, the library media specialist must become an expert on authentic assessment. Numerous books are available for study (Graves & Sunstein, 1992; Hart, 1994; Herman et al., 1992; Hill & Ruptic, 1994; Kuhlthau, 1994; Mundell & DeLario, 1994; Murphy & Smith, 1992).

Second, the library media specialist must build a repertoire of authentic assessment products by using published suggestions (see a taxonomy of authentic research products in Stripling, 1993b, pp. 47-51); adapting real-life communication media to research assignments (for example, television game shows, newspaper editorials, highway billboards); and adapting products used by real professionals in their work (land-use reports, advertising spots, background papers). The repertoire moves authentic assessment to the forefront in collaborative planning sessions.

Since true authentic assessment products involve the student in thinking while the product is being prepared (instead of the traditional thoughtless copying involved in reports and most tests), the library media specialist must structure the unit so that students have time for reflection and feedback.

A focus must be maintained on student learning, not on the student learning product. Many teachers make the mistake of assessing student performance on a one shot, end-of-the-unit, how-dazzling-is-the-final-product basis. But the essence of learning is understanding. If a student cannot express his or her new understandings, defend his or her point of view, explain the gaps in his or her own knowledge, and ask new questions at the end of the unit, then that student probably has not participated fully in the "Thoughtful Learning Cycle."

Implications of Centering the Library on Learning

School libraries should be centers of learning and not information. Dervin and Nilan discovered that many library user studies defined information as a product to be given out, to be studied for a "right" answer (in Kuhlthau, 1993, p. 3). But in a learner-centered library, the learner uses information to construct new ideas and personal points of view. The learner is seeking to make sense of information: "The person seeks meaning, rather than a right answer, and views information as a way of learning and finding meaning or as a process of construction" (Kuhlthau, 1993, p. 3).

If school library media centers are to create a culture of meaning that pervades the school and raises the quality of the educational experience, then there are implications for the structure, operations, and services of the library. Everything should be directed toward creating engaging experiences for learners; offering stimulating materials; and fostering a climate of learning, sharing, and reflecting. The litmus test of every decision should be: Will this decision have a positive effect on student learning?

These efforts to focus the library on learning extend beyond the walls of the library and even the school. School library media specialists must build learning communities that use all the resources of the local and electronic community, that establish partnerships with other libraries and community agencies, and that invite the community into the school to share in the learning experiences.

Structure

Time is a structural element of libraries that can have a powerful effect on learning. All proponents of school reform and quality schools have declared that time must be treated flexibly if all students are to achieve a high level of learning. Students must be given the time they need to be successful. Accordingly, school libraries, which are at the center of the learning process, must be flexibly scheduled. Students and teachers must have access to the library when their learning needs demand it. Flexible scheduling does not mean that nothing is scheduled. It simply means that the library has an open schedule; as teachers and library media specialists develop resource-based units, they schedule the students into the library to pursue their investigations at appropriate times (maybe once a day for three days in a row, maybe two hours on one day, maybe small groups every other day).

Since students will be constructing their own meanings, the time they need in the library will vary tremendously. Not all research can be done in forty-five-minute blocks. Therefore, the partnership between the library media specialist and the classroom teacher is essential in identifying the individual needs of students and structuring research time accordingly.

The physical space of the library is another structural element that impacts learning. The environment of the library must be engaging. The practice of putting all the books on the wall and lined-up tables in the middle so that lessons can be delivered and students can be controlled at all times reflects a teacher-in-charge atmosphere that belies constructivist learning. A learning-centered library must have flexible space that can be used for large groups, small groups, and individuals. Each space should be surrounded by resources, real objects, exhibits, colorful and interesting objects, art, student work, and/or technology.

According to John Dewey, learning is both acting and reflecting. Students must have space in the library to do their work, to engage other students in their discoveries, and to work together on projects that are spread out on tables or on the floor. Students must also have space for reflecting quietly and individually—nooks, special corners, study carrels. In addition, the physical space of the library must accommodate public sharing of new understandings because sharing intensifies the learning experience: "Libraries need to be forums for the telling of the mind one has made up, because it is in the telling that knowing becomes clear" (Carr, 1991, p. 220). Students may share in many different formats (e.g., print, posters, exhibits, hypermedia programs, dramatizations, speeches).

