

EGS Research & Consulting

STUDENT LEARNING THROUGH WISCONSIN SCHOOL LIBRARY MEDIA CENTERS

CASE STUDY REPORT

Prepared for:

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TABLE OF CONTENTS

| | | |
|-------------|---------------------------------------------------------|-----------|
| I. | VIALE LIBRARY MEDIA PROGRAM | 1 |
| II. | CASE STUDY ONE: Monona Grove High School | 9 |
| III. | CASE STUDY TWO: | 18 |
| IV. | CASE STUDY THREE | 27 |
| V. | CASE STUDY FOUR | 36 |
| VI. | CASE STUDY FIVE: Hamilton Middle School, Madison | 46 |
| | APPENDIX A: INTERVIEW GUIDES | |

I. VIABLE SCHOOL LIBRARY MEDIA PROGRAM

The purpose of the case studies was to identify and collect information on library media programs that exhibit best practices. Although Wisconsin does not have public school library standards that define best practices or profile the components of an exemplary program, the library media programs selected as case studies were examined on the basis of best practices defined in the literature or in standards other states developed. Public school library media standards most frequently address components such as staffing and program management, the library as a learning environment, curriculum and technology integration, resources (collection and funding), and facilities. The standards consider a quality library media program as one that is staffed by one or more certified library media specialists and aides. The number of professional and support staff increases proportionally with the number of students. The program has a diverse collection that combines both print and non-print, including online resources; the size of the collection meets specific items per student ratios, and its average age does not exceed ten to 15 years with a focus on currency of non-fiction materials. Standards also emphasize the instructional role of the professional staff and the close collaboration of librarians with teachers and students to facilitate quality teaching and learning. The library is positioned as a learning environment and has the space and physical outlay to enhance learning.

Five school library media programs were selected from the 1,043 schools that responded to the school library media questionnaire. The schools were selected on the basis of several criteria, including:

- Grade level: elementary, middle/junior high, high school, combined levels
- Geographic location: the schools are distributed throughout the state of Wisconsin
- Urban, rural, suburban setting
- School size: student enrollment
- Library media program staffing
- Academic performance on the 2003-04 Wisconsin Concepts and Knowledge Examination (WCKE)

The selected schools were visited from October 31 to November 4, 2005. During each visit, interviews were conducted based on interview guides, with the principal, library media specialist, teachers, and students. In addition to the interviews, the library media specialists provided program documentation.

The five library media programs selected for case studies were in elementary, middle and high schools, and a combined junior and senior high school. The schools vary in enrollment from 327 to 1,024 students. The five schools have between 21.5 and 76 teachers. Demographically, the percentage of the White student population ranges from 70 to 98 percent. Between four and 25 percent of the students are eligible for subsidized lunch. Regardless of the differences in enrollment, the library media programs have one certified professional library media specialist. Four of the five library media programs have a full-time library media specialist and one program has a 0.8 FTE library media specialist. The five programs have library aides, but not all have full-time aides. The five programs also receive support from volunteers.

Table I.1 presents details on school size, student demographics, library media program staff and volunteers, and number of teachers and students interviewed.

Table I.1. Case Study Programs

| School | Elementary Hilltop Elementary, Rice Lake | Middle Kettle Moraine, Dousman | Middle Hamilton, Madison | Junior/Senior High Parkview, Orfordville | High School Monona Grove, Monona |
|----------------------|-------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Enrollment | 327 | 1,024 | 705 | 541 | 993 |
| Number of Teachers | 21.5 | 69 | 57 | 50 | 76 |
| Student Demographics | 98% White, 23% eligible for subsidized lunch | 96% White, 4% Minority, 4% eligible for subsidized lunch | 70% White, 20% Asian, 10% Black and Hispanic, 25% eligible for subsidized lunch | 98% White, 13% eligible for subsidized lunch | 92% White, 7% eligible for subsidized lunch Ara.Adami@springbranchisd.com |
| Program Staff | 0.8 LMS 0.5 aide | 1.0 LMS, 1.0 aide | 1.0 LMS, 0.8 aide | 1.0 LMS, 3 aides (hours vary) | 1.0 LMS, 1.0 aide |
| Volunteers | 4 parent volunteers, 0.5 day/week each | 7 student volunteers daily, 1 adult | Adult volunteers | 2 students, 2 adults, 1 retired teacher | Student and parent volunteers |
| Teachers Interviewed | 5 | 7 | 7 | 8 | 6 |
| Students Interviewed | 8 | 7 | 6 | 8 | 6 |

Although the library media programs are located in schools with wide ranging enrollments, they share many commonalities and exhibit similar characteristics of highly dynamic and viable library media programs.

For the sake of continuity and brevity, library media specialists will be referred to as LMS throughout the case study reports.

Strong administrative support for the library media program

In all of these programs, principals know and have high expectations of the full-range of the role of the library media program and recognize its impact on instruction and on student academic performance. Their comprehensive knowledge of the program is a result of frequent LMS-initiated communication and principal observations when “walking through” the school library media center. Principals have great respect and admiration for their LMS and hold her in high regard: *“I have trust and confidence in the LMS for sound ideas... Our LMS makes the difference.”* Principals clearly recognize the capabilities of the LMS and her valuable

contributions: “*She knows the curriculum and initiates communication and planning... She is the best-versed standards person in the school—I rely on her.*” They value her as a key asset to the instructional program and support her by providing funding, removing barriers, and facilitating her visibility through membership and attendance in committees and faculty meetings. “*She’s an active and valuable member of our team.*” The principals, like teachers and students, recognize her unique contributions: “*Her strength is collaboration with teachers. She understands how to teach well and listens to others... She’s very proactive with teachers and seeks better ways to do things... She shows students how to be active in their own learning.*” The principals also promote the library media program when and by holding meetings with faculty and parents in the library media center.

The personality of the LMS

The LMS is the major asset and driver of the library media program by her sheer personality. The LMS is the program. Principals, teachers, and students from the five library media programs all commented on personality traits that make the LMS such a force. These personality traits include the ability of the LMS to work productively with teachers and students; her ability to relate to students as people, her ability to understand their mind set and motivate them; her high expectations from students, and her caring and sympathy.

Table I.2. Principal, Teacher, and Students Quotes Describing the LMS

| Principals |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>She’s never too busy to help.</i> |
| <i>She pushes us to do what’s right for all students</i> |
| Teachers |
| <i>Her enthusiasm is contagious</i> |
| <i>She’s persistent, but non-threatening</i> |
| <i>She’s a proponent of ‘you can do this’—she motivates</i> |
| <i>Students know she’s there to help them</i> |
| <i>She helps students demonstrate their skills and challenges them to have high expectations</i> |
| <i>She is so tuned in to what we are doing</i> |
| <i>She has a ‘forward looking’ way of accomplishing things</i> |
| <i>She loves what she does and the kids respond to it</i> |
| <i>She has an uncanny ability to figure out everyone’s reading interests and can get anyone to read</i> |
| Students |
| <i>She’s a very smart lady and will help us with anything</i> |
| <i>She’s one of my favorite adults in the building</i> |
| <i>She’s always there to help you</i> |
| <i>She knows what students need</i> |
| <i>She gives good advice</i> |
| <i>She makes you feel welcome and happy</i> |
| <i>She never under-estimates us</i> |
| <i>She encourages us to do well; she gets excited for us when we achieve</i> |
| <i>She knows a lot about everything, she knows specific facts</i> |
| <i>She explains why something is important and useful for later in life; She helps us with things to do in the future and shows us how to find information</i> |
| <i>She encourages us and is honest with us about our work</i> |
| <i>She inspires you to read; she asks for our opinions about books</i> |
| <i>She’s so enthusiastic about reading that it’s made us love it more</i> |

Visibility of the LMS

One of the key ingredients of an effective library media program is the visibility of the LMS. In the five library media programs visited, the LMS is high profile. She is known to all teachers and students in the school. She is also visible in the district and is known to the school board and parent groups. Her visibility is a result of membership in multiple school and district committees and her participation in staff meetings and on curriculum teams. One of the library media specialists is even a member of the city council's broadband telecommunications committee. The library media specialists seek membership in school and district committees because they recognize that doing so makes them visible and therefore known to all teachers. They are cognizant that their visibility better facilitates collaboration with teachers, enhancing their role as an instructional partner. They also value membership in committees as an important source of information on curricular and technology issues. These library media specialists recognize that their ability to help teachers lies in their broad knowledge of the curriculum across grade levels and content areas.

Yet, regardless of the visibility of the library media program, the library media specialists are tireless promoters of their program. They promote the program to the school board through joint presentations with teachers about the program and its contribution to instruction and student performance. They provide ongoing information to the principal about the program operations and successes and encourage walk-throughs. They not only work with teachers in developing new units and integrating print and electronic resources into existing units, but they seek out those teachers who are less inclined to come to them for help. They publicize the program to parents and the community through school open houses, presentations to the Parent Teacher Organization (PTO), articles in the local newspaper, and reports on local television.

Knowledge of the curriculum and state standards

The key to the instructional contributions the library media specialists make lies in their knowledge of the curriculum and instruction. The LMS works so well with teachers on curricular issues because teachers view her as more than a credible source of curricular knowledge. They recognize that she is familiar not only with the curriculum for their grade level and content area, but that she has a broader perspective, knowing the curriculum for the grade above or the grade below them. *"Her knowledge of the curriculum and what all classes and teachers are doing is valuable."* Her credibility is also enhanced because teachers see the LMS as a teacher, a peer. In addition, teachers value her unique capabilities, which they themselves do not possess. These capabilities include a high level of technology proficiency, wide ranging knowledge of print and electronic resources, "lack of fear" of trying new things, and innovativeness. *"She is a proponent of 'you can do this' – she motivates."*

The LMS as an agent of change

In the five programs visited, the library media specialists not only help teachers make their curriculum resource-rich, but work with teachers to revise existing units and develop new innovative units. The results of these efforts enhance the curriculum, refresh teachers, raise expectations, and increase student interest. Teachers consider the library media specialist a

“transformation agent,” one who is not afraid “to push the envelope.” *“Because of her support, teachers will try new things... She has revolutionized my curriculum from textbook-only to simulation and research-based instruction.”*

In spite of being initiators of change and pushing teachers forward, factors that disturb the status quo, the library media specialists have succeeded in establishing a seamless collaboration with teachers. Teachers view them as an indispensable source of ideas, help, and support and continuously seek their expertise. Teachers recognize that the assistance the LMS provides in identifying resources saves them countless hours. They are cognizant that even if they had the time, they would not have had the knowledge for identifying such an array of resources. They are aware that they often do not have the ability to identify new technologies, become familiar with them, and integrate them into the curriculum. Teachers know that the new ideas and technologies that the LMS brings forth would not be part of the instructional program without her. The library media specialists recognize that *“classroom teachers would teach differently if we weren’t here.”* In the schools visited, the LMS has become an indispensable member of the school community.

Teacher-Librarian

The five schools visited consider the library media program to be an instructional program and regard the LMS as an educator and not just as a librarian. The principals provide staff support so that the LMS is able to spend the majority of her time working with students and teachers on instructional activities. These include planning units with teachers, teaching collaboratively, teaching information skills and technology literacy, assisting students with projects, and providing professional development. In comparison, the survey of 1,043 library media programs showed that, on average, many library media specialists spend only about one-quarter of their time on these activities. Library media specialists in these five schools recognize that functioning as teacher-librarians is key to the program: *“You need to be a teacher – librarian to be effective”* because *“my main goal is to help kids learn.”*

Technology integration leader

In addition to being an instructional leader, the LMS of the five schools also serves as the technology integration leader. The LMS is a member of the school or district technology committee and has participated in the development of their district’s combined library and technology plan. Being technologically proficient and knowledgeable about current and new technologies, the LMS is the motivating force behind the integration of technology into the curriculum. She facilitates integration by identifying electronic resources and tools for use with different curricular units. *“She initiates ideas and uses of technology and resources.”* She “pushes” teachers to develop their technology competencies and to use new software programs and equipment. She provides training to teachers and students in current and new technologies. *“She’s made teachers more confident in technology and has created a safe learning environment.”*

The library media center is the heart of the school

In the five schools visited, the library media center (LMC) is the hub and heart of the school. According to one principal, *“This is the heart of the school and it pumps blood out throughout the school.”* The LMC is positioned as a place of instruction and learning where teaching and learning are ongoing throughout the day. *“The LMC means ‘try new things’—it’s a learning environment,”* according to teachers. According to principals, *“Our LMC is a living, breathing space... Our LMC is ingrained in the school—everyone depends on it.”*

In fact, the demand for class visits is typically greater than the ability to accommodate the number of teachers wanting to bring their students into the LMC. Inability to meet demand is a combination of limited space and limited staff. One of the library media programs offers a sign-in book spanning the whole year: due to great demand, teachers have to schedule class visits far in advance of the unit. In other programs, teachers stop at the LMC every morning before school starts to see if any space has opened up. Teachers are eager to take their students *“because students want to be in the LMC”* and they know the benefits to students of collaboration with the LMS.

The energy emanating from the LMC is due to its being such a popular place, not only with classes but also with individual students. The LMC in the schools visited is a warm, inviting, safe, and exciting place to be for students. For many students the LMC is a place of choice because of its atmosphere and resources. According to students, *“If you’re feeling stressed out, you can go there and get help and do schoolwork—it’s a relaxing place to be... Our library has a big choice of books—there must be one that you’ll like... Our library rocks! ... There’s something on everything that you can think of.”*

One of the attractions the LMC holds for students is the program’s ability, due to the efforts of the LMS, to accommodate and meet the needs of all students, including special education students and reluctant readers. Principals and teachers both commented on the uncanny ability of the library media specialists to “hook” students who express no interest in reading into reading books and even participating in reading competitions. *“She’s an amazing, hidden talent because she convinced someone who doesn’t like to read to read 14 books for Battle of the Books.”* Library media specialists in the five schools visited use a variety of techniques to accomplish this. They learn about the specific interests of individual students and find books to match these interests. They find jobs in the LMC for students who are reluctant readers and get them involved and excited about the program. They ask students to be book reviewers and publish their reviews to benefit all students. They supplement the collection with books targeted at low level and reluctant readers, including low-level high-interest books and books on tape. They draw in students who are not readers by helping them express themselves in related areas, such as preparing PowerPoint presentations or displaying their technology proficiencies.

