4-15-1997

Integrating library and technology skills into the curriculum of the Thomas E. Bowe Elementary School

Carol L. Todd
Rowan University

INTEGRATING LIBRARY AND TECHNOLOGY SKILLS

INTO THE CURRICULUM OF THE

THOMAS E. BOWE

ELEMENTARY

SCHOOL

by
Carol L. Todd

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree in the Graduate School
of Rowan University
May, 1997

Approved by

Professor

Date Approved April 15, 1997

ABSTRACT

Todd, Carol L. Integrating Library and Technology Skills into the Curriculum of the Thomas E. Bowe Elementary School, 1997. Thesis Advisor: Dr. Lynne Levy, School and Public Librarianship, Rowan University.

The purpose of this thesis was to develop a library curriculum for grades four through six for the Thomas E. Bowe Elementary School, Glassboro, New Jersey.

After many new additions of computer technology to the media center, such as CD-ROMs, the Internet, and an on-line catalog, as well as changes in the New Jersey Core Curriculum Standards, it was determined that the old curriculum was out-dated and in need of revision.

To determine what changes should be made in this curriculum, students and teachers were surveyed to assess their current and future needs. Several schools with successfully integrated library media programs were also visited so their programs could be seen and evaluated for possible ideas. Many books and journal articles pertaining to the topic were read for their insight and relevancy on integrating media/technology skills with the curriculum.

The curriculum guide suggests ideas for integrating library/technology skills into the school's curriculum. Increasing students' awareness of, and ability to use, technology will help to prepare them for the 21st century, as well as help to create life-long learners.

MINI-ABSTRACT

Todd, Carol L. Integrating Library and Technology Skills into the Curriculum of the Thomas E. Bowe Elementary School. 1997. Thesis Advisor: Dr. Lynne Levy, School and Public Librarianship, Rowan University

The purpose of this thesis was to develop a library curriculum for grades four through six for the Thomas E. Bowe Elementary School, Glassboro, New Jersey.

Included in the new curriculum are skills necessary to use the new technology. The curriculum also includes suggestions for incorporating these skills into the school curriculum. Increasing students' awareness of, and ability to use, technology will help prepare them for the 21st century, as well as help to create life-long learners.

ACKNOWLEDGMENTS

I would like to take this opportunity to thank my husband, John, and my children, Chris and Amy, who encouraged and supported me as I pursued my goal of a Master's Degree in School and Public Librarianship. Without their understanding, love, and patience this would never have been possible.

I would also like to thank Dr. Lynne Levy for her encouragement and assistance throughout the writing of this thesis. Her many hours of devotion to our needs was greatly appreciated.

Additional thanks goes out to Regina Pauly for her enthusiasm and words of encouragement to urge me on to get my Master's Degree.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE
Introduction

Technology is playing a major role in the media centers of many schools across the country. The school where I am the media specialist, the Thomas E. Bowe Elementary school, in Glassboro, New Jersey, has entered the technology age as well. The resulting problem with the new technology was how to incorporate this newly acquired technology into an already jam-packed curriculum. As a result of this project, I have created a new curriculum that incorporates technology into the library program, as well as integrates it with the school's core curriculum.

Increasing students' awareness of, and ability to use, technology will help to prepare them for the 21st century, as well as help to create life-long learners. The goal is for the students to see the relevance of the technology as it applies to research skills, reading, and their general classroom instruction. Studies have shown that teaching library skills in isolation has no meaning for students. As a result, students should not see the media center as just another special, but as an exciting, meaningful class that will open doors to exploration for them.

Thomas E. Bowe Elementary School

The Thomas E. Bowe Elementary School is a small school, grades four through six, with approximately 560 students, located in Glassboro, New Jersey. Forty percent of the school population qualify for basic skills instruction, with an additional 75 students classified as perceptually impaired or emotionally disturbed. Drugs, violence and abuse are everyday occurrences for many of our students. Consequently, teachers must be

creative and motivated in order to keep students in school and actively involved in their education. These students need to learn how to become critical thinkers, problem solvers, and analyzers of information. Technology, when integrated with research and reference skills, can be exciting, motivating and meaningful.

At present, the library/media curriculum at the Bowe school is the standard, out-dated curriculum of the 1980's. The school is not state-of-the-art technology-wise, but we have acquired several new Macintosh LC580's, a beginning CD-ROM collection, and an Internet connection. Full automation will occur within the next year or two. With these additions, it is hard to fit the additional technology into the curriculum.

Bowe School is also on a fixed scheduling system. This is a system where a class of students is scheduled to come into the library/media center for instruction in information skills and book selection on a regular basis, most often weekly, and provides teachers with preparation time. The school went from a flexible schedule, which allowed the media specialist and the classroom teacher time to plan and schedule together for instruction, and allowed the library to be used according to need, to a fixed schedule two years ago. This change was implemented to give the teachers additional preparation time. As a result of this fixed schedule, there is very little time for collaboration between the media specialist and the classroom teachers. This collaboration would allow the media specialist and the teacher to share the responsibility for planning both content and process goals for a unit of study. It is still possible, however, for a program to combine library/research skills with technology to enhance the school's main curriculum, and make these new skills relevant to our students.

School Visitations

In order to develop this new curriculum I wanted to visit several schools which are demonstrating excellence and innovation in their library/media programs.