The way resources in a library are structured also impacts learning. Quality school libraries will be structured as virtual libraries with network access to resources in the community and the world. The access in virtual libraries operates in two directions. Not only will students be able to

extend their learning beyond the library into other libraries, public documents, databases, and in fact almost limitless resources, but students, parents, and community will also be able to go the other direction, tapping into the school library's resources from remote locations (classrooms in the building, other schools, the home). Virtual libraries expand learning opportunities beyond the physical space of the library, beyond the fixed hours of school operation, and beyond the student population itself.

Operations

Centering the library on learning will necessitate a rethinking of policies. In a librarian-dominated library, rules are often made for the convenience of library operations—i.e., students may check out only two books at a time, each student has a five-minute limit on use of the electronic index, books may be checked out for two weeks and may not be renewed, only students who have been "trained" can use computerized sources, audiovisual materials can be used only in the library.

Changing policies to accommodate learning will probably improve students' physical access to learning materials. However, a key component of constructivist learning is students' *responsibility* for their own learning. Access and responsibility must go hand-in-hand, and school library media specialists will have to place special emphasis on helping students learn responsibility in the use of the library. Students may check out any and all materials if they are responsible for returning the materials in good shape and in a timely manner. Students may use electronic sources if they use them responsibly (i.e., students do not change the operating system on the computer; students do not violate Internet ethics by entering inappropriate messages or by accessing materials that are neither relevant nor appropriate for their learning needs). Library policies must foster both the engagement and the ethics of learning.

The operations of the library also include collection development. The philosophy of collection development has certainly changed in the last forty-five years of school libraries. In the infancy of school libraries, the goal of collection development was simply to collect materials that had been spread throughout the school into a centralized and more equitably accessible library. As school libraries began to focus on program, the emphasis in collection development was on building core collections. Professional books emerged which identified quality materials to be purchased in each Dewey area. The quality of the collection could be determined by the percentage of these core books that were available.

As the focus of school library programs shifted to instruction, the method of collection development also shifted. School library media specialists began to develop their collections around instructional units, so certain Dewey areas in a library would be quite strong while others would contain only a few current materials. The collection was supposed to match the curriculum of the school; the closer the match, the higher the quality of the collection.

Now the focus has shifted to learning, and the learning is controlled by individual learners. The expectation is that the curriculum will be mapped according to core understandings, but that students will choose aspects of those understandings to study in depth. Two forces are operating on the collection: students will be studying in greater depth (and therefore will need more diverse and complex sources of information) and students will follow their own paths, pursuing connections where they find them and branching into new areas as their own learning dictates (the actual learning curriculum may be as varied as the number of students in the school).

Collection development, then, for learning-centered libraries, is quite different. No library can function independently. Collections must be developed in conjunction with other library collections and in partnership with other librarians (school, public, academic, and special). Networking, both physical and electronic, has become essential. Review sources will still be vital for in-house resources, and those resources will continue to be important in every library (we are not moving to libraries with no materials on-site, particularly in school libraries). In place of review sources for external resources, school library media specialists must teach evaluation of electronic sources and information. No student should emerge from the public schools without the evaluation skills that previously only their school librarians had to possess.

The in-house collections themselves are shifting to a greater focus on learning through technology. The funding of libraries must increase to accommodate the greater expense of electronic equipment and resources. School library media specialists must be careful to base all of their decisions on learning, not on the glitz of the technology itself. Everyone in the school must understand how computer-based sources contribute to learning. Students must be guided to choose the best source for their questions, whether that source is on the shelf, on the local computer, or in cyberspace. Learning is not enhanced when students spend twenty-five minutes finding the scientific name of an alligator by surfing the Internet when they could have found it in two minutes in a reference book twenty feet from them.

Services

The greatest impact of a library's focus on learning is in the area of services offered through the library. School library programs must be directed toward thoughtful engagement of students. Tours, two-day orientations, fact-grabbing games, copy-from-the-encyclopedia reports, isolated library-skills instruction, and marathon scavenger hunts must be abandoned. The services offered by the library must all be based on the thoughtful learning cycle with support for both process and content learning throughout. Classroom teachers and library media specialists must understand the essential interrelationship of process and content. They

must also structure learning assignments that cause students to probe for meaning, to gather information themselves, to draw conclusions, to share their learning with others, and to ask additional questions.