Impact on academic performance

The library media programs visited have an impact on student academic performance. Principals, teachers, library media specialists, and students recognize the connection between student academic achievement and the skills and knowledge students derive from the library media

program. Principals contend that the LMS impacts student performance through her work with teachers. *“Her collaboration with teachers is key to the academic performance of students.”* However, the LMS has a more direct impact on students’ performance. The program gives students research and information technology tools and skills that they can use in all content areas. It develops their critical thinking ability and opens their eyes to a wide range of resources and information. It increases interest in reading and excitement about learning. The program even helps students recognize that their academic performance will affect their future choices. The program helps students take an active role in learning and assume responsibility for it. According to one of the principals interviewed, the current educational system wants students to learn how to learn, to self-reflect, and be responsible for their own academic growth and development. This principal considers the LMS the moving force behind this. *“The LMS is the most instrumental person in helping the staff make this paradigm shift.”*

CASE STUDY ONE: MONONA GROVE HIGH SCHOOL, MONONA

The site visit was conducted October 31, 2005. Interviews were conducted with the library media specialist, the principal, six teachers, and six students representing grades 10 through 12. The participating teachers teach social studies, science, English, special education and medical occupations. They have between three and 25 years of experience. The high school has 993 students and 125 staff of whom 76 are teachers. The principal has been at this particular school for two years. The high school serves two adjacent suburban communities and its student population is 92 percent White.

Classrooms have between one and three computers. The school has two computer labs that serve as business education classrooms, two technology education labs, and four labs that are resource centers for math, social studies, science, and English. There is also a writing lab with 15 computers. The library media center (LMC) has 35 laptops and two data projectors; one is mounted for class instruction and meetings, the other is on a cart and circulates among classrooms. Other data projectors are mounted in the classrooms of those teachers who use them regularly.

Library Media Program Organization

The school's LMC has a full-time library media specialist (LMS) and one full-time aide. The LMS has served in this position for 8.5 years. The LMC is open before school starts and closes approximately 1 hour and 10 minutes after school is over for the day.

The LMS considers one aide sufficient because of space limitations in the LMC. The aide is responsible for circulation, shelving, cataloging and processing of materials. The LMC catalog is automated and it can be accessed from anywhere in the school; some teachers access it from their classrooms.

The LMC frequently uses student volunteers who come in for a class period to mainly shelve materials. Some students come to work in the LMC for an hour twice a week as part of a community service project. The LMC occasionally has parent volunteers who assist with specific projects.

Collection

The collection of the library media center has been improved thanks to a three-year grant the school received from the district to upgrade its collection. The fiction collection has grown and the entire collection is weeded on an ongoing basis. According to the LMS, the LMC has a strong social studies and science collection. The literature collection is older and has been targeted for improvement in 2005-06. Online resources include databases such as ProQuest, Badgerlink, and Acuweather. Online databases can be accessed from any school computer and also remotely.

LMS Participation in Committees

One of the key factors contributing to the effectiveness of the LMS is her visibility throughout the school and her familiarity with the teachers and the curriculum. Participation in school and district instructional and technology committees provides a high degree of visibility. The LMS served on the school's Pathfinder Leadership team - a three-year elected position. The Pathfinder Team, which meets twice a month, consists of three administrators and nine teachers and is in charge of policy, planning, and professional development. The LMS is also a member of the school's committee that coordinates communications, curriculum, and budget and reviews new course proposals. The LMS chairs the school technology committee. Although there is no official school curriculum committee, the LMS has monthly meetings with teachers to discuss how the library media program can support curriculum initiatives. She has also participated in the language arts and health curriculum teams that revised those curricula.

The LMS serves as the district library media program coordinator and also coordinates the district's distance learning lab. She is on the district mentoring steering committee for new teachers and is a member of the city council broadband telecommunications committee. While not an official member of the district curriculum committee, she makes presentations about library media program projects and activities to this committee several times a year. As a result of a presentation on the age of the school's collection, the district gave the school a grant of \$50,000 yearly for three years to upgrade the collection.

The LMS recognizes that being on school and district committees is beneficial because it gives her high visibility and keeps her informed about the curriculum and school activities. She is a familiar face in the building to teachers, staff, and students and is comfortable going into any classroom because all the teachers know her. The LMS considers herself to be knowledgeable about a wide range of issues across content areas through daily communication with teachers.

Principal Support

Administrator support of the library media program is key to the program's effectiveness. The principal, who has been in his position at this school for two years, is a great supporter of the library media program and the library media specialist. The principal recognizes that the library media program is a "lean organization" and that its staff is smaller than the staff in other schools of this size. The principal supports the library media program financially through the school's general budget over and above what it receives from state library aid. The principal feels that by scheduling staff meetings in the LMC, he is demonstrating that he views the LMC as the center of the school. The principal reported that he invites and uses the input of the LMS on curriculum and professional development topics.

The LMS has a close and positive relationship with the principal and is cognizant and appreciative of his support. When he first came to the school, she invited him to the LMC to observe her program and evaluate her activities. She wanted him to become familiar with the library media program and provide input and ideas. She visits his office regularly and keeps him informed by sending him statistics on the number of students, teachers, and classes using the LMC.

The principal also visits the LMC at least twice a week to observe students and activities. He indicated that he looks at the environment and sees that students are comfortable and feel welcome, that they are being served, and are working. He observes students doing research, reading, and engaging in collaborative activities. The principal observes how the LMS works with students and teachers, how she engages students, and how much time she spends with them. The principal also observes the aide and her interaction with students. The principal seeks feedback from students and teachers about the program and indicated that he has never received any negative comments from teachers or students about the program or the LMS. The principal concluded that, based on his observations of the LMS and the level of activity in the LMC, the program is highly productive.

Technology Access, Use and Integration

The LMS works closely with the district's technology director who is located at the high school. Both participated in a half-day retreat to review the district's Technology Plan. She discusses resources with him and succeeded in acquiring wireless laptops for the LMC. As the technology committee chair, the LMS recommended a series of professional development workshops to expose teachers to technology and demonstrate how to integrate it into the curriculum.

The LMS estimated that 15 percent of the teachers are technology proficient and five percent have low technology competencies; the remaining 80 percent have mid-range technology competencies. Teachers have recently begun using GradeBook; they also report attendance electronically. Parents can remotely check on their children's performance. Most students have home computers. The school now publishes an electronic newsletter and only mails by regular post to those who request it.

The LMS estimates that 20 percent of the students are highly proficient in technology; the rest are proficient. In general, students come to high school with keyboarding skills. Students use computers in the LMC for writing assignments (using Publisher), online research, and web site evaluation.

Based on interviews, teachers integrate technology in a variety of ways. In social studies, the teachers use PowerPoint for presentations and streaming video and each quarter students do a project requiring the integration and use of technology. In science, teachers use lab simulations and data projectors; they also use a mobile laptop cart with 12 laptops. The English teachers use videos and data projectors in the classroom and utilize the writing lab for word processing. The Medical Occupations teacher uses anatomy software. The special education teacher and students make use of assistive technology.

The teachers interviewed all acknowledged the strong role that the LMS played in helping them integrate technology and the information technology and literacy standards (ITLS) into their curricula. The LMS, according to teachers, provides content specific assistance in different classes across all content areas. For example, the Medical Occupations teacher works with the LMS to set up the Career Search program and identify web sites with additional information on careers which is a major focus of the course. The science teacher recognizes that she should more frequently use the LMS as a resource because of the valuable contributions the LMS has

made to science units and projects. In English, the LMS helps students with their online research by reviewing the thought process involved in doing research. The LMS has introduced university online databases to seniors taking a class in psychology. In social studies the LMS team-teaches a unit on the Civil War that integrates the use of primary resources. To address the needs of special education students, the LMS purchased new books on tape to help meet their different reading levels.

Students interviewed indicated that they learned basic computer skills in elementary school and took keyboarding in middle school. The high school offers instruction in computer applications. The LMS helped to increase their technology proficiency by teaching them a combination of research and Internet skills including the identification and evaluation of web sites, the use of keywords to structure searches, how to document sources, and how to construct a presentation. She also provides students research tips specifically tailored to their projects, such as showing them how to find current articles on specific countries and how to identify events associated with a specific historical figure.

Students indicated that they use computers in school and out of school to do research; check e-mail from counselors, teachers and other students; do word processing; or prepare PowerPoint presentations. They also use computers to play games and work on projects. Some of the students take classes in web design and engineering where they use computers the entire class period. Students indicated that, on average, when they do not have a project, they use computers about 15 minutes a day. When they work on a project, use is extended to approximately 45 minutes a day. Out of school use of computers varied from 30 minutes to two hours a day. Some of the students spend three hours on the computer during weekends.

Collaboration and Teaching

The LMS is a teacher – librarian and an integral part of the instructional team. In a typical week, the LMS estimates that she spends 60 percent of her time on instructional activities with teachers and students. She meets with content area teams weekly to discuss upcoming assignments, the curriculum, and how the library media program can support students and teachers. The LMS spends about 10 percent of her time planning instructional units with teachers. She engages in collaborative teaching on four to five major units a year with each unit running three or more weeks. The LMS also spends 30 to 60 minutes a day, on average, identifying materials for teachers.

Teachers have deep respect for the LMS and consider her contribution to them and their students invaluable. The LMS tailors her collaboration, according to teachers, to each subject area. The LMS informs teachers what they should expect from students engaged in different projects. The primary role of the LMS in these collaborative projects is to teach students about the research component of the project. Specific examples of collaborative projects include:

- In psychology, the social studies teacher collaborates with the LMS on experiments and on the development of the survey used for class projects.
- The Medical Occupations teacher works with the LMS on health career exploration topics.

- In social studies, the teacher collaborated with the LMS on a new cultural anthropology project, the idea of which originated with the LMS. To test the validity of the idea and the project, the LMS actually did the assignment, first writing a cultural journal which served as a model for the student projects. The cultural anthropology project includes such themes as education, leadership and government, religion, rituals and rites of passage, health care, economy, family, social life, and contact with other cultures. The project outline lists key questions associated with each theme and possible journal ideas.
- In English, the teacher and the LMS collaborated on a project on how to make poetry more palatable to students.
- The science teacher and the LMS collaborated on a project dealing with an energy efficient house.

The tenth grade social studies Document Based Questions (DBQ) model project is an example of a truly collaborative research project. In this project, students are asked to use the same methodology that professional historians use when they research the past. Students have to prepare three DBQ essays a year. Each essay consists of five paragraphs with a thesis statement, three assertions, background information, and document analysis. In the Civil War DBQ essay, students access the Valley of the Shadow web site that has primary source material such as newspapers, diaries, and census data from the Civil War era. They are asked to use at least one diary or letter, one newspaper, and one political cartoon or image. Before students start working on the DBQ the LMS provides necessary instruction on using this college-level resource to find relevant and unique information about their topic.

As part of her instructional activities, the LMS also provides professional development to teachers. For example, she taught a district-wide class on Investigation and Exploration and worked with the Director of Curriculum and Instruction to bring in a specialist in reading strategies.

Impact of the Library Media Program

The principal and teachers concurred that the LMS has a significant impact on teachers, instruction, and student performance. With help from the LMS, teachers acquire a more complete picture of what they can present to students. She works with teachers to develop different assignments for students, taking advantage of the wide range of resources the LMC has to offer. Her suggestions lead to assignments that require more critical thinking on the part of students.

Teachers consider the LMS a critical source of help. According to the interviewed teachers, the LMS invests large amounts of time and effort in each of their projects, searching for materials and suggesting ideas. This not only adds new resources to the projects, but also saves them a lot of time. Because the LMS is so familiar with the curriculum and content areas, she provides more effective assistance to teachers and students. She provides invaluable behind the scenes support and always asks teachers what they need. Because she is so well read and knowledgeable, her recommendations to teachers and students are highly respected. Through these efforts, teachers reported, the LMS encourages them to try projects they would otherwise never attempt. For example, the LMS persuaded the English teacher to do smaller projects that would be less overwhelming to students. These projects entail more research but in smaller pieces. The social studies teacher concluded that “we are better teachers” because of the LMS.

The principal, teachers, and students all reported that the LMS has a significant impact on students. The LMS sees her main contribution as giving students a wider sense of possibilities; she gives them the tools, through the DBQ approach, to think for themselves and decide where they stand on an issue. This helps students take more initiative in their learning and broadens their perspective. The cultural anthropology journal, a freshman year project, helped students become more focused in their research and more disciplined in their writing. The tenth grade DBQ project involving the Civil War is challenging because the web site used was designed for college students. The LMS believes that these projects and other activities in which she helps students have an impact on their academic performance.

According to teachers interviewed, the LMS increased student interest in reading using a variety of strategies. The LMC has a very attractive display of books. By bringing in guest authors, she makes students more interested in reading. Her philosophy is that if one book is not interesting to a student, she will find another book that the student might like. According to teachers, “reluctant readers are happy to go to the LMC.” To promote student reading, the LMS took a group of students to a local bookstore and had them each select two books to be purchased for the LMC collection—an activity she plans to repeat this year.

Teachers indicated that students look at the LMC as a good place to do schoolwork. Students want to be in the LMC. Strategies implemented by the LMS have increased the number of students coming to the LMC. “There are more students there than ever before.” Students like the displays and also like the LMS as a person: “they trust her and go to her for help.” Students confirmed that they found the LMC to be accessible, open after school, and useful for research.

According to teachers, the LMS gets students more excited about their work and reinforces what they learn. She makes research easier and more fun by breaking down a process that often can be overwhelming to students. Teachers reported that through her involvement in science and other projects, the LMS models how to be curious and discover new things. Her efforts help students improve their skills and competencies and see the importance of life-long learning.

Students credit the LMS with reading most of the books in the library. They reported that they have developed a personal relationship with the LMS and often ask her for book recommendations. Students also recognize that because of what the LMS has taught them, they have become better researchers. Students see the LMS as a staff member who “knows a lot about everything.”

Impact on Student Learning and Academic Performance

The principal thinks that the LMS is making “a huge contribution” to student academic performance. The LMC is the **heart of the school**. Students feel comfortable there, they know how to access resources and how to use information for different classes. The LMC is such a popular center of academic work for students that when the school has early releases twice a month, it’s not uncommon for 40-50 students to go to the LMC to catch up on their work.

According to the principal, the LMS recognizes the importance of communication and collaboration with staff. The LMS knows what the curricular expectations are and she has

developed strategies to help students and teachers meet these expectations. The LMS works closely with the director of curriculum to help set school goals and provide resources in support of the goals and standards.

Teachers recognize that the LMS's impact on students is cross-disciplinary: students can ably use research skills in different content areas because the LMS has standardized the research process. This has helped students become very familiar with the research process.