The Hugh J. Boyd, Jr. Elementary School in Seaside Heights, New Jersey, is very proud of its technology program. The school is a Kindergarten through sixth grade school that has just added a beautiful new addition which includes a brand new media center. A state-of-the-art computer lab is housed in the media center. The school is completely networked and has Internet connections in every classroom. Teachers are encouraged to learn the latest technologies through networked lap-top computers. Thirty hours of computer in-service time must be achieved throughout the year in order to fulfill contractual agreements.

While I was impressed with the beauty and functionality of this school, I was disappointed by the fact that they do not have a media specialist. A part-time aide handles the students' fifteen minute per week book exchange time, replaces books on the shelves, and tends to the needs of the automated Winnebago system. The computer teacher, who is a certified media specialist, works with the computer classes, in-services teachers, and maintains the network. A literature teacher teaches library skills and introduces new trade books to the students in their classrooms. While all of this looked and sounded wonderful, I couldn't help but feel the media center was being wasted. It should have been bustling with activity; instead, it was quiet, books perfectly aligned on the shelves, not a chair out of place. Not quite what I had in mind.

Clearview Regional High School, in Mullica Hill, New Jersey, is a excellent example of a well used, technology-rich, media center. They have just completed their new addition, which also included a state-of-the-art media center. While I realize this is a high school, whose needs are quite different from an elementary school, many good ideas were gleaned from the visit.

The media specialist believes in utilizing the media center to its utmost. While I was not present while students were using the library, I could imagine every computer and work station being used; every seat occupied with students reading or doing research. The media center was an attractive, well designed space for learning.

The third school visited was the Logan Township Elementary in Swedesboro, New Jersey. This school was built six years ago with the intent of being a leader in the field of technology. It was not a disappointment. The media center is fully automated with the Winnebago system, as well as completely networked throughout. A wall of computers allow students to access information from CD-ROMs, look up books and magazines, and generate reports through word processing. An additional wall of computers in the back of the media center allow Internet access at all times. All of the computers are used continuously throughout the day.

Logan has a fixed scheduling system for grades Kindergarten through four that covers prep periods for classroom teachers. The two media specialists are able to incorporate the necessary skills needed to use the library with the technology available to the students. Grades five through eight have a flexible schedule where they use the media center to work on projects they are covering in their classroom. The media specialists work with classroom teachers to incorporate media/technology skills with the on-going curriculum. I was impressed with the ease and skill that the students exhibited while using the computers.

All three of these visits helped me to envision what I want to achieve for my own school's media curriculum. My goal is to develop a library/media program that will aid the school to achieve the goals it has set for its curriculum, as well as to achieve the New Jersey Core Curriculum Standards, and to help students understand the importance and relevance of these skills both now and into the future.

CHAPTER TWO
Literature Review

As we approach the 21st century, the roles of the Media Center and the Library Media Specialist are dramatically changing. As far back as 1988, Information Power stated that "the mission of the library media program is to ensure that students and staff are effective users of ideas and information" (American Association of School Librarians and Association for Educational Communications and Technology [AASL & AECT], p.1). Never before has this mission been more of a challenge to fulfill than it is today. Ninety percent of the world's information will reside in an electronic format by the end of the decade. This underscores the importance of changing the curriculum focus from an emphasis on knowing, to one of analysis, synthesis, and constructing personal meaning. Johnson (1995) states that "we must move away from a dependence on textbooks to a greater use of multiple resources for information" (p. 37).

Because of the influx of technology into our school library media programs we must instruct our students and teachers on technology's use and how it fits into our schools' curriculums. According to Jane Bandy Smith (1995), "a curriculum-based library media program begins with the prescribed goals and objectives of the instructional program and fits resources and activities to that framework in ways appropriate to each learner's needs" (p. 2). The goal of integrating library media skills, technology, and the curriculum is to enhance and extend classroom learning through a variety of resources and to prepare students for life-long learning and use of information sources (Smith).

"The landscape of how information handling skills are viewed and taught is changing" (Jacobsen, 1995, p. 20). This is true in school library media centers every-

where. No longer is the emphasis on how to use an index, card catalog, or other reference tool to locate information, but how to evaluate and use information that technology locates or retrieves. Bucher (1994) notes that we have moved from book cards to bar codes; card catalogs to automated on-line computers; encyclopedias and periodic indexes to on-line and CD-ROM searches; notetaking and reports to hypermedia stacks.

According to Krieser and Horton (1993), "it is more important to teach students what to do with materials than to spend energy, effort and time on locating materials" (p. 362). Rather than let technology control the library, let it enhance the library's role within the school and work with the school's curriculum (Farmer, 1996). Our mission, as stated in Information Power (AASL & AECT, 1988), is to provide resources and activities that contribute to life-long learning. One critical life-long learning skill is the ability to access information (Pappas, 1996).

Role of the Library Media Specialist

Library media specialists have a new role and must see themselves as a resource for students and teachers who need help with technology, as well as print materials (Johnson, 1995). Media specialists can also be referred to as instructional consultants or teachers, since their role involves connecting curriculum content to the appropriate resources and using a variety of computer related technologies to create and modify information relevant to the learning styles of students (Wright, 1993). Librarians, working closely with classroom teachers, must help students develop a positive image of the library. They must help students see the library as a tool to help them access current and accurate information (Barron & Berger, 1995).

The media specialist must be the catalyst for a change from the traditional library skills curriculum by combining knowledge of the school's curriculum with an understanding of the instructional and technical design process. A planned media program that supports the school's goals would enable the media specialist to demonstrate the effectiveness

of the library media program (Smith, 1995). Information Power (AASL & AECT, 1988) states that "by assuming a leadership role in the use of technology in the school, the library media specialist promotes effective use of instructional technologies and facilitates their full integration into the curriculum" (p. 10).