Perhaps the greatest service a school library media specialist can offer to a student is to participate as a co-learner. As students' inquiries delve into complex ideas way beyond textbooks, classroom teachers and library media specialists do not have to pretend to know everything; they can enjoy the thrill of learning right alongside students.

School library services that are focused on learning provide intellectual access. *ALA Goal 2000* suggests that libraries, which have become known for intellectual freedom, must also become identified with, and advocates for, intellectual participation (ALA, 1994). School libraries have a vital role in that goal. The foundations for learning that occur in school libraries will provide the lifelong learners who use all other types of library services. Unless school library media programs foster thoughtful learning, students will emerge as crippled citizens, unable (or unwilling) to sort through the morass of information in our changeable society before making life decisions.

Implications for the Profession

Basing school library media programs on learning means that the tools and strategies of learning must be available to all students. School libraries are obligated to provide equitable access to a rich environment of electronic, audiovisual, and print resources. Every professional librarian understands that. In many schools, however, funding for libraries has not kept pace with the cost of electronic access; consequently, school libraries are moving quickly to a bifurcated and inequitable structure—i.e., the haves and the have nots.

Because school library funding has, to a large extent, come from school funding, school library media specialists have not had to lobby independently for support. But that quiescent role will have to change to counter the escalating costs of providing access to information and the increasing inequity in library support and services. School library media specialists will have to become vocal and political activists for library funding, joining in a lobbying effort with librarians from all types of libraries. A national effort to build electronic library networks should include all types of libraries with the realization that each library has something to contribute and something to gain from such networks.

In addition to the equity issue, school libraries have another serious professional problem to address—lack of relevant professional training. The requirements for becoming certified as a school library media specialist vary from state to state; however, many states require an advanced degree (sometimes an MLS or MLIS, sometimes a Master's in education), many require teacher certification, and some also require previous teaching experience. The number of school library media certification programs is decreasing (a drop of sixteen programs since the listing in *School Library Media Annual 1992*) (Shontz, 1994, p. 301).

At the same time that school library media certification programs are decreasing in number, the demands on them are increasing. School library media specialists need to be prepared in traditional library operations and collection development, but learning-based library programs place additional demands for training. School library media specialists (both new recruits and those already in service) must have experience with effective teaching strategies, curriculum development, resource-based learning, thinking skills, multiple intelligences, learning styles, cooperative learning, storytelling, production of hypermedia programs, and developmental stages of young children and young adults, to name a few areas. At this point, school library media specialists are scrambling for the training they need to meet the expectations of their new roles.

Guidelines for the Future

The school library profession has been fortunate to have prescient leaders throughout its history who have, through the American Association of School Librarians, issued national standards or guidelines on a fairly regular basis. The guidelines predict future trends, establish important goals, and maintain a focus on quality in school library media programs. Many of the changes that have occurred in school libraries over the last half century have been the result of the support and provocation provided through a national standards document.

The American Association of School Librarians and the Association for Educational Communications and Technology have recently begun work on a revision of *Information Power*, the guidelines issued in 1988. The vision document and implementation plan that emerges from this process will lead school library media programs into the twenty-first century. In pursuing this vision, school library media programs cannot follow a path isolated from, or even parallel to, other types of libraries. Libraries of all types must join paths and collaborate on every aspect of their programs, from hours of operation to collection development to programming. By interweaving the services of all libraries and establishing new partnerships with other institutions, librarians can provide the quality of libraries that will build and support communities of learners. Quality in school library media programs is inextricably linked to quality in all libraries.

Quality libraries are joyful places of learning, where patrons develop the habits of heart and mind (Wood, 1992, p. 75) that allow them to participate fully in the outside world. The atmosphere in libraries should reflect Glasser's (1992) final condition for a quality organization: "Quality always feels good, and the greater the quality, the longer the good feeling lasts" (p. 178). The ultimate judgment of a school library's quality may reside in the heart of each child who discovers and pursues the joy of learning.

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