LMC Use

All class visits are flexibly scheduled. Teachers indicated that they most often take their students to the LMC when they do a project. Teachers take their classes to the LMC up to four times a year for class projects. When they do a project they go to the LMC daily over a two-week period or for the duration of the project. Teachers also send students to the LMC when they desire more information than is covered in class.

Students go to the LMC on their own with varying frequency. One of the students reported visiting the LMC only when she has an assignment. Another student goes once a week to use the computer "for fun." A third student goes multiple times a day, before school, during lunch time, and during study hall. This student uses the LMC to read magazines and books.

In addition to planning instructional projects, teachers often go to the LMC to get recommendations from the LMS for their personal reading. The LMS always notifies teachers about materials that she thinks would be of interest to them. The LMC also houses a professional collection. Teachers interviewed often go to the LMC during their free period or in the morning before school starts. The frequency of their visits varies with the social studies teacher going daily, the English teacher going three times a week, and the science teacher visiting the LMC once a week.

Library Media Program Promotion

The library media program is extremely visible and the LMS is a tireless promoter of the program. She and teachers presented the results of collaborative curricular projects to the school board. Guest author visits are announced in the local newspaper and she includes program activities in the parent newsletter. She e-mails memos, announcements, and promotions to administrators. The program also gains visibility through her participation in the teacher mentoring committee. The school's web site has an LMC page. This year the program was nationally recognized for the success and impact of its DBQ collaboration project.

The principal does not think that he needs to single out the library media program for promotion to teachers because it is already such a central and visible part of the school. He does promote the LMC to students when he walks through classrooms and study hall and promotes the LMC to parents as a source of resource support for their children.

The principal believes that the LMC is shaped to a large extent by the technical and interpersonal skills of the LMS. "Having the right person is huge. The LMC is the heart of academics for the

school. For the LMC to be effective it has to be highly customer oriented.” The LMS at this school embodies all these: she is both proactive and supportive.

Collaboration with Public Library

The school library media program and the local public library cooperate and collaborate as much as time allows. Students in this high school come from two communities, one of which does not have a public library. The two libraries do promote each other’s programs, including the public library’s summer reading program. The LMC and the public library are planning a joint study night in January 2006 for semester exams.

Students reported that their use of the public library varies. Four of the six students interviewed reported going to the public library on a regular basis. Some of the students use the public library for projects because it has a wider range of resources. Students also check out books for personal reading from the public library.

Library Media Program Strengths

The program is highly visible as a service-oriented resource. The LMC has high quality print and non-print resources. The LMS purchases items in response to teacher and student needs. The LMC is an inviting and welcoming space. The LMS revived the program when she took the position about nine years ago. She made it a vital, fully integrated instructional program through collaboration with teachers. According to all those interviewed, the only weakness is that the facility is too small to meet demand for classes and limits the number of students that can be accommodated.

The principal considers the integration of the library media program into the instructional program as one of the school’s assets: the LMC is not an isolated part of the campus. The LMS is well connected with staff and she reaches out to all departments. The LMS has been very proactive in supporting departments in different ways; she does not wait for them to come to her. Her activities and visibility make the LMC a “very living thing.”

Students reported that they can always find what they need in the LMC; the place is clean, inviting, easy to use, and the materials are up to date. LMC staff is very friendly and always helpful. The LMS helps students sift through resources and identify those most appropriate to projects since some require many sources. The LMS always asks students what books and other items they want her to purchase. The students also see collaboration between the LMS and their teachers as valuable to the content and outcome of the projects.

CASE STUDY TWO: PARKVIEW JUNIOR/SENIOR HIGH SCHOOL, ORFORDVILLE

The school visit took place on November 1, 2005. Interviews were conducted with the library media specialist (LMS), the principal of the junior high school, eight teachers representing grades 7 through 12, and eight students in grades 8 through 10. The principal of the Junior High School has been in this position for 11 years and until this school year, he was principal of both schools. The participating teachers teach science, social studies, English, civics, special education, and family and consumer education. Their experience ranged from three to 34 years.

The school spans grades 7 through 12 and is housed in one building with two wings: one for each school. The Junior High School has 183 students and the Senior High School has 358 students or a total of 541 students. The school had one principal until the 2005-06 school year when the district hired a principal for the Senior High School. The Junior High has ten teachers and the Senior High has 40 teachers. The student population is 98 percent White and 13 percent of the students are eligible for subsidized lunch.

The school has six computer labs with 20 computers in each lab. Three labs are dedicated to technology education, English, and business education; there are also three open access labs. The Library Media Center (LMC) has 16 computers.

Teachers estimated that approximately 60 to 70 percent of the students have computers at home. All but one of the students who were interviewed has a computer at home.

Library Media Program Organization

The library media center (LMC) has a full-time library media specialist (LMS) who has been in this position for 32 years; there are three library aides: one works full-time during the school day and two split evening hours. The LMS serves teachers and students in the combined junior and senior high school.

The library media center opens at 7:00 in the morning, before school starts. The LMC has extended hours four evenings a week for student and community use. On Monday, Tuesday, and Thursday, the LMC is open until 8:30 p.m.; on Wednesday it is open until 6:00 p.m. Opening the LMC to the community is important because the town has a very small public library with limited hours. The evening hours allow parents to come and help their children work on projects. The school pays for the evening hours using state funds designed to support cooperative programming between school districts and communities.

The LMC uses student and adult volunteers. Every day two students come for one class period each to help in the LMC. The LMC also has two adult volunteers who regularly work two hours a week. A retired teacher volunteers in the LMC four to five hours a week. Volunteers help with weeding and the aides who work in the evening shelve all materials used during the day.

Collection

The LMC has a collection of approximately 22,000 print and non-print resources. LMC staff and volunteers have weeded the collection extensively; the average age of the collection is 12 years. The LMS has been rebuilding the science collection and has identified books about countries and biographies as an area for improvement.

The LMC has access to online resources such as CQ Researcher, World Almanac, World Book Online, Grolier Online, Lands and People, WISCareers, NetTrekker, and Badgerlink. The online catalog is accessible from any computer in the building and also remotely.

LMS Participation in Committees

The LMS participates in key school and district committees giving her visibility and keeping her informed on curriculum and technology issues. The LMS chairs the district curriculum coordinating committee (CCC) which she helped establish in 1990. The CCC consists of 20 members, including teachers, two students, and parents; the committee meets monthly except in December. It prepares the professional development schedule for the district and has subject area subcommittees for K-6 and 7-12. Teachers who act as facilitators deliver professional development in the district. The district has been revising its curriculum in the past five years and has completed curriculum mapping to align curriculum to the state academic content standards.

A major CCC initiative has been the implementation of differentiated instruction. Under differentiation, teachers attend to the learning needs of individual students or small groups rather than teach the class as if all learners are alike. Teachers differentiate based on student readiness, interests and learning styles. Teachers use multiple strategies to implement differentiation, such as pre-assessments, literature circles, writing workshops, small group instruction, group investigation, independent study, and interest centers. The school decided to adopt this approach to benefit students who have not been successful academically. The LMS has been actively involved in this process by selecting and purchasing resources for differentiation and promoting their use among teachers and students. This is the second full year of implementation and the district has already seen noticeable documented improvement in student academic performance.

The LMS also works closely with the district technology director in leading the technology committee. The committee has 16 members consisting of administrators, board members, teachers, students, and parents. The technology committee oversees purchases and develops the district's technology plan. The LMS, with the help of the technology director and the LMS serving the elementary school, developed policies for technology and Internet use, materials selection, e-mail, inter-library loan, copyright, and classroom use of videos.

While the library media program does not have a formal advisory committee, the LMS considers the teachers to be her advisors. She seeks their input on important policy issues and the selection and purchase of materials or programs to enhance the curriculum. She also gained their support in having the library open in the evening, an idea that began with one evening eight years ago and has now grown to four evenings each week.

The LMS communicates with the elementary LMS daily and they have a formal meeting each month. The LMS is very involved in the state school library media association (WEMA) and always attends the annual conference.

Principal Support of Library Media Program

The principal is a strong and vocal advocate and supporter of the library media program and the LMS. The principal reported that he has a great deal of trust and confidence in the LMS and that he communicates with the LMS almost daily. The principal's office is located in close proximity to the LMC which aids the communication process. Their communication is also facilitated by the fact that the principal serves as the district's assessment coordinator. He looks at the LMS as a valuable resource when discussing curriculum issues. The LMS credits the principal with always having time for her; they exchange ideas and adopt each other's suggestions. The principal discusses professional development issues with the LMS and typically accepts her recommendations.

The principal supports the library media program financially by responding to general and specific program budget requests, such as the purchase of Smart Boards for the school. Financial support for the program is above that provided by state school library aid (Common School Fund). The principal also supports the library media program by encouraging teachers to use the technology in the LMC and enabling them to attend professional development opportunities outside of the school district.

Technology Access, Use and Integration

Typically, classrooms each have one computer. Special education classes have three to five computers and utilize assistive technology such as laser pens. Technology education classes have 12 to 15 computers. The English Department lab supports all English classes, APEX Learning classes, and the yearbook publication. The library catalog can be accessed from any classroom and from home.

The LMS estimated that over 50 percent of the teachers are technology proficient; very few teachers lack technology competencies. Teachers who were interviewed indicated that they are at different levels of technology proficiency. The science teacher considers himself to be proficient while the English teacher indicated that she does not feel very proficient. Teachers report grades and attendance electronically. Grading information is accessible to parents online. The students, according to the LMS, are "really proficient." Most students are proficient or advanced by eighth grade. Keyboarding is offered in third grade with computer classes in fifth and sixth grades which prepare students to come to junior high with keyboarding and software proficiency.

The technology director and the LMS with principal support established expectations about the use of technology in the Technology Plan. The plan requires that teachers use various technologies at least once each quarter (as described in the Technology Integration Report); however, this requirement is not part of their annual performance evaluation. Some staff are more reluctant than others to use technology. Like the LMS, the principal estimates that 50 percent of the teachers are technology proficient. Students drive teachers to use technology and develop their technology competencies. The principal credits the LMS with leading the school and the district in technology use.

As described, teachers are required to prepare a Technology Integration Report four times a year in which they must identify the units they have covered during the quarter, describe how they have integrated the use of technology and information skills into these units, and identify what technology products were used. They also have to indicate the specific information and technology literacy standards covered in the respective units and report the school outcomes taught. The Technology Integration Report, a product of the technology evaluation team, was voluntary last year but is required this year.

The Wisconsin information and technology literacy standards (ITLS) are completely integrated into the school's curriculum. The principal believes that the school does a satisfactory job in helping teachers know and integrate the technology standards. Technology aids greatly in the differentiation approach the school is using. The technology evaluation team has facilitated the integration of technology into the curriculum. The team meets monthly and consists of the technology director, the LMS, and principals. The technology evaluation team is responsible for designing the technology professional development program.

The LMS credits the alignment of the curriculum and the ITLS standards with improving student achievement. Teachers, with the help of the LMS, used the ITLS matrix to create standards and benchmarks for student achievement. Comparing the past with the present, the LMS sees that students conduct more vigorous and challenging research in the LMC because these benchmarks were set, technology is integrated, and higher levels of thinking are incorporated into the overall design of each research unit.

Technology hardware and software used by the school includes laptops, AlphaSmarts, digital and video cameras, data projectors (LCDs), smart boards, graphing calculators, Inspiration, Jeopardy, Publisher, and CAD software. Teachers integrate technology through projects. For example, social studies students access the Internet for stock market information, build stock portfolios and locate maps. In science, teachers and students use digital cameras, virtual labs, iMovie, PowerPoint, and Publisher to prepare lab reports and brochures. English projects involve Internet searches on authors, PowerPoint presentations, and the use of Inspiration in the writing process.

According to teachers, the LMS has engaged in multiple strategies to improve their knowledge and use of technology. While the LMS says that she spends less than one percent of her time providing professional development, she's really quite active. The LMS provides training on a one-to-one basis or in small groups. She identifies technology-related professional development opportunities and offers training in software programs, technology use, and trouble-shooting, and in resources to support the content areas. The LMS and teachers frequently attend workshops and conferences together as a team. The district takes advantage of the technology services offered by its regional education service agency. They are currently participating in a consortium grant project focused on providing staff development that is linked to standards-based curriculum and evaluation and the effective use of technology in support of student learning.

Collaboration and Teaching

The LMS is a teacher – librarian. The LMS estimates that she spends at least 75 percent of her time on teaching and learning activities. The school has a full-time library aide to ensure that the

LMS spends time on instructional related activities. The principal considers the LMS an educator and observes the high level of instructional activity in the LMC on a daily basis when walking through the library. He sees students on task and students signing up for the homework lab. He finds the atmosphere in the LMC “very business like” and conducive to learning. He also values the LMS’s participation in the Curriculum Coordinating Council, which helps her in knowing and shaping the curriculum and enhances her instructional role.

Teachers interviewed reported that collaboration with the LMS varies by content area, but that they typically consult with the LMS when they plan new units or want to assign a research project. The LMS considers information skills instruction an ongoing activity and keeps a binder of teachers’ units. After discussing objectives and the end product with teachers, the LMS recommends print and non-print resources, helps define student learning goals and outcomes, affirms ITLS and content standards, and helps shape how students will demonstrate their knowledge. One of the new science teachers indicated that he consults with the LMS every time he plans new units. The social studies teacher consults with the LMS two to three times a quarter on World History research projects.

Teachers find the assistance the LMS provides extremely valuable as it saves them significant amounts of time and enables them to use and offer more resources to their students. The teachers appreciate the positive and constructive ways in which the LMS helps them: “She is a good cheer leader, very positive, offers support and information... She is a facilitator of curriculum, coordinating both vertical and horizontal alignment with state standards. The LMS has a good relationship with the school.” The teachers value her as a good source for brainstorming ideas for projects and suggestions for resources. The LMS compliments teachers’ work by reinforcing what goes on in the classroom. She makes students do more advanced work by asking them to go further than they initially expected and to try new technologies. According to teachers, the assistance the LMS provides is of considerable benefit to students. For some students the “LMS is the best point in their relationship with the school.”

Library Media Program Impact on Teachers

The LMS provides technology and a wide range of resources that support higher-level activities. With the integration of technology and differentiated instruction, teachers have transitioned from a lecture mode to a facilitator and resource person mode. Students now have more choices in directing their learning. When the LMS goes into the classroom to observe presentations, she sees more high-level thinking and synthesis. She attributes this to the integration and use of technology, differentiation in instruction, and the revised curriculum due to the completion of curriculum mapping. She also sees more group work in the classroom and more discussion. The research projects teachers assign now require more high-level thinking and are more challenging.