Technology in the Media Center

Media centers today are in the middle of a barrage of technology. This technology can help to make the media specialist's job more efficient with automation systems that manage the circulation process with speed and accuracy and provide circulation statistics on demand. Time spent on overdue notices, typing and filing catalog cards and completing inventories is greatly reduced. Collection development is enhanced by the ability to generate collection statistics and thereby identify areas of need. Automated systems save precious time and afford the library media specialist an opportunity to focus on the needs of students and teachers (Pappas, 1996). With this increased technological knowledge, students need support and guidance to use these tools intelligently (Jacobsen, 1995).

CD-ROMs and on-line databases are becoming commonplace for their research capabilities in many library media centers today and will continue to be implemented even more so in the future. Reference tools such as encyclopedias, periodic indexes, atlases, almanacs and news clipping services are all available on CD-ROM. This technology provides exciting resources for information access, problem solving, critical and creative thinking and global communication (Pappas, 1996). Students who search electronic databases today are not limited to the subject vocabulary, but rather use keyword functions to search through all the text of a database. This process enables information access with great speed and produces numerous references which shifts the emphasis from knowing information to using information (Pappas).

With the large variety of CD-ROMs available, plus the staggering amount of information available in on-line databases, it has never been as important to integrate the library media center curriculum with that of the classroom. Far from being an "extra" thing to learn, computers and their functions are a systematic and integral part of the curriculum (Jacobsen, 1995) that teach an important lifelong learning skill - the ability to access and interpret information (Pappas, 1996). Computer related technologies do not exist in isolation; however, they are part of the whole network of the school and community communications that when combined with resources in the library media center, are effective only if they are integrated into the curriculum of the school. Schools cannot afford to have expensive technologies in the school or media center if they are not a vital part of the instructional program (Wright, 1993).

Integration of the Classroom Curriculum

For years library skills were taught in isolation in a rigidly sequential manner, during a class period that was used to fill a preparation period for the classroom teacher. Little or no communication existed between the media specialist and the teacher, usually because of lack of time. Studies have shown that these skills taught out of context held little meaning for students, were deemed irrelevant, and lacked purpose. According to Jane Bandy Smith (1995), "the best way to teach information skills is by imbedding or meshing them with the classroom content" (p. 2). "Any activity of the school library media specialist," as stated by Keith Wright (1993), "needs to be integrated into the curriculum. It is past time for arguments about how and when to teach library media skills as higher order information skills; such skills are meaningful only if taught in context of actual need for that skill" (p. 39).

In order to implement an integrated curriculum, a flexible scheduling system should be in place. Studies have found that flexible scheduling is best suited for integrat-

ing the library skills program into the curriculum. Rigid scheduling limits the time students and classes are free to use the library (Willeke & Peterson, 1993).

If flexible scheduling is not an option due to limited staff and/or time constraints, a successfully integrated library media program can still be implemented. More and more library media specialists are finding ways to integrate library instruction into existing courses in a manner that makes library resources and methodology for finding them an essential and basic component of the course. Course integrated library instruction requires that the library media specialist and the classroom teacher work together closely in planning research assignments and introducing students to the library (Ormondroyd, 1996).

Information skills are the mutual responsibility of teachers and library media specialists, and must be infused into instruction across the curriculum. Students need to know how to identify a need for information; to locate, gather, and select relevant information; and to apply information to resolve an issue under question (Hubbard, 1996).

The purpose of integrating library media skills into the curriculum is to extend and enhance what is happening in each classroom. Library activities should help to address classroom events and instructional objectives. The activities should develop the learner's skill in finding and using information. Aligning library activities with specific school objectives enhances the value of library media services. Students learn through finding their own answers to questions (Smith, 1996). Library instruction that guides students through levels of information to solve a problem or shape a topic enables them to use information for learning (Hubbard, 1996). According to Wayne Moss (1990), "school library media centers exist primarily to support the curriculum. More important, school libraries provide opportunity for a variety of learners with a wide variety of learning styles to make contact with the curriculum at different points. A curriculum nurtured by strong library services should produce thoughtful, knowledgeable users" (p. 17).

Working cooperatively with teachers, library media specialists can recommend resources to be used in instruction, as well as identify appropriate points to infuse specific

information skills (Hubbard, 1996). According to Smith, (1995) "once a faculty has experienced a curriculum based program, they understand its benefits for students and they refuse going back to a traditional approach" (p. 2). As far back as 1978, J.S. Smith found the development of fourth, fifth, and sixth grade students' competence in research and study skills to be more effective when integrated with the curriculum. Students in curriculum integrated library media programs have significantly more positive attitudes about the library media center and reading than students in traditional library media programs (Kreiser & Horton, 1993). Marjorie Pappas (1996) points out that "a library supported curriculum can make students aware that unlike other pastimes which grow boring as time goes on, the enjoyment to be drawn from reading actually grows keener the longer one practices it" (p. 16).

Success in Schools

The success of integrated library media/technology skills within the curriculum relies on cooperation between the library media specialist and the classroom teacher. Much research supports this notion. Flexible scheduling is the ideal scheduling tool for allowing individual children, small groups, or the entire class to go to the media center. Flexible scheduling, along with the library media specialist's philosophy of tying information skills instruction to the curriculum are the major facilitators in the success of any media program (Solomon, 1994). As mentioned previously, however, not every school has the means to provide flexible scheduling. Accommodations can still be made to successfully integrate the library media program with the curriculum. Technology has finally provided the tools to enhance this curricular change (Pappas, 1996).