Teachers consider the LMS an invaluable resource. In their own words, teachers described the LMS:

- She is a source of ideas and information
- She makes resources available and brought in more resources in house. She provides resources that are typically not available to schools in small towns

- She is a very thorough person – she gives the full spectrum of service
- She is very dedicated
- She has enhanced classes by providing a wide range of resources
- She encourages teachers to try new things and made it easy for them to introduce changes
- She suggests new projects that require higher levels of literacy and analysis
- She always asks teachers what they need
- She is always available: She is there whenever you need her. She is a constant.
- She figures out how to make it easier for teachers; how to make them use their time most productively
- She is at the forefront of everything

Library Media Program Impact on Students

Students interviewed identified a variety of ways in which the LMS has impacted their learning. They have a great relationship with the LMS and can see that she enjoys helping them. She has taught them about the LMC and its resources including how to use computers and access online resources. According to students, the LMS instructed them in effective Internet search skills, showing them how to access and evaluate web sites. The LMS also taught students how to scan online information in order to determine whether it is relevant to their needs and then how to bookmark those web sites. She does not allow students to procrastinate but keeps them on task, even reminding them when projects are due. Students commented that she wants and expects students to do the best they can. She proofreads student reports and gives them constructive comments on content and style. Her help is most valued on difficult assignments. She always encourages students to do the assignment and do it well.

The LMS is also a great promoter of reading. Students credited the LMS with increasing their interest in reading by guiding them toward good books. She keeps tabs on what students read, knows their reading preferences, and recommends books to them accordingly. She also consults with students about what books to buy for the LMC. Under her initiative, the school organized Dr. Seuss and Shakespeare celebratory reading events.

Impact on Student Learning and Academic Performance

The principal considers all the activities students perform in the LMC, such as research, information search and access, and writing reports as contributing directly to their learning. Students use their research skills across content areas. The LMC is a big part of student learning with students even using the LMC after school and in the evening.

Teachers concluded that the library media program has a definite impact on students' academic performance. Teachers reported that the LMS makes sure that students are familiar with the range of resources the LMC can offer. She takes the time to show students the different resources in the LMC. She tells students which web sites are trustworthy.

- The English teacher allows students who are failing academically to go to the LMC to work there. The LMS works with these students and keeps tabs on them.

- The social studies teacher sees the LMS as a motivator, she challenges students and stretches their goals; she gives them new tools. With her support, students are more apt to complete their work.
- By teaching students to use new tools and equipment, the LMS, according to the science teacher, raises the skills of all students. Students learn new skills and competencies from the LMS then go and teach those skills to other students.

As a result of their interactions with the LMS and the skills they acquired, students are more motivated and engaged. According to the LMS, students are more motivated to do well and care more about their grades. Differentiation has made a big difference. Students have more choices in assignments and classes. Students try harder, and projects are more sophisticated. Parents have access to grading and attendance data. This has helped parents get more involved and monitor their children's progress. Students have also been doing better on state tests in the last two to three years.

Students concluded that the LMS helps them with "everything" both academic and personal. The LMS helped them realize that their academic performance will have an impact on their future. They also credited her with help beyond normal school activities. One student praised the LMS for helping her sister find a good nursing college, while a second student credited the LMS with helping her find a publisher for a book of poems she had authored.

Students described the LMS help as follows:

- She encourages me to do my work
- She helps me with life
- She helps with school-related problems
- She helps with everything academic: she has never not known anything I asked her
- She has not charged me rent yet for being in the LMC all the time

LMC Use

All class visits are flexibly scheduled. Teachers reported that they take their students to the LMC when they work on a project. Teachers typically assign at least one project per quarter and during that time will take their students to the LMC daily for a period of up to two weeks. The science teacher goes to the LMC with students for two weeks each quarter and the social studies teacher goes to the LMC with his students for five days each quarter.

The principal and teachers also go to the LMC for their own purposes with visits varying from once a week to once every three weeks. Teachers go to the LMC to find books, use the reference books, and also the main building copier that is located in the LMC. Some teachers go to the LMC during their free period or before school starts in the morning. The LMS also sees teachers, instructional assistants, and the principal using the LMC after school and evenings.

Students indicated that they go to the LMC with their class once a week or once every two weeks when not working on a project. When they have a project, they go every day for one or more

weeks. On their own, students go to the LMC daily, signing up before school in the morning so that they can come during their study hall or lunch hour. Some of them also come on nights when the LMC is open.

Students interviewed reported that they use computers in the LMC to do homework and e-mail friends. If they can't talk to the teacher in class, they may e-mail questions to the teacher. They also play games, look for sports statistics, and read about books. Some of them get e-mails from the counselor or from their coach about team practices or games.

Library Media Program Promotion

The LMS promotes the program to teachers "all the time." She is the library media program's ambassador and sees herself as a role model for students. The LMS sends parents letters about different events, puts information on the school web page and writes articles about the library media program for the school newspaper. The school web site has a library media program page. She also provides information about the LMC weekly to the community's public access channel.

The LMC is such a central and integral part of the school that the principal does not see the need to promote it further to teachers and students, though he promotes the program to other by opening the LMC to the community and having evening hours. Teachers promote the program to students by developing lessons that integrate the use of LMC resources.

Collaboration with the Public Library

The LMS collaborates with the public library in several ways. The public library holds eight to twelve technology skills classes at the LMC each year. The LMS sets up the classes jointly with the public library. The LMS informs the public library about projects students are doing and the public library in turn provides books through interlibrary loan. This benefits the students because the public library has a different collection. The LMS also gets books for students on a regular basis through inter-library loans when more copies of a title are needed or a specialized one-time use book is needed for research.

Library Media Program Strengths

The LMS identified two areas of strength: the integration of technology into the curriculum and the evening program. The evening hours are very popular with 30 to 40 students attending each evening. It has become part of the school and community culture.

According to the principal, the leadership that the LMS provides is a key strength of the program adding: "It's people who make the difference." In spite of the school's limited financial resources, the LMC has a comprehensive, up-to-date non-fiction collection. The LMC maintains excellent communication and rapport with teachers and students. Teachers look to the LMC as a welcome place to take students.

Teachers identified access to resources, the evening hours, the well-developed collection, technology resources, and the "open-door policy" of the LMS as the program's strengths.

Teachers lauded the library media program as exemplary giving the following reasons:

- Relative to other programs in schools of this size, the LMC in this school has more resources
- The LMC is more accessible because of the LMS; students use it more frequently and more students use it
- Both teachers and students are eager to use the LMC
- Open door policy: this encourages students to come to the LMC

Students identified the best aspects of the library media program as computers, diverse collection, different reading levels of books, and the LMS. Students recognize that although the LMC is small, it has a good collection and many online resources. “It is deceiving when you first see the library, but when you start using it, you see how rich it really is.”

All parties agreed that the size and physical layout of the LMC was its only weakness, making it less functional. Teachers indicated that the LMC could accommodate only one class at a time making it difficult to schedule classes there. The principal and LMS foresee several challenges facing the library media program including funding, staffing, updating the equipment, and keeping the LMC open in the evening.

Summary

The LMS recognizes that she is the one who sets the tone for the program. She attributes the success of the program to her rapport with the students and to being an important part of their lives. The principal has great respect for, trust, and confidence in the LMS. He considers her an irreplaceable part of the instructional team. The principal is very impressed with the library media program the LMS has developed.

The teachers expressed great respect for the LMS and her accomplishments. They see her as an invaluable resource to themselves and their students. Her activities have both supported and enhanced their instruction and elevated student skills and competencies. Students consider the LMS an indispensable source of help academically as well as personally. They expressed great appreciation and admiration for her.

The LMS is a source of change and innovation. She has collected a rich set of resources and exposed them to teachers and students. Her impact on teachers and students is evident and significant. Teachers credit her for her positive and constructive professionalism and her dedication.

CASE STUDY THREE: HILLTOP ELEMENTARY SCHOOL, RICE LAKE

The visit to the school was conducted November 2, 2005. Interviews were conducted with the library media specialist (LMS), the principal, four teachers, the district Gifted and Talented (G/T) coordinator, and eight fourth grade students. The four teachers teach K-4 and have between eight and 32 years of experience. The G/T coordinator was invited to the interview because the library media programs in the district work closely with the G/T program.

The elementary school is one of seven schools in a small district with 2,700 students. The school has 327 students in grades K-5 and 21.5 teachers. Most of the students (98 percent) are White; 23 percent are eligible for subsidized lunch. The school has few students with limited English proficiency. Seven percent of the students are in special education.

The principal has been in this position for 11 years. The principal serves as the district elementary coordinator, dealing with enrollment, resources, budget, and planning issues. She is also in charge of the district's pre-kindergarten program in three schools. In addition, the principal is involved in the development of a virtual education program for the district that focuses on credit recovery and enrichment courses.

Library Media Program Organization

The district has four full-time certified library media specialists: two of them support five elementary schools, one is at the middle school, and one serves the high school. The four library media specialists work as a cohesive team, planning and coordinating activities and sharing information, ideas, and resources on an ongoing basis. They are all active in the state school library media association (WEMA) and attend the annual conference as a team.

In recognition and support of their teamwork, the library media specialists get early release four times a year for planning purposes. The library media specialists are trying to promote consistency across the schools in research topics and technology. They divided their work into four areas: research-based, technology skills, reading appropriate materials, and library information skills. They meet monthly on a formal basis and also meet with area colleagues several times each year.

The LMS of this elementary school has been in her current position for 12 years. She is responsible for two elementary schools in the district, spending four days at this school and one day at a smaller school; she designates a half-day for planning between the two schools. The principal hires a substitute who is a teacher for the day that the LMS is at the other school. The substitute is familiar with the library media program and teaches literacy and computer classes during that day. The LMC also has a half-time library aide in addition to an aide for two hours a day who is at the computer lab adjacent to the library media center (LMC). The LMC has four regular parent volunteers that the school parent organization recruited; one parent comes for a half day each week.

The LMC includes two areas: a library and an adjacent computer lab with 25 computers. The LMS and another aide who is available for two hours a day supervise the lab. The LMC provides

integrated instruction on a flexible schedule and book checkout on a fixed schedule; the computer lab uses a flexible schedule and teachers sign up for the time they need.

Collection

The library media center's collection has approximately 9,600 items. The LMS does a collection analysis three times a year. The LMS completed a thorough weeding in the last two years. The collection's average age is 18 and the LMS assesses it as strong in easy fiction and weak in science and history. The school board has requested that she submit a five-year plan for collection development and replacement. Online resources include World Book, SIRS Researcher, InfoTrac, and Badgerlink.

Participation in Committees

The district's curriculum director ensures that the library media specialists are on different committees throughout the district, both to enhance their visibility and to keep them informed about curricular issues and developments. Each of the four library media specialists participates in a different content area committee. The LMS supports the English language arts committee with resources and ensures that technology is part of the instructional program. The LMS is also a member of the technology committee that meets monthly. All agenda items of the technology committee are aligned with the district's combined library and technology plan.

As a member of the elementary software committee, the LMS works with the technology director to review current software packages used in the district and to purchase new software. She is also a member of the science curriculum committee and the site planning team that includes the principal, teachers, and parents. The district curriculum leadership team includes only one LMS and currently, the middle school LMS serves on this committee. The team assesses content area programs, works on the vertical alignment of curriculum standards and benchmarks and on strengthening the assessment component of instruction.

Professional Development

Professional development is provided through a mix of one-on-one, short presentations of five to ten minutes, and more formal district-wide programs. The LMS designates a half day each year towards improving the technology competencies of teachers and has assisted with training elementary school teachers and staff on using software, scanners, and digital cameras.

Teachers reported that the LMS trained them to use such programs as KidPix and Kidspiration and that they work with the LMS to align technology with the curriculum. In after school sessions, the LMS provided training to teachers on web page design, setting up a group mailing, creating a list of favorite web sites, using a digital camera, and scanning pictures. The teachers appreciate that the LMS always asks them what training they need and how she can assist them.

Principal Support of the Library Media Program

The LMS works closely with the principal; their offices are adjacent to each other. The principal and the LMS communicate daily and the principal is very supportive of the library media program. The principal walks through the LMC daily to observe student engagement in information skills instruction and literature activities. She also looks for signs of a positive relationship between the LMS and the students. The LMS and the principal even collaborated on designing the school web page.

The principal considers the library media program a multi-media program that includes technology. She conducts needs assessments and staff surveys for this building and follows up with teachers to assess their needs and provides necessary release times. The LMS meets with the school staff three times a year to discuss how she can support them in curriculum implementation through resource identification and setting up links on the school's web page.

Technology Access, Use and Integration

Classrooms typically have one computer which teachers use mostly for reporting attendance and grading electronically, e-mail, word processing, and information access. To encourage teacher use of e-mail, the principal e-mails a weekly memo to all staff.

The school has two digital cameras that teachers can borrow. Software programs include Kidspiration and Kidpix. The school uses an elementary software suite that is designed to meet all curricular areas including math, language arts, and science. The suite consists of a variety of programs using formats such as drill and practice, drawing, writing, graphic organization, and keyboarding.

Primarily, teachers take their classes to the computer lab once a week to do technology related projects and instructional activities. The kindergarten teacher takes her class to the computer lab for 30 minutes every Friday for instruction that has been planned collaboratively with the LMS. She pairs students to work on computers. The upper grade level teachers take their students to the computer lab once a week for 45-minute classes. Some of the teachers use parent volunteers who take small groups of students to work on the computers.

The LMS is technology proficient and estimates that 10 percent of the teachers are technology proficient. Half of the teachers consider themselves as moderately proficient and the rest classify themselves as beginners.

Students interviewed said they developed their technology competencies through instruction at home and from the LMS. A 2002-03 district survey showed that 85 percent of elementary school students have computers at home and that 66 percent of the computers were connected to the Internet. All the students who participated in the interview have computers at home. All but two students reported that their home computers are connected to the Internet. Students reported that they spend 15 to 60 minutes a day on their computers at home primarily to send e-mails to friends and play games.

At school students use the online catalog to look for books; the LMS taught them how to use this tool when they were in second grade. All fourth students know how to use the Internet the way the LMS taught them in third grade. They are familiar with web sites appropriate for children and use web links. The students go to the computer lab once a week for 45 minutes to work on math, do research projects, and write reports.

The principal reported that the district has undertaken a four-year process to focus on the alignment of math, social studies, and language arts standards with the state information, technology and literacy standards (ITLS). The district used the Department of Public Instruction matrix in the curriculum mapping process and the next step is to demonstrate competence and assessment by grade level. Technology is used extensively in all content areas for such activities as research, writing reports, math concepts, and drawing pictures.