Success of Technology

The introduction of computer based tools for information access and retrieval is an integral part of the library media center's offerings. Children are introduced to encyclope-

dias on CD-ROM when looking for facts about people, places, or things (Solomon, 1994). Students must have an understanding of the subject being searched on the CD-ROM. This provides an excellent opportunity for integrating CD-ROM search skills with classroom instruction. Students can see the value of CD-ROMs and internalize the skills when they are used to meet a specific need (Baumbach, 1990). According to Pelsma, Wood, and Talab, (1990), "CD-ROM products offer a powerful aid in developing information literature" (p. 52).

Students are introduced to on-line searching when dealing with subjects that are absent from the library media center's collection or when current information is required (Solomon, 1994). Listservs are used to seek information about books and topics and to connect to authors, illustrators and poets via the World Wide Web.(McElmeel, 1996).

Many of the newer technologies provide information for students with a wide variety of learning styles that are especially useful with cooperative learning groups (Bucher, 1994). The variety of ways in which information can be accessed and manipulated gives the school library media specialist opportunities to match the technologies with the learning style, experience and skill of individual students (Wright, 1993). Technology influences curriculum and instruction by providing tools and facilitating active learning, problem solving and critical/creative thinking (Pappas, 1996).

Technology facilitates the management functions of the library media center and enables the library media specialist to focus on learners (Pappas, 1996). According to Keith Wright (1993), "the automation of circulation and/or the catalog can allow the library media specialist to provide services, discover information not previously available, and most important, better integrate school library media programs and resources into the instructional program" (p. 90). Consequently, the use of technology gives students better access to information and improves the management of library media centers (Willeke & Petersen, 1993).

The growth in the use of technology that we read about in journals is a daily part of our working world (Skeele, 1996). The ability to conduct a successful search is a skill that is becoming essential in the school library media center. It is also becoming an important part of many professions, since many businesses access databases on a daily basis (Baumbach, 1990). It is our job as teachers and media specialists to make sure our students are prepared for the future by assuring that these skills have meaning and purpose in our curriculums in order to carry the skills over into everyday life.

CHAPTER THREE
Teacher and Student Survey

Surveys were given to the teachers and students of the Thomas E. Bowe Elementary School to see how the media center was being utilized by both populations. Surveys were given to twenty six faculty members. Of the twenty six surveys given out, seventeen were returned.

Teacher Surveys

The following is a breakdown and discussion of the questions presented in the teacher survey:

Table 1

Question 1: Do you use the library media center for:

Teachers of grades	Individual students sent	Scheduled class instruction	Scheduled class research	Scheduled class circulation	Class use	Personal use
4-6	82%	100%	71%	29%	53%	82%

Bowe school has a rigid schedule in place for library use. Each class has a scheduled time for class instruction. The problem arises whereby only half of each class has library instruction per marking period. The other half is scheduled for computer instruction. Classes switch each marking period. The media center has six periods per week open for book exchange and class use. While this is really not enough time, the periods are well used as you can see by the percentage of use. The media center is frequently used by teachers for Internet use, computer time, or book selection for unit study.

Table 2

Question 2: Does the Media specialist consult with you for instructional planning?

Teachers of	Individual Teacher	Part of a team
4-6	59%	47%

Due to library classes covering teachers' prep periods, each teacher's class is seen weekly and classes cover a set library curriculum. Individual teachers meet with the media specialist to discuss what resources are available for units of study their students are working on. Occasionally, the media specialist will meet with a team of teachers to discuss upcoming units and how to allow all students access to the materials. Lack of time, as well as rigid time constraints, prohibits collaborating more.

Table 3

Question 3: In planning for instruction with your library media specialist, do you:

Teachers of grades	Have meetings	Impromptu meetings	Assist in selection & evaluation of materials	Involve LMS in instruction-al activities	Have difficulty in scheduling library	Inform LMS of assign-ments
4 - 6	6%	35%	53%	24%	18%	59%

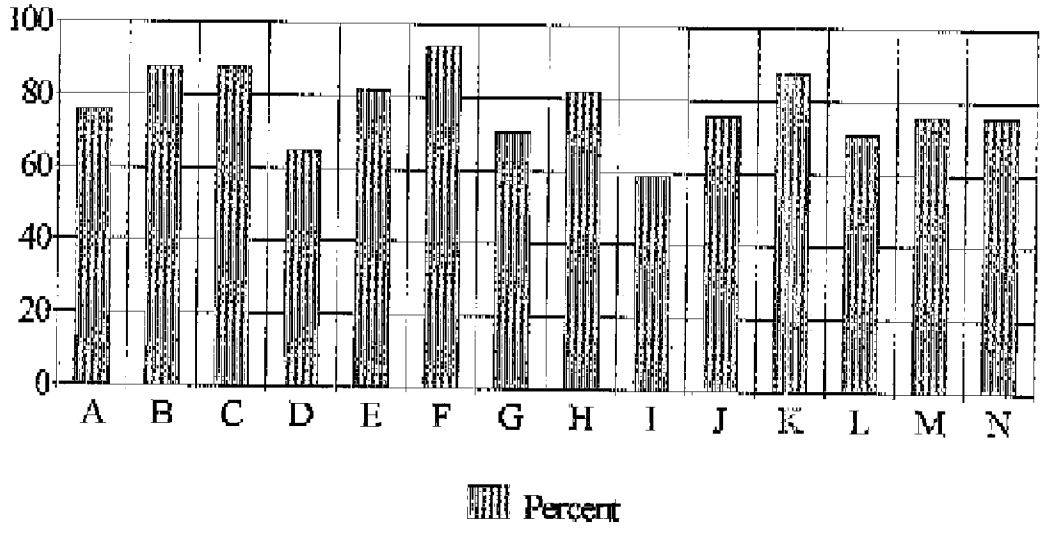
Because of rigid scheduling of classes, meeting time is limited. Some teachers do meet with the library media specialist informally to discuss units of instruction. Teachers are always given consideration when selecting materials. The media specialist keeps a running list where teachers may make requests for materials throughout the year. Several teachers do try and involve the LMS in their activities. They make use of the open time in the media center and will ask the librarian to instruct students on the use of a particular reference book or piece of software. Accommodations can usually be made when a teacher requests use of the media center. Teachers realize the small number of open peri-

ods and adjust their schedules accordingly. As the results show, over half of the teachers will make the librarian aware of what the class is studying so that books and materials can be set aside.

Question 4: Which of the following items do you consider essential for inclusion in a revised curriculum?

A. Parts of a book
B. Card catalog
C. Fiction/nonfiction
D. Dewey Decimal System
E. Almanac
F. Encyclopedia, atlas, dictionary
G. Geographical & biographical dictionaries
H. CD-ROM services
I. Internet services
J. Periodicals
K. Reading motivation
L. Biographies
M. Bibliographic citations
N. Audiovisual materials and equipment

Table 4



Generally speaking, all teachers surveyed seemed to feel that all areas were important to be included in a new, revised curriculum. Surprisingly, the Dewey Decimal System

was given one of the lowest percentages for addition into the new curriculum. Do teachers feel this is an outdated means of finding books, or is it that they do not completely understand it themselves? The other area, Internet services, was also given a fairly low percentage considering the amount of workshops being given to teachers and students. This is an area I thought would be quite high. Again, there are many teachers who are afraid of computers and the Internet and I feel this could play a role in how they view it in the classroom and media center.

Table 5

Question 5: If your library media center has a rigid schedule, are there times, other than your regularly scheduled time, when you would like to use the library as follows:

send individuals from your classroom for extra book check out or research?	38%
send small groups from your classroom for extra book checkout or research?	65%
scheduled class visits (2 or more days in a row) for research?	53%

It is evident that teachers want to use the media center on an as-needed basis. This is difficult with rigidly scheduled classes. The teachers have certain periods during the week when they can send students to the media center. These periods are not always convenient for many teachers. Accommodations are made for some teachers, but that is not always easy to do.

Teacher comments on the survey were very positive. Teachers basically feel the media center is moving forward into the age of technology. They are happy to see the computers being used with the students and feel the Internet is a welcome addition to the school.

Student Surveys

Student surveys were given out to 50% of the student population in grades four through six. This was easy to do as half of the students have media center, while the other half has computer technology. Students were encouraged to be honest and no names were put on the surveys, only grade level.

Table 6

Question 2: I have been to our library media center:

Grade	by myself	with a small group	with my class	with my grade
4th	39%	35%	100%	0%
5th	61%	52%	100%	0%
6th	61%	68%	100%	0%

As indicated by the numbers, all students come to the media center for a scheduled period of time with their class. There has never been a time since I have been the media specialist that an entire grade has been in the media center for any reason. There just isn't room to house everyone. Students tend to come singly or in small groups more often when they get into the fifth and sixth grades. Research and projects are the motivating factors for these extra trips to the media center.

Table 7

Question 3: I use our library media center:

Grade	when I need to	when I want to	only when the rest of my class does	for pleasure reading	for reports
4th	48%	21%	55%	29%	52%
5th	61%	23%	41%	29%	71%
6th	66%	45%	37%	30%	78%

Most students are able to get to the library when they need to look up information or exchange a book. They are not, however, allowed to come to the media center any time they wish. The scheduling of classes leaves very little "free" time for students to use the media center other than their regularly scheduled class time. Unfortunately, for many students class time is the only time they can come to the media center. Their lunch may interfere with the "open" time. Some students are able to take advantage of the "open" time, which allows some to come to the library and read for pleasure. They may check out a new book, stay and read, or enjoy the new magazines. Happily, a high percentage of students do use the media center for reports. The numbers increase as the grades get higher, obviously because more research is expected of fifth and sixth grade students.

Table 8

Question 4: I would use the media center more often if:

Grade	I could find the materials and information I need	the LMC had the materials I need	the LMC had the materials I like	the LMC was open longer hours	I could come during class
4th	40%	30%	43%	45%	51%
5th	36%	23%	35%	40%	55%
6th	26%	18%	46%	23%	55%

Many of the students questioned were unhappy with the books available in the media center. Their comments mentioned repeatedly that they did not like the worn out books. I must also add that the younger children were generally more favorable in their comments about the media center. They liked the books and liked coming to the media center. The fifth and sixth graders were the harshest critics. An overwhelming comment

among these students was that they found the library skills classes "boring," mainly because of the worksheets. This comment may reflect the need to move the library/media classes into the new technology.

Fifty percent or more of the students said they would use the library more if they could come during class. This shows a need for a schedule that will meet the needs of the students and teachers. A flexible schedule would allow students to use the media center at their time of need, when learning is most critical.