The district has different technology benchmarks depending on grade level. For example, by the end of first grade, students are expected to be able to develop basic word processing skills. In first grade, students use Kidspiration as a graphic organizer to organize thoughts and ideas; they use CDs in math. In second grade, students are expected to use the Internet to do research on animals and oceans and publish a newsletter. In fourth grade, students are expected to do a PowerPoint presentation on Native Americans and prepare a brochure on a Wisconsin topic.

The library media program also works closely with the G/T program. The G/T coordinator considers the LMS very responsive in providing information and resources, in addition to assisting with technology. The G/T students do extensive research projects and PowerPoint presentations.

The district technology director, housed at the high school, works closely with the four district library media specialists to facilitate use of the automated circulation system, online catalog, and other instructional software. He helped them set-up the web page for the library media program and assists with technology-related professional development.

Impact of Technology Integration

Teachers credited the LMS with helping them develop and improve their technology competencies. The LMS met with teachers for half a day to plan units integrating technology hardware and software. During their common planning time, the LMS provides ideas to teachers and identifies resources for curricular projects. Teachers feel that the time commitment to develop a unit is so enormous that without the help the LMS provides they would not be able to do it or do it as well.

The integration of ITLS and curriculum mapping has improved instruction with teachers now using technology in more productive ways. Without the LMS, teachers would do drill and practice instead of taking technology literacy to a higher level. Technology is used not only to develop students' technology competencies but also to make learning more concrete and applicable. For example, in math classes, students learn to use a spreadsheet and populate it with data and then graph the data. Students learn that spreadsheets are used in business, so they become aware that what they learn in school is being used in the real world.

Collaboration and Teaching

The LMS is a teacher-librarian. The LMS says that her primary responsibility is to work with teachers and instruction and estimates spending 85 percent of her time on teaching and learning activities. Like all teachers, the LMS submits lesson plans every week to the principal. The lesson plans identify the teachers with whom she works, the topics she will be teaching, and where the activities will take place.

In order to support collaborative teaching through planning, the principal and the LMS develop a yearly calendar of activities that includes common planning time for the LMS and the teachers by grade level. The calendar also ensures that the district's four library media specialists work together and share resources. The collaboration among the four library media specialists and the support they receive from the school district principals is considered one of the district's strengths.

According to the principal, teachers across the district are also provided release time seven to eight times a year to work on curriculum. During these occasions teachers from all elementary schools in the district work in teams by grade level. The two library media specialists serving elementary schools work with all of the teams.

Teachers also meet three times a year for four hours each time with the library media specialists to identify resources for each unit and plan co-teaching activities. One of the teachers interviewed had planned the unit on Native Americans with the LMS. After teaching it for five years, the LMS helped the teacher enrich the unit and refresh it by adding new activities and resources.

The LMS and the G/T coordinator are currently developing book clubs for students in grades three to five. The book clubs will meet throughout the year and each student will have to read five books a year. The book club program is currently being piloted at this school with two groups.

Impact on Teachers

The LMS has a direct impact on instruction and student learning. The LMS teaches students to become information processors and provides them with the experience and skills necessary to effectively use information and technology. The LMS is knowledgeable about the total curriculum which helps her guide teachers.

Through her activities, the LMS makes it easier for teachers to develop and deliver instructional units and plan student projects. The LMS asks them what they need and always responds and honors teachers' requests. Teachers consider the LMS a valuable source of support: she searches for, identifies and acquires resources, and provides technology support in addition to collaboratively planning, teaching, and assessing units.

The LMS spurs innovation and creativity and teachers reported that they get new ideas from the LMS. Teachers don't have the time to look for new sources. The knowledge the LMS has of

available resources saves them a significant amount of time which ultimately increases both teacher and student productivity. The LMS helps teachers meet the diversity of student needs and learning styles.

Library Media Program Impact on Students

The library media program excites students. They have a very positive attitude about going to the LMC and adjacent computer lab; they consider it a fun activity. According to the principal, the LMS contributes to student learning through the teaching of research and analytical skills beginning in first grade. The LMS advocates for the integration of ITLS and sees a connection between these activities and students' academic performance. The LMS is continually searching for new ways in which to keep students interested in learning and motivated to do so. She sees many students read more; circulation has increased and more students check out books. The special programming helps promote reading.

According to teachers, the library media program has a big impact on fourth grade students. Students become more knowledgeable and share more information. Previously, skills were taught in isolation; now skills are integrated throughout the curriculum and across content areas. Technology has moved the integration further. Projects are more complex, but more resources are available. Students learn lifelong skills through these projects. Elementary school students have become better researchers; their skills are better developed which will help them when they attend middle school and high school.

Teachers interviewed agreed that the library media program has a "huge impact" on students' academic performance. Teachers reported that students are excited about the books in the LMC; they like the books available to them. This is important because some students don't have access to books at home. Some of the technology used by students beginning in kindergarten lays the foundation for their learning. Students are not afraid of technology and use it to learn practical skills such as test taking strategies. The library media specialists help students by ensuring instructional consistency across schools.

Impact on Student Learning and Academic Performance

The principal is well aware of the important contribution made by the LMS: she can see the difference in the level and quality of activities students perform when they work with the substitute teacher instead of the LMS. The LMS knows all the students and where they are academically, and she tailors her work with them accordingly.

The principal considers the help provided by the LMS to students to be very important. Through the Big6 research process, taught by the LMS, students learn skills that can be applied in all content areas; it is a lifelong skill. The work students do and the skills learned in the LMC are a critical part of their education.

According to the principal, the school expects that by the end of fifth grade students will know how to search for and identify resources, access technology, use the electronic catalog, and

understand and apply the Big6 research process. Students are also expected to be technology proficient.

The fourth grade students interviewed consider the LMS to be of great help to them, agreeing that what they have learned in the LMC has increased their interest in school. Students credit the LMS with personal encouragement and constructive criticism: “She’s honest with us about our work and tells you how to improve or change.” They concluded that using technology makes learning more fun: “When using computer software, you are having fun and don’t even realize you are learning.”

Students credited the library media program with increasing their interest in reading. The LMC has more books than individual students have at home and it provides an environment where reading is fun. The LMS promotes reading through group activities, author visits, booktalks, displays, contests, and awards. The LMS reads books to students that increase their interest in reading. She helps them find books, has “inspired them to read,” and teaches them how to use the atlas and read maps so that “they can get ready for the real world.” They see the skills the LMS helped them develop as “help with the future.” Students recognize that “you can’t survive without reading.”

LMC Use

Teachers interviewed come to the LMC at least once a week and appreciate the flexible scheduling. They also visit the LMC during non-class times to talk to the LMS or look for instructional resources. According to teachers, students appear very comfortable coming to the LMC or to the computer lab. They see the LMC as a comfortable place to be: it is warm, inviting, and it is easy to find books.

The principal uses the LMC “all the time.” She will frequently select a book and read to students. She also uses the professional resources available in the LMC as she is in the process of completing a doctorate in educational leadership.

Students indicated that they come to the LMC with their class to use resources such as the atlas, do research, or hear an author speak. The LMS often reads books that have received awards to students. Students also come to the LMC on their own once or twice a week to check out or return books. When students come to the LMC they like to stay and read and discuss different books with the LMS. They make use of the reference section for research. The school has adopted the Big6 research model and students said they enjoy working on the process with the LMS and discussing their progress with her. The LMS also monitors classes for library manners and presents awards to students and classes with the best library behavior.

All but one of the students who participated in the interview frequent the public library. They check out a variety of books from the public library: historical fiction, books that were made into movies, books on World War I, classics such as Moby Dick, or books on animals.

Library Media Program Promotion

The LMS promotes the library media program to teachers, administrators, students, parents, the school board, and the community in several ways. During National Library Week in April, the library media specialists organize a district-wide book “garage” sale for teachers. Last year each teacher received a “Libraries Matter” wristband.

The LMS promotes the library media program to students through book displays, author talks, book fairs, and the RIF program. The district has participated in the Reading Is Fundamental (RIF) program for 26 years. Students receive three books a year and have author-of-the-month presentations to promote reading.

The LMS also promotes the library media program to parents through articles in monthly school newsletters and in *Bridge*, the district newsletter. The local radio station carries promotional spots for National Book Week about the library media program every quarter. The local newspaper also carries articles on the school library media programs. The district library media specialists organize a display in the local shopping mall for an annual reading promotion event associated with Read Across America.

The principal thinks that teachers are all so familiar with the library media program that there is no need for targeted promotion of the program to teachers. “The LMC is part of what teachers do.” The support the LMS provides teachers makes the program an integral part of instruction and education.

Collaboration with Public Library

This district has an active relationship with its community public library. The LMS represents the school district on the public library board. She and the other school district library media specialists help promote the public library’s summer reading program to all teachers, parents, and students. The public library invites first grade students to visit and get a library card. The public library’s youth services librarian follows school projects so the library can have extra resources on hand to support those projects.

Library Media Program Strengths

The LMS made the library media program a success by advocating for the program with teachers, administrators, and school board members and by developing a program that is curriculum and technology centered. The LMS cites flexible scheduling, administrative support, and common teacher planning time as the main strengths of the program. Having common planning times with teachers has been a key success factor enabling the LMS to enhance her role as a teacher-librarian. Because the technology department is well staffed, the LMS does not have to spend time on technical support, allowing her to spend the majority of her time on instructional activities. Flexible scheduling of classes allows her to be more responsive to teacher and student needs. Having library media aide support also allows her to spend the majority of her time on instructional activities.

The principal credits the LMS with creating a strong instructional program, communicating with teachers about their needs, exhibiting an understanding of what good teaching is, and introducing new resources to teachers and students. Administrative and budget support allows the LMS to provide a variety of resources to meet student and teacher needs.

Teachers consider the resources identified by the LMS, the training provided to teachers and students, and the knowledge brought by the LMS to enhance lessons and units as the key strengths of the library media program. Teachers recognize the important contribution that library media specialists make to instruction and stress the need for more library media specialists so that all schools can have a full-time LMS.

Summary

The focus of this library media program is on instruction. The LMS serves as a teacher–librarian. The principal considers the LMS an integral part of the instructional team. She perceives the primary responsibilities of the LMS to be instruction and the support of teachers in planning and delivering instruction. The LMS is also key in teaching students the Big6 research process adopted by the district.

Students see great value in the library media program and recognize the importance of the skills they are learning from the LMS. They hold and express great affection and respect for the LMS. One student summed it up perfectly: “The LMC rocks!”

CASE STUDY FOUR: KETTLE MORAINÉ MIDDLE SCHOOL, DOUSMAN

The school visit took place November 3, 2005. Interviews were conducted with the library media specialist (LMS), the principal, seven teachers, and seven students. The principal is in her 26th year as a school administrator.

Two groups of teachers were interviewed. The first group consisted of four teachers and a district curriculum staff member. The teachers interviewed teach life science, language arts, and technology education to sixth and seventh grade students. They have been teaching between 14 and 20 years. The second group consisted of three eighth grade teachers of earth science, language arts, and American History; these teachers have 15 to 28 years of experience.

The school has 1,024 students in grades six through eight and 100 staff of whom 69 are teachers. It is the only middle school in the district. The district is economically well to do with only four percent of the students considered economically disadvantaged. Most of the students (96 percent) are White; about two percent are Hispanic. Four percent are eligible for subsidized lunch.

The school is organized into three separate houses (wings), one per grade level. The school has six computer labs: two are dedicated to technology and business education, the others are open to various classes on a sign-up basis.

A program unique to this school is one titled “Laser Live 9 (LL9)”—a student-produced news program that is broadcast throughout the building at the beginning of each school day. The program operates daily with the participation of 32 to 36 students and includes news and school information. It is filmed and produced entirely by students, under the direction of the LMS and another teacher. All students have an opportunity to participate in the production and delivery before moving on to high school.

Library Media Program Organization

The LMC is located in the center of the school, in the hub of the three houses and is physically very visible. Program staff consists of a full-time library media specialist (LMS) and a full-time aide. The LMC houses one of the computer labs. The LMS estimates that the majority of her time during the school day is spent on instructional activities with students. The aide and volunteers check books in and out, shelve books, and manage other clerical duties.

The LMS began her career as a library intern while in high school and in the public library during high school and college. After graduating from college, she worked as an elementary library media specialist in three schools. She has been the middle school library media specialist for nine years and has completely changed the library media program with the principal’s support, showing both initiative and leadership. She totally retooled the LMC and reshaped the relationship with teachers. When she started her work at this school, the LMC had old computers, no web page, and no online databases. She began to introduce technology as soon as she started working in this school and within her second year there were 30 new computers in the

LMC. She reconfigured the LMC floor plan to make more room for computers and rearranged the collection.

She expanded the outdated reference collection and installed a security system for the collection. Being forward looking and service oriented, she met with teachers to become familiar with what they teach so she could determine the resources needed to support and enrich the curriculum. The teachers value so highly their relationship with the LMS that they would do anything for her, according to the principal.

The LMC has seven student volunteers who check out and shelve books. There is a student at the desk every hour the LMC is open, from 7:00 to 2:30. The LMS recruits students all the time. Students who want to work in the LMC sign up for it as a class. The LMC has one adult volunteer for three hours a week. Other adult volunteers, recruited by the Parent Teacher Organization (PTO), may come to help with special projects, such as a complete inventory of the LMC collection and building technology. In addition, substitute teachers help in the LMC when they do not have to teach. Teachers who sub in the school on a regular basis know what to do in the LMC.

Collection

The LMC has a collection of about 29,000 items and is 15 years old on average. When the LMS came to work in the school, the collection was very old and had not been weeded. The collection is now weeded three times a year. The goal of the LMS is to have a collection that is relevant to the needs of teachers and students. She has allocated considerable funds for fiction, graphic novels, and poetry.

The LMC provides many online resources including SIRS, Grolier, ProQuest, NewsBank, AP Photo Archives, CultureGrams, Hoovers Online, and Badgerlink.

LMS Participation in Committees

The LMS serves on the school technology committee that meets monthly and reviews technology purchases. She also helped develop the district's combined library and technology plan. The LMS attends meetings of the reading department team to be aware of curricular activities and needs. She has also served as the district library media coordinator.

The six library media specialists in the district meet monthly. The district has four elementary library media specialists, one middle school LMS, and one high school LMS. The LMS is an active member of the state school library professional association and attends the annual conference.