Another interesting comment was, "Why can't we use the computers more?" The students want to use the computers, but because of our current curriculum, and our scheduling system, it is not easy to allow the students to have free access to the computers.

It is obvious that the students want to use the new technology. It is also obvious that a new program must be designed to meet the needs of the students and faculty to incorporate new and exciting approaches to teaching these skills.

CHAPTER FOUR
Information Skills Curriculum

Curriculum Documentation

Curriculum Area: Library Media Center Information/Technology Skills

Grade Levels: Fourth through Sixth

Course Overview: The school library media center is a central resource containing print and non-print materials including electronic resources. It serves the students and professional staff of the Thomas E. Bowe Elementary School.

The purpose of the library media center is:

- to support the curriculum;
- to assist students in becoming independent and effective users of library materials;
- to enable students to become problems solvers, analyzers of information, and critical thinkers;
- to lay a foundation for the lifelong enjoyment of reading and learning.

It is imperative that information skills be taught in conjunction with the classroom curriculum. To be a successful program, the combined efforts of the classroom teacher and the media specialist are required to instruct students in techniques of information retrieval and application.

Course Objectives:

It is the desire of this program to provide:

- instruction to become discriminating users of technology sources.
- learning experiences to encourage the application of technology.
- understanding of the value of print sources, as well as non-print sources.
- a curriculum which allows for development of competency in location skills, use of reference materials, audio-visual materials, and research skills.
- students with exposure to quality literature.

Course Outline:

I. Location Skills

A. Catalog

B. Fiction and Nonfiction

C. Dewey Decimal System

D. Reference Collection

E. Biographical Sources

F. Periodicals

G. Indexes

II. Utilization

A. Evaluation and Selection Techniques

B. Research Techniques

C. Literature Appreciation

III. Technology

A. Internet

B. CD-ROM

1. Electronic Encyclopedias

2. General References

3. Magazine Indexes

C. Audiovisual Materials and Equipment

Method of Instruction

- Resource-based Instruction
- Demonstration
- Discussion
- Cooperative Group Projects
- Individual Projects
- Information location
- Researching
- Reading
- Writing

Evaluation

- Teacher Observation
- Project Evaluation
- Student Evaluation
- Classroom Teacher Evaluation and Consultation

LOCATION SKILLS

FOURTH GRADE

Catalog

The student will be able to:

- use author, title, and subject searching techniques in locating materials.
- begin a keyword search.
- use the catalog to locate sources.

Fiction and Nonfiction

The student will be able to:

- locate fiction and nonfiction books and use the nonfiction collection as a source of information.

Dewey Decimal System

The student will be able to :

- understand that the purpose of the Dewey Decimal System is to classify by subject the nonfiction materials.
- become familiar with the ten main classes.

FIFTH GRADE

Catalog

The student will be able to:

- use subject, title, author, and keyword searching techniques in locating materials

Fiction and Nonfiction

The student will be able to:

- begin identifying the various types of fiction genres: adventure, science, realistic, mystery, historical, fantasy, sports, humorous.
- use the nonfiction collection as a source of information.

Dewey Decimal System

The student will be able to:

- become familiar with the ten main classes

SIXTH GRADE

Catalog

The student will be able to:

- begin basic Boolean searching techniques.
- prepare a simple bibliography using information from the catalog.

Fiction and Nonfiction

The student will be able to:

- identify the different types of fiction.
- use the nonfiction collection as a source of information.

Dewey Decimal System

The student will be able to:

- understand the ten main classes.

LOCATION SKILLS

FOURTH GRADE

Reference Collection

The student will be able to :

- know the difference between the reference collection and the regular collection.
- use a general information encyclopedia to find information about a subject.
- use the Kid's Almanac to locate statistics and facts.

Bibliographic Sources

The student will be able to :

- define biography and autobiography.
- understand that biography is shelved alphabetically by subject's last name.

FIFTH GRADE

Reference Collection

The student will be able to :

- know that there are special subject encyclopedias.
- use guide words in the encyclopedia.
- begin using the almanac to locate statistics and other facts.

Bibliographic Sources

The student will be able to:

- define collective biography.
- locate information about a person in the collective biography collection.

Indexes

The student will be able to:

- use an encyclopedia's index in order to locate information.

SIXTH GRADE

Reference Collection

The student will be able to :

- determine the reference source most appropriate for a specific purpose.
- compare and contrast various sets of encyclopedias for purposes of research.
- locate information in reference sources.
- begin using a variety of reference sources for reports and projects.

Indexes

The student will be able to:

- use an encyclopedia's index in order to locate information.

UTILIZATION SKILLS

FOURTH GRADE

Evaluation and Selection Techniques
The student will be able to:

- select a book for a specific purpose.

Research Techniques
The student will be able to:

- locate information in a general encyclopedia.
- locate nonfiction books on a specific topic.

Literature Appreciation
The student will be able to:

- become familiar with age appropriate Newbery Award winning and ALA notable books.

FIFTH GRADE

Evaluation and Selection Techniques
The student will be able to:

- use various parts of the book to locate and document information.

Research Techniques
The student will be able to:

- research a topic using more than one source and compile the information into a short report.

Literature Appreciation
The student will be able to:

- become familiar with a Newbery Award winning book.

SIXTH GRADE

Evaluation and Selection Techniques
The student will be able to:

- begin to use discrimination in selecting books and periodicals to read.
- select books for leisure reading from a variety of genres.