Professional Development

The LMS, along with all district library media specialists, plans and delivers technology-related staff development. Professional development for groups takes place mostly after school. Individual training takes place during school hours. Teachers watch the LMS when she teaches

students. The LMS herself participates in training workshops to learn new programs and technologies and often takes advantage of online training offered through conferences, workshops or local university classes. She has recently begun using vtc.com, an online tutorial, to reinforce her technology skills.

Principal Support

The principal considers the LMS a “blessing” and is highly complimentary of her: “She is of a phenomenal caliber.” According to the principal, the LMS is so dedicated to the program that the principal must insist that the LMS leave the LMC to take a break during the day for lunch. The principal and LMS communicate nearly every day

The principal provided financial support for print, non-print, and equipment resources for the library media program. The LMC receives part of the school’s technology allocation and, in fact, the principal ensured the LMC received the newest computers. The PTO has also organized book sales to provide additional funding for books and equipment, and this past year the LMC purchased 12 scanners with PTO funds. According to the principal, the LMS is relentless in finding funds for the LMC and has successfully authored several outside grants.

The principal supports the LMS and “gets out of her way... Anything I can get for her I will get.” The principal sees her role as removing any barriers so that the LMS can operate effectively. She has refrained from assigning any other duties to the LMS or the LMC aide and provides daily scheduled common planning time for each teaching team in which the LMS participates.

Technology Access, Use and Integration

This middle school is technology rich and has more than 350 computers. The LMS has been a technology leader in the school since her arrival. The school board supports technology infusion and according to the principal, provided the school with \$100,000 per year for five years for this purpose.

Typically, classrooms each have one computer that teachers use for word processing, e-mail, attendance, grading, and Internet searching. All science classrooms are equipped with a data projector that is used to show science videos, demonstrations, and presentations. Classroom technology is supplemented with computer labs. Each house has a lab with 30 computers. The school also has five mobile carts each containing a computer and a data projector. Teachers can also check out laptops from the LMC and use them for such activities as taking notes at meetings or conferences, presenting at conferences, learning new programs or working with programs they may not have at home.

According to the LMS, the majority of the school’s teachers are technology proficient; there are very few teachers who are not. Teachers interviewed consider themselves proficient or “mid-way to proficient” in technology. The school maintains a chart by teacher and house which tracks the technology competency level of each teacher.

The LMS has played a key role in improving the technology proficiency levels of teachers and they look at the LMS as the technology leader of the school. Teachers are required to complete 20 hours of technology training within two years of their hiring date. The teachers use Star Online to assess their technology competency level when they are hired. The LMS prepares the professional development schedule for technology. The LMS also identifies technology related training opportunities outside the district and teachers can take some training online. According to teachers, the LMS is critical to teacher and student development of technology proficiency. She trains both teachers and students in different software and different types of equipment.

Students come to middle school with good technology skills; teachers and the LMS estimate that between 80 to 90 percent of the students have home computers. Students are very proficient and enjoy teaching each other. Because students are so motivated to use technology they push teachers to learn it as well.

All students interviewed have computers at home. Some access the LMC catalog from home or use the school's Virtual Library. The Virtual Library is an extensive online collection of resources consisting of school, public library, and state collection catalogs, online magazines and newspapers, curriculum links, online encyclopedias, maps and geography resources, graphics, and clip art. Students primarily use their home computers for games, e-mail, and entertainment. Students indicated that they were not as technology proficient when they started middle school although some knew how to type. One student indicated that she was afraid of computers at that time. At present, two of the students consider themselves "cutting edge" in terms of technology proficiency, while the rest consider themselves to be proficient.

Teachers indicated that it's difficult to keep up with their students as they become more technologically advanced. So teachers ask the LMS to show them how to do things that their students can do but they can't. The LMS "works on" teachers who are not using technology: "she is very persistent in encouraging them to use technology." She plays a key role in helping teachers integrate technology into their lessons.

Teachers reported that students in sixth grade do three or four projects a year that involve the use of technology. Students use Inspiration to help them organize their thoughts. Students do PowerPoint presentations and use Publisher for their reports. Students videotape speeches. In science students do research reports on controversial science topics and make use of the flexcam. The eighth grade science teacher takes her students to the computer lab monthly and for consecutive days when doing projects. The teacher makes sure that they cover every major technology: PowerPoint, web page design, and word processing. Students graph data on Excel spreadsheets. The language arts teachers use computers for word processing and research.

Collaboration and Teaching

The LMS is very standards-oriented and made them a key focus when she joined the staff. The state's information and technology literacy standards (ITLS) have been integrated throughout the school's curriculum using the Department of Public Instruction standards matrix alignment tool.

The LMS, according to eighth grade teachers, provides support and offers suggestions. She comes to teachers with valuable new ideas because she knows the curriculum so well. She uses new software and encourages teachers to use it as well. She teaches both teachers and students new technologies.

The principal walks past the LMC throughout the school day and can see that the LMS is engaged in instructional activities with teachers and students. The LMS estimates that she spends five percent of her time on identifying materials for teachers and students. For example, in sixth grade, students do a project on an invention consisting of a historical review and assessment of the impact of the invention on society. The LMS pulls out all the relevant books on inventions, she constantly updates resources. She helps students find information and shows them how to use applicable software programs. This results in projects based on accurate and current sources of information. According to the technology education teacher, “without her, students would not be able to do the assignments.” She makes the research experience a positive experience for students.

Teachers see huge benefits to involving the LMS in unit planning because the LMS contributes new ideas and suggests changes in the unit. According to teachers, the LMS saves teachers a lot of time and effort; with her help teachers can use their time more productively. She gets students and teachers very excited and motivated. Her help is especially critical when many students are involved in projects.

Most of the units planned have technology integrated into them. Through a University of Wisconsin-Whitewater grant project, a team of reading, language arts, and social studies teachers from the school has worked with two professors to integrate higher order thinking skills and literacy resources into their curriculums. Most of the teachers involved had never before considered working with a library media specialist on curriculum. This effort made her more visible to the entire faculty and drew math and science teachers into the project.

The LMS helped social studies teachers develop a unit on the Supreme Court in which eighth grade students simulate court cases and act as attorneys or Supreme Court justices. The social studies teacher who implements this unit considers the LMS pivotal to her content area. The LMS is also working with the Spanish teachers on a project using Publish software to prepare and send postcards to Spanish speaking countries. She has also worked with the language arts teacher to incorporate the use of Macromedia’s Fireworks in a project in which students design CD covers.

Collaborative teaching takes place every time a teacher brings a class to the LMC. The LMS introduces new technology and teaches students how to use databases, how to set up research, how to use key words in Internet search, how to evaluate web sites, how to find information in an article, and how to synthesize information.

Impact of Library Media Program on Teachers

Thanks to the efforts of the LMS, teachers are more confident in their technology skills. She has opened the door to a place where it is safe to learn. By making the curriculum come alive, the LMS helps teachers stay fresh.

Teachers indicated that to make units more appealing to students, the LMS purchases useful resources such as Hoover Online that the student stock clubs use. She came up with the culminating question (*what is sacred?*) for the project on Native American culture. She continually comes to teachers with ideas on how to enhance units and projects.

According to teachers, the LMS reaches areas of the curriculum that might otherwise not have been approached; she digs deep. The social studies teacher credits the LMS with “revolutionizing her curriculum.” Previously, the teacher basically taught from the textbook. The LMS helped her change her instructional approach to using simulations (e.g. Supreme Court unit), research, and technology as the basis for teaching. The science teacher no longer teaches from the textbook, but by experimentation and technology use. Both teachers acknowledge that their current approaches make their subjects more “intimate” to their students: “it gets knowledge in their bones and they really get it.”

According to the principal, the LMS is well acquainted with the state content and information, technology and literacy standards and integrates them into all collaborative units which contributes to student learning and achievement. The principal indicated that while the previous LMS was very traditional, this LMS is a “trail blazer. She knows what learning is, what literacy is, knows what critical thinking is and can share that with others. She is relentless and driven. She pushes all of us to do what is right for students.”

Benefits to Students

Teachers reported that students learn new technology skills from the LMS. Students use technology as a tool to better understand content areas. The use of technology has served to decrease students’ frustration. It also empowers students to go deeper in learning a subject. Students are now held more accountable for the end product. The LMS pushes students to try and do new things and sets the bar higher and higher in terms of technology use. She knows better than teachers what students are capable of.

Teachers indicated that with help from the LMS students have become proficient in technology and research. She excites students, brings out their talents in the application of software programs and research and opens up the world to those who do not have computers at home. She provides opportunities to low level readers and is highly responsive to student and teacher needs. Her knowledge of the curriculum contributes to her ability to identify resources across content areas. “She is way ahead of the curve in selecting books and novels for students.”

Students were highly complimentary of the assistance they get from the LMS. Students reported that the LMS “taught me all the software programs.” They learned how to use different programs in a class or on a one-on-one basis. They appreciate her overviews of the research process and making them aware of options at different points in the process.

Impact on Student Learning and Academic Performance

According to the principal, the school is one of the top academically performing middle schools in the state. The LMC is the center of the school and central to students' academic performance. The current educational leadership wants students to learn how to learn, to self-reflect and be responsible for their own academic growth and development. The LMS is the moving force behind this philosophy. The principal considers the LMS to be the most instrumental person in helping the staff make this paradigm shift.

The principal indicated that the middle school has created a culture of innovation. The principal encourages teachers to learn new things and explore "what's out there and then choose from it." The principal sets clear expectations for teachers and students. The school cultivates an open culture where teachers teach other teachers and the LMS joins in this process of modeling successful projects to others.

The LMC, according to the LMS, impacts performance by helping teachers design projects that help students make connections, develop their analysis and synthesis skills, develop products that use higher order thinking, and require "out of the box" thinking. For example, the iMovie projects students produce require higher order thinking skills in combining words, pictures, and music. Students have to read a variety of sources and understand the architecture of reading online. These projects help students make more connections to life and how they relate to it.

Teachers indicated that the LMS challenges students to do better and meet higher standards. She creates opportunities for lower achievers to show their skills in areas other than reading, such as in creating PowerPoint presentations or digital movies. She has high expectations of all students, even those with learning disabilities.

The LMS has been "a transforming presence" throughout the school. She changed the LMC from a place where students were reluctant to go to one that is so popular it is hard to get into. According to eighth grade teachers, before the LMS came, there were no computers and the LMC was little used. She opened a whole new world to teachers. "She has taken the LMC to a place we couldn't imagine it could go."

Teachers recognize that to optimally serve teachers and students, the LMS takes many courses to learn the latest techniques, strategies, and resources. Teachers concluded that the LMS, by teaching new software and reinforcing it, being available to students and teachers, encouraging students to problem solve and scaffold their thinking, and setting high standards has an impact on student academic performance. "She is a teacher with a forward looking approach and mind set."

The students interviewed also consider the LMS to be very helpful. She teaches them new things and provides tips on how to do things better, easier or more efficiently. They are all impressed by how much she knows about the different software programs and resources. As a result of her help, they are able to use more information sources and extract more useful information. The students are cognizant that the work they are doing with the LMS will prepare them for high school and beyond.

Students also credit the LMS with improving their study skills: they know how to be more specific in their searching, thus have become more productive. They have learned how to better organize information and how to recognize good web sites. Their experiences with the LMS have made them more interested in learning about new things and eager to learn. She facilitates the use of technology and information literacy to raise teacher and student expectations.

Students described the help they have received from the LMS as follows:

- She gives me the tools to do my future job
- She gives me tools to do research
- Papers are so much better: content is better because we look at quality resources
- She covers cross-content. She helps so much, you can't describe it

LMC Use

All class visits to the library media center are flexibly scheduled. According to the principal, students use the LMC all the time; it is a fun place to be. The LMS makes the place attractive with books that capture the attention and interest of students who are not typically avid readers. She promotes books and reading through frequent book talks in the reading classes and has created a web page on which students post their own book reviews.

According to teachers interviewed, the LMC is so popular and in demand that it is difficult to schedule classes there. Teachers are happy if they can get their classes in two to three times a year and have to schedule months in advance. The language arts teachers usually go to the LMC once a quarter. The science teacher takes his class once a year for two weeks. The social studies teacher visits the LMC with her class several times each month.

Teachers go to the LMC on their own mostly to talk to the LMS and get her input and suggestions about projects. Teachers usually plan with her several times before assigning a project. It is easy to communicate with the LMS because “she makes it her business to know the curriculum.”

Teachers indicated that the LMS makes students feel very comfortable in the LMC. Students love the LMC atmosphere; they know it is a place where they can get help. They associate the LMC with trying new things and learning. Students know and follow the rules. The LMC is not a quiet place; it is a “learning library.” The LMC is very full throughout each school day. The LMS has a very clear vision of what a LMC should be and advocates for it.

According to the students interviewed, class visits to the LMC vary by content areas. Students go to the LMC with their language arts class twice a week, while social studies students go to the LMC once or twice a month. Classes go to the LMC for a consecutive number of days when doing projects.

Students go to the LMC on their own at different frequencies. One of the students reported going to the LMC daily to use the iMac movie software. Another student is doing an internship in the LMC. Students go there to read at free reading time or do their schoolwork instead of going to study hall.

The principal frequently visits the LMC to read newspapers and use the Virtual Library. The principal holds PTO and Parent Night meetings in the LMC so that parents can see what takes place in the LMC.

Library Media Program Promotion

The LMS is a relentless promoter of the library media program. Because the library media program is such an integral part of the instructional program, the principal does not see a need to promote the LMC to teachers. However, the principal gives the LMS time to talk about the LMC during faculty meetings. She describes her activities through a monthly report distributed to the curriculum director, superintendent, and the principal. She promotes the program to parents by presenting at PTO meetings and preparing articles for the district newsletter.

Collaboration with Public Library

The LMS has served on the board of the public library since 1991. The public library and the school district shared a grant to teach older citizens to use technology. The LMS and public library jointly promote the summer reading program to teachers and students.

Several of the students interviewed use the public library only during the summer months. Although one of the students has a long drive, he said it was worth it because the public library has a large selection of books. Students go to the public library to do research and check out books for pleasure reading.

Library Media Program Strengths

The library media program excels in its relationship with teachers and students. Both teachers and students are very comfortable coming to the LMC and using its resources. The LMS sees it as her mission to make students love books and love the LMC. She is also changing the viewpoint of teachers about what the LMC can do for the curriculum and their students.

The principal sees the strengths of the library media program in the following areas:

- The LMS is the heart of the program and its greatest asset. The teachers respect, trust, and have confidence in her. The teachers know that when they involve the LMS in their units or projects, it will be a successful experience.
- The program has a good collection that is weeded and updated annually. The school allocates considerable funds to the collection with some additional funding from the PTO.