Research Techniques
The student will be able to:

- present information in a written report or oral presentation.
- make a bibliography of author, title, publisher, and copyright date for research assignments with the assistance of the library media specialist.

Literature Appreciation
The student will be able to:

- read and enjoy a Newbery Award winning book.

TECHNOLOGY SKILLS

FOURTH GRADE

Internet
The student will be able to:

- access the Internet with assistance from the media specialist.

CD-ROM:
Encyclopedia
The student will be able to:

- access articles by browsing titles and using the word index with the assistance of the media specialist.

General Reference
The student will be able to:

- access information by browsing titles and word indexes with assistance .

FIFTH GRADE

Internet
The student will be able to:

- access the Internet with assistance from the media specialist.

CD-ROM:
Encyclopedia
The student will be able to:

- access articles by browsing titles and using the word index with the assistance of the media specialist.

General Reference
The student will be able to:

- access information by browsing titles and word indexes with assistance .

SIXTH GRADE

Internet
The student will be able to:

- access the Internet independently.
- conduct basic keyword searches to locate information for research purposes.

CD-ROM:
Encyclopedia
The student will be able to:

- access articles independently by using the title and word index.
- complete a word search to locate information.

General Reference
The student will be able to:

- access information by browsing titles and word indexes independently.

TECHNOLOGY SKILLS

FOURTH GRADE	FIFTH GRADE	SIXTH GRADE
	Audiovisual Materials and Equipment The student will be able to: • load a video camera and record.	Magazine Indexes The student will be able to: • begin searching the EBSCOHost magazine index by subject with assistance by the media specialist. Audiovisual Materials and Equipment The student will be able to: • create a project to be videotaped using a script and storyboard. • exhibit final product to classmates. • design a library skills lesson using the overhead projector.

Student Application Suggestions

The following lessons exemplify integration between library/technology skills and the classroom curriculum. They are merely suggestions as to what can be done to integrate library media skills with the classroom. In order to have integration between these two areas, collaboration between the classroom teacher and the media specialist is imperative.

Fourth Grade:

Science Application:

The students will work in a cooperative group to prepare a three dimensional project depicting the solar system using:

- the card catalog for selecting non-fiction books.
- CD-ROM encyclopedias.
- relative web-sites on the Internet with assistance by the media specialist.

Social Studies Application:

The students will work in cooperative groups to research the various geographical regions of New Jersey using:

- the card catalog to select appropriate non-fiction books.
- CD-ROM encyclopedias and atlases.
- the Internet with assistance from the media specialist.

Fifth Grade:

Social Studies Application:

The students will work independently to research an explorer and write a one page report using:

- biographical sources.
- non-fiction materials.
- The Internet with assistance from the media specialist.
- CD-ROM encyclopedias.

Science Applications:

Working in cooperative groups, students will research a system of the human body and give an oral presentation to the class using diagrams. This project will be accomplished using:

- non-fiction materials.
- CD-ROM encyclopedias.
- The Human Body CD-ROM.
- the Internet with assistance from the media specialist.

Sixth Grade:

Reading Application:

Each student will choose a Newbery Award winning book and prepare an oral presentation to be videotaped by another student and later presented to the fifth grade class. This will be accomplished by:

- searching the card catalog for Newbery Award winning books.
- using the word processor to prepare their written reports.
- learning to load and shoot the video camera.

Science Application:

Students will research a science fair topic using:

- the card catalog.
- CD-ROMs.
- the Internet.

Social Studies Application:

The students will prepare a three page research paper on a topic pertaining to Egypt. This will be accomplished by:

- using the card catalog to search for non-fiction books.
- using CD-ROM encyclopedias.
- using the Internet.
- using the EBSCOHost magazine index.
- preparing a bibliography.

WORKS CITED

American Association of School Libraries and Association for Educational Communications and Technology. (1988). Information power: Guidelines for school library media programs. Chicago: American Library Association.

Barron, D., & Bergen, T. J., Jr. (1992). Information power: The restructured school library for the nineties. Phi Delta Kappan, 73 (7), 521-525.

Baumbach, D. J. (1990). CD-ROM: Information at your fingertips! School Library Media Quarterly, 19, 142-148.

Bucher, K. T. (1994). Computers and technology in school library media centers. Worthington, OH: Linworth Publishing, Inc.

Farmer, L. S. J. (1996). The changing role of the school library media teacher. Teaching information literacy using electronic sources for grades K-6. Worthington, OH: Linworth Publishing, Inc.

Gould, J. (1997, January). Clearview Regional High School, Mullica Hill, New Jersey. School visitation.

Hubbard, S. (1987). Information skills for an information society: A review of research. Eric Digest. [On-line]. Available: http://www.ed.gov/databases/ERIC_Digests

Jacobsen, F. E. (1995). Roadscholar: A school librarian sets out in search of high-tech success. School Library Journal, 41, (11), 20-23.

Johnson, D. (1995). The new and improved school library: How one district planned for the future. School Library Journal, 41, (6), 36-39.

Kreiser, L., & Hortin, J. (1993). Research for the curriculum integrated library program. International Journal of Instructional Media, 20, (4), 361-367.

McElmeel, S. L. (1996). How are we using computers in the classroom? Technology Connection, 3, (5), 35-37.

Moss, W. (1990). School libraries essential to curriculum reform. Thrust, 19, 15-17.

Moyer, M. (1997, February). Logan Township Elementary School, Swedesboro, New Jersey. School visitation.