Teachers identified the major strengths of the library media program as the cutting edge technology available, accessibility of resources, and support for students and teachers. They laud the program's ability to meet teacher needs in all content areas. Teachers also appreciate that students use information and media in a continuous way; they see it as a life skill that will serve them outside of school. Students moving to the high school come so well prepared that they have pushed the high school to get more technology to match that of the middle school.

According to students, the strength of the LMC is the caring LMS. They view the LMC as “not just a place; it is the activities that define it.” The collection is an asset; the LMC has a wide range of books and the collection is continuously improving. They describe the LMC as “the heart of the school; it is the key to everything else that goes on in the school.”

Summary

The principal, teachers, and students value highly the LMS and consider her to be indispensable. The teachers consider her a “transforming agent.” She elevated academic expectations for all students and has impacted their learning and reading. She has been a tremendous help to teachers, elevating the level of their units and the expectations from students. The LMS helped teachers change the way they teach and supported them in developing a pedagogical approach that is more effective. Teachers consider her a great coach and students recognize the unique and significant contribution that the LMS is making instructionally. They credit her with having a great impact on their interest in learning, productivity, and preparation for high school. She has placed the school on the cutting edge. She **is** the library media program.

CASE STUDY FIVE: HAMILTON MIDDLE SCHOOL, MADISON

The school was visited on October 31 and November 4, 2005. Interviews were conducted with the two library media specialists (LMS), the principal, seven teachers, and six eighth grade students. This is the principal's first year at this particular school. Teachers interviewed teach English as a second language (ESL), geography and science, physical education, language arts, and special education. The teachers have nine to 20 years of experience.

The middle school is located in an urban area and is the largest middle school in the district. The school has 705 students and is ethnically diverse; 70 percent are White, 20 percent are Asian American (Korean and Chinese), and 10 percent are Black and Hispanic. The school has a large population of students with limited English proficiency and a high percentage of special education students. Twenty-five percent of the students are eligible for subsidized lunch. The school has a staff of 100; 57 are teachers.

The school has two computer labs with 28 computers in each lab. The library media center (LMC) also serves as a lab with 30 computers, 12 of which were purchased with Parent Teacher Organization (PTO) funds. The special education classrooms have their own assistive technology lab of six computers. The school has five data projectors that circulate for classroom use. The school also has about 30 Averkeys that connect computers to the television. The principal plans to have these available to every teacher in the school. The school got funds for purchasing this hardware from the PTO and the area neighborhood association in honor of the school's 50th anniversary.

The school has an audiovisual technician who helps with technology problems. If the LMS and the technician cannot address the problem, they refer the problem to the district technology office. The district sends in a technical support staff member for half a day a week. The LMS is also the teacher representative to the PTO.

Library Media Program Organization

The library media program has a full-time LMS. This year two library media specialists share the position: one works four days and one works one day a week. A library aide works 33 hours a week. Having an aide has made a difference in the program, as it allows the LMS to devote time to students and instruction. The instructional program operates entirely on a flexible schedule.

The LMC has adult volunteers who work in the LMC about 15 hours a week. The LMS recruits adult volunteers during school registration. As the school does not have any study hall periods, there are no student volunteers in the LMC.

While the library media program does not have a formal advisory committee, the LMS continually solicits input from staff and students about books and other resources to add to the collection.

Collection

The LMC has a collection of about 13,165 print and non-print items. The LMS considers the fiction collection to be very good with multiple copies available. The collection analysis showed that the nonfiction collection is weak in the areas of history, technology, space, and the human body. The LMS plans to allocate funds to update the nonfiction collection this school year. The LMS has one volunteer who helps to weed the collection.

Online databases include CultureGrams, NoodleTools, World Book Online, SIRS Discoverer and Researcher, and Badgerlink. The library catalog can be accessed from classrooms and from home. Teachers and students have been provided with the passwords necessary for remote access to these online resources.

LMS Participation in Committees

The LMS is active in several school committees. She chairs the technology committee that meets monthly to keep equipment updated and to disseminate information on integrating technology into the curriculum. As the committee chair, the LMS is responsible for setting agendas and is the point person for staff with technology problems.

The LMS serves on the school's PTO board and also meets with other district middle school library media specialists monthly to review books and order new resources. All district library media specialists communicate via a district-wide listserv.

Staff Development

The LMS provides training to staff on new online databases and on programs like Internet Detectives, a website evaluation program developed by the school district. She also offers professional development on programs such as Excel and video streaming. Most professional development usually takes place after school, though she also occasionally provides short training sessions during staff meetings. The LMS taught the teachers how to use United Streaming and how to access the public library catalog from their school computers. She has also involved teachers in literature review and enrichment programs offered by the district.

Principal Support of Library Media Program

Although the principal is new to this school, the LMS has already developed a close professional relationship with him and gained his support for the program. The LMS and principal meet regularly once or twice a week.

The principal is very attentive to the LMS: he listens to her concerns and problem solves with her. The principal works with the LMS to develop the library media program budget that is primarily determined on a per student basis. The principal provides the LMS time to present at staff meetings.

The principal walks through the LMC often to observe instructional activities taking place. On a daily basis he observes various types of collaboration and co-teaching between the LMS and classroom teachers. He is aware of the impact of technology on the operation of the library media program and instructional process. He credits the LMS with placing links to LMC resources on the school's webpage to help facilitate easier access to information resources.

The principal is cognizant of how passionate the LMS is about literature. She has frequent book discussions with students, asks them to review books for her and then posts their book reviews in the LMC for other students to read. She even provides the principal books on tape of stories that students like so that he can become familiar with what they are reading. The principal listens to the tapes on his drive to and from school.

Technology Access, Use and integration

When the LMS came to the school, not all teachers had computers in their classrooms. Classrooms now have between one and five computers each; the science and language arts classrooms have three computers each. The teachers interviewed rated their level of technology competency from moderate to proficient. The LMS considers two-thirds of the teachers to be technology proficient; the younger teachers are more proficient.

Teachers use computers to report grading and attendance, review Internet content, search for lesson plans, do word processing, and e-mail parents and colleagues. Each classroom has a TV/VCR and teachers can check out a data projector from the LMC. Teachers use Averkeys to connect a classroom computer to the TV for video streaming and PowerPoint presentations. The language arts teacher created a blog for class content. The speech and language teacher uses BoardMaster with her students for writing reports and essays. The science teacher accesses and incorporates the Foss online curriculum. In geography the teacher does a lot of Internet searches. The ESL teacher uses the computer to adapt materials for ESL. Teachers use Inspiration throughout the curriculum to do planning for writing projects and word processing.

Students are very proficient; they are the ones who "push the envelope." Teachers estimate that 75 percent of the students have computers at home. All the students interviewed have Internet-connected computers at home. They spend between 30 and 60 minutes a day on their home computers doing research and word processing and sending e-mails. The language arts and social studies teachers have web pages and students access those periodically from home. Students learn keyboarding in elementary school. In middle school, students take a quarter-long class on computer applications and on how to use other technology.

The principal relies heavily on of the LMS in the area of technology. The school is a heavy user of technology and is ahead of many other district schools, in part because of the expertise and persistence of the LMS. The extent of technology integration varies by subject area, but all interviewed teachers are integrating technology into the curriculum. According to the principal, students know how to use online technology and how to evaluate different web sites. Students do a lot of Internet searches and routinely incorporate streaming video into their PowerPoint presentations.

Collaboration and Teaching

The LMS is a teacher–librarian. According to the principal, the LMS “is very much a teacher” and is part of the curriculum team in the school. The school has four curriculum teams, one per grade level plus a unified team; a new learning coordinator works with these teams. The LMS attends team meetings at the common planning time and assists with providing resources to support new programs.

The LMS considers herself to be another learning coordinator. Teachers come to her with their units and she identifies resources, web sites or other tools to support their lessons. During the first three years of the LMS’ tenure in this school, she spent about 20 percent of her time planning units with teachers. Because so many units are now developed, she spends less time on this activity and more time with instructional activities. The teachers consider the LMS very helpful across content areas because of her knowledge of the curriculum. Teachers recognize the expertise of the LMS and ask for her input. They have great respect for her. The LMS is very visible to teachers. With the objective of supporting all teachers, the LMS does not hesitate to go to those teachers who do not come to her.

The LMS knows the scope and sequence for each grade level and looks at the curriculum from a skills perspective. She helps teachers set the format for student research projects and since she knows about all projects, she informs teachers what other teachers do so that they can adapt good ideas from each other. Each grade level has a research topic focus; for example, seventh grade does a compare and contrast project and eighth grade does a persuasive essay project. When the LMS realized that sixth grade students did not know how to use search terms effectively in their research, she prepared two lessons on this topic. She went into the classroom to give seventh graders a five-day lesson on the identification and evaluation of web sites. This year, the LMS and a teacher have collaborated on a six-week unit on bullying. The teacher chose the topic and the LMS identified books and other resources on the subject, reviewed them over the summer and will co-teach the unit.

Teachers interviewed always work with the LMS to develop new units and identify new books and resources. The ESL teacher gives the LMS copies of all of her units in order to identify those with which the LMS can help. The special education teachers credit the LMS with “seeing the whole picture” while they typically just look at a small piece. The science teacher considers the LMS a very good resource and credits her with helping to revamp the geography curriculum. The LMS was the catalyst for integrating Internet resources into the curriculum. Every time she assigns a research project to her students, the LMS reviews with the students the research process and related information skills.

The language arts teacher communicates daily with the LMS for planning and asks for help in identifying resources, appropriate web sites, and reading levels. For the sixth grade writing project, the teacher chooses a topic and the LMS identifies and provides the books, identifies web sites, and works with individual students at their level. The teachers are pleased that the LMS continues to emphasize print resources and the importance of reading.

Benefits to Teachers

The LMS has made the LMC the core and foundation of the school. She is very responsive to teachers' needs and they recognize that they would be lost without her. Whatever teachers need she manages to get. She works so well both with adults and with students. She listens to all staff and goes above and beyond of what is normally expected.

According to teachers interviewed, the LMS saves them a significant amount of time; she accomplishes things that teachers would not be able to do, such as identifying and evaluating new web sites and other resources. The LMS organizes and makes resources available ahead of time. Her efforts enrich the curriculum and give it additional depth. For example, when the LMS traveled to Southeast Asia, she incorporated her experiences into a geography unit co-taught with the science teacher.

Teachers benefit from the great materials and technology in the LMC. The LMS helps teachers with new strategies. She provides feedback on projects and makes suggestions on how to improve the projects. Teachers indicated that she informs them when new books arrive in the LMC, what the books are about, and which of their students would enjoy these books. She can do this effectively, according to the teachers, because she knows so many of the students personally. She organized a writing lab in the LMC and also organized a "community reads" program by grade level.

Teachers credit the LMS with "hooking in many students" and with having an "uncanny ability to reach students and tap their interest," citing increased student participation in the popular Battle of the Books program. She looks for ways to involve students who are "on the fringe" and often gets them to volunteer in the LMC. The ESL teacher appreciates her relationship with students: "she never says no to ESL students, is friendly, comfortable with and available to students." They compliment her for being in tune with the middle school student mind. Teachers see the LMS serving as a really caring role model who makes learning fun. Because of the LMS, teachers "get opportunities, great resources, new stuff, input and feedback on projects and ideas."

Benefits to Students

The LMS indicated that she spends the majority of her time working with students; every time she is with students, she teaches them. Students interviewed reported that the LMS taught them how to evaluate web sites and how to use keywords when doing searches. She also does an in-depth review of the research process. The students found her lessons very helpful and useful. She has also taught them how to problem solve and how to organize information. She "never underestimates anybody." In fact, she has confidence in their abilities and is very excited when students achieve.

According to students, the LMS knows the book preferences of individual students: "Once she knows you, she can recommend what you like." The students appreciate her knowledge of books: "you can tell she knows books." She has increased students' interest in reading because she is so excited about books. She knows students' favorite authors and gives them books they like to read. She knows the students so well that she can tell when students don't read. The LMS

introduces books in such a way as to peak students' curiosity and interest, cultivating their desire to read. One of the students interviewed served as a book reviewer for the LMS and enjoyed it. The school participates in the annual local Battle of the Books competition where students have to read 14 pre-selected books and then answer questions for points about those books. One of the students confessed that the LMS persuaded her to read the books for the competition even though she does not like to read. She considered this an "amazing event," one that turned her on to reading.

Students indicated that the LMS helps them not only academically, but also in personal matters. Students feel that they can always relate to her; she is always available to students and listens to them. They feel comfortable talking to her about personal things and they believe that she really knows what students need and addresses their needs. Students consider the LMS as a safe haven: "when you are stressed, this is a good place, a quiet place." A student summarized her relationship with the LMS: "Seems she is part of my daily life." "She is very helpful and a good person if you need help in anything." They consider her a friend.

Impact on Student Learning and Academic Performance

According to teachers, students leave middle school well prepared to do research. By the end of middle school, students are proficient users of many tools and have honed their skills on how to search, identify, access, and evaluate resources. Teachers value her role in teaching students research skills because the focus in the classroom is primarily on course content.

The LMS, according to the principal, also shows students how to be active in their own learning. Students acquire a set of very useful skills, learn different types of search engines, and learn to filter good web sites out of the unreliable ones. Through this, students learn how to look at information and assess it.

Teachers agree that the LMS has an impact on student performance. The activities in which students engage and the skills they acquire enrich them; she opens students' minds. The LMS has also increased students' interest in reading and reading achievement scores have risen due to increased reading activities, collaboration with teachers, and information skills instruction.

Teachers concluded that the LMS goes beyond just teaching information and literacy skills. She makes sure that materials are available for both avid readers and uninterested readers. The LMS spends a considerable amount of money on books and materials for special education students.

The LMS sees herself as an advocate for kids and the work the LMS does with students helps them organize information. The library media program makes students aware of more resources which impacts reading and learning and gives students more choices and options. The LMS sees gains in student skills from grade 6 to grade 8. Students not only become more proficient in searching and information processing but they become more astute about the research process.

LMC Use

The LMC is a busy place that is much in demand; it is not uncommon for two or even three classes to be using the LMC each class period. Some teachers even go to the LMC first thing in the morning to see if anyone has cancelled, thus providing room for them to bring in their students.

All of the teachers interviewed take their classes to the LMC for projects throughout the school year. Since students have to write a book report each month, teachers go to the LMC to help students find books and to listen to book talks from the LMS. The ESL teacher brings students to the LMC daily since many of her students have no access to computers and resources outside of school.