Ormondroyd, J. (1988). Course integrated library instruction. ERIC Digest [On-line]. Available: http://www.ed.gov/databases/ERIC_Digests

Ondic, P. (1996, December). Hugh J. Boyd, Jr. School, Seaside Heights, New Jersey. School visitation.

Pappas, M. (1996). A vision of school library media centers in an electronic information age. School Libraries Media Activities Monthly, 13, (2), 32-34, 38.

Pelsma, K., Wood, L., & Talab, R. S. (1990). CD-ROM and information literacy across the curriculum. Media & Methods, 27, (5), 10, 52.

Skeele, L. (1996). Teaching information literacy using electronic sources for grades K-6. Worthington, OH: Linworth Publishing, Inc.

Smith, J. B. (1995). Achieving a curriculum based library media center program. Chicago: American Library Association.

Solomon, P. (1994). Children, technology, and instruction: A case study of elementary school children using an online public access catalog (OPAC). School Library Media Quarterly, 23, 43-51.

Willeke, M., & Peterson, D. L. (1993). Improving the library media program: A school district's experience with change. School Library Media Quarterly, 23, 101-105.

Wright, K. (1993). The challenge of technology: Action strategies for the school library media specialist. Chicago: American Library Association.

REFERENCES

Buchanan, J. (1991). Flexible access library media programs. Englewood, CO: Libraries Unlimited, Inc.

Eisenberg, M. (1990). Technology and the library media program: Focus on potential and purpose. School Library Media Quarterly, 19, 139-148.

Juliano, A. & Wimberg, L. (1994). An integrated information skills curriculum guide for Galloway Township Public Schools. Unpublished master's thesis, Rowan College of New Jersey, Glassboro.

Mondowney, J. G. (1996). Licensed to learn: Driver's training for the Internet. School Library Journal, 42, (1), 32-34.

Olsen, R. (1996). When it comes to technology...the postman always thinks twice. School Library Journal, 42, (5), 18-22.

Olsen, R. & Meyer, R. (1995). Library leaders put Internet and kid's TV on D.C. agenda. School Library Journal, 41, (12), 10-11.

Simpson, C. (1996). The right filter for the wrong address: Regulating net access. Technology Connection, 3, (5), 18-19.

Symons, A. K. (1996). Intelligent life on the web and how to find it. School Library Journal, 42, (3), 106-107.

Vandergrift, K. E. (1996). Build a web site with a brain. School Library Journal, 42, (4), 26-29.

APPENDIX A

THOMAS E. BOWE ELEMENTARY SCHOOL
LIBRARY MEDIA CENTER
STUDENT SURVEY

1. I am in grade _____.

2. I have been to our library media center:
   _____by myself.
   _____with a small group.
   _____with my class.
   _____with my grade.

3. I use our library media center:
   _____when I need to.
   _____when I want to.
   _____only when the rest of my class does.
   _____for pleasure reading.
   _____for reports.

4. I would use the library media center more often if:
   _____I could find the materials and information I need.
   _____the library media center had the materials I need.
   _____the library media center had the materials I like.
   _____the library media center was open longer hours.
   _____I could come during class.

5. What I like best about our library media center is
   _____
   _____
   _____

6. What I like least about our library media center is
   _____
   _____
   _____

Buchanan, Jay. (1991). Flexible Access Library Media Programs. Englewood, Colorado: Libraries Unlimited, 34.

APPENDIX B

THOMAS E. BOWE ELEMENTARY SCHOOL
LIBRARY MEDIA CENTER
TEACHER SURVEY

I am currently working on my Master's Thesis. This survey is part of my work for the thesis. It would be so helpful if you would complete this survey and return it to me as soon as possible. Thank you.

Name (optional):_____
Grade:_____

1. Do you use the library media center for:
   ____individuals sent from your classroom for book checkout or research?
   ____scheduled class visits for instruction?
   ____scheduled class visits for research?
   ____scheduled class visits for circulation?
   ____class use (videos, guest speaker, etc.)?
   ____your own use?
   ____other? Please explain_____
   _____

2. Does the library media specialist consult with you for instructional planning as:
   ____individual teacher?
   ____part of a unit?

3. In planning for instruction with your Library Media Specialist, do you
   ____have unit meetings that your LMS may attend as necessary?
   ____have impromtu meetings for planning?
   ____assist in selection and evaluation of materials?
   ____involve the LMS in instructional activities using library media materials/technology?
   ____have difficulty in scheduling the library media center for lessons or units planned?
   ____inform the LMS of assignments that call for the use of media resources?

4. Which of the following items do you consider essential for inclusion in a revised curriculum?
   ____parts of a book?
   ____card catalog?
   ____fiction/nonfiction?

____Dewey Decimal System?
____Almanac?
____Encyclopedia, Atlas, Dictionary?
____Geographical and Biographical Dictionaries?
____CD-ROM services (Encyclopedia, Atlas, etc.)?
____Internet services?
____Periodicals (newspapers and magazines)?
____Reading motivation (such as contests, author studies and booktalks)?
____Biographies?
____Bibliography citations?
____Audiovisual materials and equipment?

5. If your library media center has a rigid schedule, are there times, other than your regularly scheduled time, when you would like to use the library as follows:
____send individuals from your classroom for extra book check out or research?
____send small groups from your classroom for extra book check out or research?
____scheduled class visits (2 or more days in a row) for research?

Comments and suggestions:_____

Buchanan, Jay. (1991). Flexible Access Library Media Programs. Englewood, Colorado: Libraries Unlimited, Inc., 34.