Teachers also go to the LMC for their own personal reading, to talk to the LMS, and to have her get books from other schools. The LMS often recruits teachers as book reviewers, giving one of the teachers a box of 40 books to read over the summer. The LMS publishes brief book reviews for students by grade level, enticing them to read with a heading such as “Looking for something to read? Try one of these favorites.”

Students reported that they visit the LMC with classes at different intervals depending on content area. For language arts, students go to the LMC once a month to do book reports. In social studies they have one project a quarter and go to the LMC for several days in a row to work on that project.

On their own, students typically go to the LMC two to three times a week to look for and check out books. The LMC is open after school until 3:45 p.m. and they can also go there when they have a study hall. According to students, the LMC “has something on everything we need.”

Students describe the LMC as a quiet place where they can study for tests, relax or get away from stressful situations. According to one student, the LMC radiates “good vibes.” Even students who do not like to read go to the LMC to “hang out.” It is a very popular place and all students like to go there.

Students consider the LMS an asset. She makes students feel good and happy. They recognize that without the LMS the LMC would not be as welcoming. The LMS likes to get to know the students and many have a personal relationship with the LMS. “There is no one who does not like her.” “She is the best librarian I have met.”

Library Media Program Promotion

The LMS promotes the program to administrators, teachers, students, and parents. The principal considers the LMS a very effective communicator. The LMS joined other district library media specialists to give a presentation to the superintendent and cabinet on the importance and benefits of school library media programs. The LMS promotes the program to parents through book talks at PTO meetings. She also updates parents about what is new at the LMC. During Parents Night, the LMS discusses the library media program, the online resources that are available, and how

these can be accessed from home. The LMS also promotes such reading-related events as the Battle of the Books competition. The program has become so popular that 150 students now participate in it. The LMS and principal are planning a “cool to read” campaign to promote reading to students, especially boys, who use the LMC less than others.

According to the principal, the LMS promotes the program to teachers at staff meetings. The LMS has a good relationship with the teachers and they use the program all the time. There is no need to promote the program to students because they are in the LMC all the time. Through her activities, skills, and work with teachers and students, the LMS is the best promoter of the program.

Collaboration with Public Library

The LMS communicates with the librarians in the four neighborhood public library branches. She informs them about the curriculum and the projects the teachers assign. The LMC showcases the public library bulletin. The public library hosts a “poetry slam” each April and the LMS takes students to this event that features a local poet.

Students reported that they go to the public library between once a week to once a month. They go more often during the summer. They check out movies, books or do research. The public library has a bigger and different collection and they use it when they want or need different materials for class projects.

Library Media Program Strengths

The LMS sees her relationship with teachers and students as one of the major strengths of the library media program. Collaboration with teachers and having a good working relationship with them is a priority for her, along with working with students, informing them about literature, and teaching them to develop search and information processing skills. The rapport the LMS has with students is critical.

The principal sees the program’s strength in the personality of the LMS and in the welcoming atmosphere she has created. Students feel helped and appreciated. They feel that their opinions count. The two library media specialists are an asset and they always make time for students and are very accessible. The LMS never tells students that she is too busy. The LMS works well with teachers; she pre-researches topics for them, identifies resources; and provides training on how to access and use resources. The LMS always looks for better ways to do things. She is very proactive and creative, always coming up with new ideas.

Teachers considered the LMS to be the main strength of the program. Her knowledge and personality are the key. She keeps her knowledge current and is familiar with all the new books. Teachers also consider the resources, the friendliness of the LMC, and the LMS as strengths of the program. The LMC is not intimidating; it is clean and neat and therefore very inviting. The LMC is the center of the school. Special education teachers credit her with the collection she has assembled for their students, a collection that includes books on tape and multiple copies of high interest low reading books.

Summary

The library media program is very dynamic and is going non-stop. The LMS is the key ingredient in the program.

The principal is an avid supporter of the library media program and of the LMS. The principal and the teachers have great respect for the LMS. They consider the LMC “the foundation, the core of the school.” They consider the LMS an integral component of the instructional program. The LMS has a clear and significant impact on the quality of instruction in the school.

Students expressed great appreciation for the LMS and all the skills she has taught them. They also have a personal relationship with her where they consult her about personal issues. The LMS is an important part of their daily life.

**APPENDIX A:
INTERVIEW GUIDES**

LMS INTERVIEW GUIDE

1. Review information from the survey on: staffing, hours of operation, budget,
2. Documentation: Obtain LMC policy and procedures manual or documentation on LMC program operations:
 - Policies and procedures
 - Copyright policy
 - Resource sharing/ILL
 - Acceptable Use Policy
 - Collection development policy (materials selection, weeding, challenged materials)
3. If LMC program has an advisory committee, what is the composition, role, method of operation and contribution/input of this committee. Provide examples and documentation of meeting agendas, memos, etc.
4. Relationship between the LMC and the public library:
 - Coordination
 - Examples of benefits to the LMC program and to the public library
5. Presence and participation of the LMS on school and district committees:
 - Committees in which the LMS participates
 - Frequency of meetings
 - Role of the LMS on these committees
 - Examples of how participation has benefited the LMC program
 - Are there any other school or district committees in which LMS should participate?
 - Why is there no LMS presence on these committees at present?
6. Relationships of LMS with:
 - Curriculum director/department
 - Technology director/department
7. LMS access to the principal:
 - Examples of how the principal supports the LMC program
 - Frequency of meeting with principal
8. School technology status:
 - Number and location of computers in the school
 - Number of computers in a typical classroom
 - Number of computer labs and number of computers in labs
 - Number of computers in the LMC
 - Teachers' level of technology proficiency
 - Students' level of technology proficiency
 - Extent to which technology standards have been integrated into the curriculum
 - Subject areas
 - Documented examples of integration

- Role of LMS in integration of technology standards into curriculum

9. Role of LMS in technology instruction:

- LMS level of technology proficiency
- Uses of computers in LMC program

10. LMS activities:

| | |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning instructional units with teachers | Percent of time per week allocated to activity How many teachers Content areas Examples of topics How LMS encourages teachers to participate in activity |
| Teaching collaboratively with teachers | Percent of time per week allocated to activity Number of times a week LMS teaches collaboratively How many teachers Content areas Examples of units taught collaboratively How LMS encourages teachers to participate in activity |
| Assessing collaborative students' projects | Percent of time per week allocated to activity Number of times a week How many students, grade levels Content areas, topics, Examples of collaborative projects Role of LMS in activity |
| Providing staff development to teachers and staff | Percent of time per week/month allocated to activity Number of times and hours a week/month How many teachers and staff Type of professional development (PD) provided Content areas and topics: examples How LMS arranges for it How LMS encourages participation Areas in which PD is needed |
| Teaching students information skills and technology | Percent of time per week allocated to activity Number of times and hours a week/month How many students are involved Content areas and topics: examples Impact on students' projects, engagement, academic performance |
| Teaching technology literacy to parents and community members | Percent of time per week allocated to activity Frequency and duration How many parents and community members participate How LMS makes parents and community members aware of available training Examples of topics |

| | |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | How LMS arranges for it How LMS encourages participation |
| Providing reading incentive activities for students | Percent of time allocated to activity per week Number of students involved Content area(s) Examples of reading incentive activities |
| Identifying materials for instructional units teachers develop | Percent of time allocated to activity per week Number of teachers involved Content area(s) Examples of materials identified and instructional units |

11. Overall assessment of “teaching and learning” activities in which LMS engages:
 - Allocation of sufficient time to activities
 - Impact on teachers
 - Impact on integration of technology into curriculum
 - Impact on integration of technology into classroom instruction
 - Impact on students’ learning, attitudes toward learning, behavior
 - Impact on students’ academic performance
 - Problems, difficulties, impediments or barriers

12. LMS involvement with other LMC program activities

13. Use of volunteers in library:
 - Student volunteers
 - Adult volunteers
 - How is each group involved
 - How and what do they bring to the program

14. Collection management:
 - Trends in the last three years
 - Areas in which collection is strong
 - Areas in which collection is weak
 - Impact of online sources on collection
 - Adequacy of collection

15. Impact of LMC program on student performance
 - Extent to which LMC program contributes to student performance
 - Examples of how LMC contributes

16. Describe the communication/PR/advocacy you implement with:
 - teachers
 - administrators
 - school board members
 - parents and community members
 - How effective is it?

EGS Research & Consulting

17. Describe your involvement with other LMSs in:
 - the district
 - outside of the district
 - in the state

18. Overall assessment of LMC program:
 - Best or exemplary practices
 - Weakness areas of gaps, needs

19. What program difficulties/barriers and challenges do you expect this year and in the next two to three years?

20. Anything else you want to add or tell us?

TEACHERS INTERVIEW GUIDE

Select six to eight teachers from different grade levels and content areas who are “high” LMC users in the areas identified in the “teaching and learning” section of the LMS survey.

1. Background information on teachers:
 - Grade levels
 - Content areas
 - Years of teaching experience

2. Technology access and use:
 - Number of computers in classroom
 - Use of technology: in the classroom, computer lab, LMC
 - Integration of technology standards into curriculum
 - Teachers’ technology proficiency
 - Examples of types of technology activities teachers implement

3. Role of LMS in improving teachers’:
 - Technology proficiency
 - Integration of technology into instruction

4. Frequency of going to LMC:
 - With students
 - On own
 - Objectives of going to LMC

- 4a. When do you most often visit and use the LMC:
 - before or after lunch
 - during lunch
 - before or after the school day
 - with your class
 - when you have to prepare a lesson
 - another time

5. Teacher – LMS collaboration:

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning instructional units with LMS | Number of times per month Examples of topics Who initiates Role of LMS in activity Helpfulness of LMS Impact Benefits to teacher Benefits to students Problems or difficulties |
| Teaching collaboratively | Number of times per month |

| | |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| with LMS | <p>Examples of topics</p> <p>Who initiates</p> <p>Role of LMS in activity</p> <p>Helpfulness of LMS</p> <p>Impact</p> <p>Benefits to teacher</p> <p>Benefits to students</p> <p>Problems or difficulties</p> |
| Getting staff development from LMS | <p>Number of times and hours a month</p> <p>Individual or group basis</p> <p>Type of professional development (PD) provided</p> <p>Example of PD topics</p> <p>Usefulness of training provided</p> <p>Areas in which teacher needs PD</p> |
| LMS teaching students information skills and technology | <p>Number of times and hours a month</p> <p>Examples of content areas and topics</p> <p>Impact on students' projects, engagement, academic performance</p> |
| LMS providing reading incentive activities for students | <p>Role of LMS</p> <p>Number of students involved</p> <p>Content area(s)</p> <p>Examples of reading incentive activities</p> <p>Impact on student reading</p> |
| LMS identifying materials for instructional units teachers develop | <p>Number of times per month teacher asked for LMS assistance</p> <p>Examples of content areas and topics on which LMS assisted</p> |

6. Do students appear confident in working in the LMC?
7. Are students typically self-motivated and able to work independently, or do they need assistance to find information?
 - Roughly, what percent of your students are motivated to work independently?
8. Do students typically choose methods of working best suited to the information seeking task?
 - Roughly, what percent of your students choose appropriate methods?
9. Impact of LMC program on students'
 - Information skills
 - Research skills
 - Technology proficiency
 - Technology use
 - Reading
 - Study habits
 - Academic performance

10. If you had to describe the contribution that the LMC program is making to students' academic achievement, how would you describe it? Give examples.
11. What are the major benefits that teachers get from interaction with the LMS? Give examples.
12. What are the major benefits that students get from interacting with the LMS? Give examples.
13. What is the most important facet of the LMC program:
 - to your teaching?
 - for your students?
14. Overall assessment of LMC program:
 - Strengths
 - Weaknesses
 - Needs
15. If I told you that this was one of the best LMC's in the state, how would you substantiate it?
16. Anything else you want to tell me?

STUDENTS INTERVIEW GUIDE

Select a group of six to eight students. In elementary school, select fourth grade students. In middle school select eighth grade students. In high school select tenth grade students.

1. How often do you go to the LMC with your class in a week?
2. How often do you go to the LMC on your own in a week?
3. Do you go to the LMC before school starts?
 - Do you go to the LMC after school?
 - Do you go before, during or after lunch?
4. What are the main reasons why you go to the LMC on your own?
5. Do you go to the public library?
 - How often?
6. Describe what you do in the LMC and give examples.
7. Do you access the LMC catalog or databases from the classroom?
 - Do you access it from home?
8. For what purposes do you use a computer:
 - in school?
 - outside of school?
 - How often do you use a computer in a week?
9. Did the LMS help you learn how to:
 - Use a computer
 - Access the Internet
 - Find online resources
 - Find resources in the LMC
 - Find new information
 - Learn new programs and applications
 - What else did the LMS teach you?
10. How helpful has the LMS been to you in showing you how to:
 - Get information you need
 - Use the information to complete homework or other assignments
 - Take notes
 - Do research
 - Improve your study habits
 - Increase your interest in reading
 - Prepare for tests
 - Do well on school and state tests

11. How does the LMS contribute to your:
 - Interest in learning
 - Interest in school
 - Interest in reading
12. If you had to summarize how the LMS has helped you, what would you say?
13. What is the best thing about the LMC program?
14. What is the best thing about going to the LMC?
15. If I would tell you that your school's LMC program is one of the best programs in Wisconsin, how would you substantiate this statement?
16. Anything else you want to tell me about the LMC.

PRINCIPAL INTERVIEW GUIDE

1. Describe your school's library media program in terms of teaching and learning; information access and delivery.
2. How do you support the LMC program in your school? Give examples.
3. How do you ensure that your LMS spends a significant percent of time on teaching and learning activities rather than non-instructional activities?
4. How do you support activities such as collaborative planning and teaching between the LMS and teachers? Give examples.
5. How often do you communicate with the LMS?
 - About what do you typically communicate?
6. Principals do walk-throughs into classrooms. Do you include the LMC in your walk-throughs? What do you look for?
7. How do you think the LMC program contributes to students' academic performance?
- 7a. In your judgment, how does the LMC program contribute to students' **learning** not just academic performance?
8. How are ITLS and other academic standards integrated throughout the curriculum? Please give some examples.
9. What are the major strengths of the LMC program?
 - What are its weaknesses?
10. Many LMC programs have been subject to staff and budget cuts. What have you done to prevent cuts in your LMC program?
 - What would you do if such a situation arises?
11. Do you use LMC resources?
 - How often?
 - For what purpose?
 - Examples
12. How do you promote your LMC program in your school:
 - To teachers
 - To students
 - To parents
13. Anything else you want to add about your LMC program.