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**INSTRUCTIONAL LESSONS FOR ONLINE CIRCULATION  
THROUGH THE USE OF A LOCAL AREA NETWORK  
IN THE SCHOOL LIBRARY MEDIA CENTER**

by  
Michael Shea Dennison

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 21, 1997

## Abstract

Dennison, Michael S.

Instructional Lessons For Online Circulation  
Through The Use Of A Local Area Network  
In The School Library Media Center, May 1997.  
Thesis Advisor: Lynne Levy, Ed.D.  
School and Public Librarianship Program,  
Master of Arts Degree. Rowan University.

The purpose of this paper was to provide the researcher with the opportunity to develop valuable experience and knowledge regarding local area networks in school library media centers.

The researcher focused on the following areas: (1) school visitations to observe and acquire hands-on experiences on how local area networks are used in school and library media center situations, (2) an analysis of the researcher's individual library media center to conduct a comparison of the districts that school visitations took place in order to determine what is necessary to further develop a more adequate local area network, (3) the design and development of instructional lessons for students in grades three through five who will operate computers connected to the local area network which is used to run the Winnebago Circulation and Cataloging System.

The following recommendations were made: (1) install a Turbo Pentium 32 MB RAM, 1.2GB hard drive, CD-ROM drive, 133MHz Server with 800MB tape drive capability to replace the old file server, (2) install a LANtastic Network Operating System to replace the Novell Network, (3) an additional Pentium 75 16MB RAM, 1GB hard drive, 133MHz workstation for patron access, (4) replace the coaxial cable with category 5 twisted pair cable, (5) purchase the Winnebago Spectrum Program, and (6) a flexible schedule or an increased preparation time for the library media specialist.

Mini-Abstract

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## CHAPTER ONE

### Introduction

#### Technology In The Media Center

Students are entering a world of electronic information. Public libraries, community school libraries, college and university libraries, baseball and football game results, stock market reports, savings and checking accounts, and news databases accessed at home through telecommunications all use electronic access (Birmingham, 1996). According to Haynes (1993), "the most essential skills that we can give students leaving our schools today, more important than any one specific objective of English or science or math, are the skills to access selectively, to evaluate, and to use information" (p. 253). Electronic access to information can be taught to our students using three sources: an automated catalog, the Internet, and in-house electronic databases connected by a local area network, which is a method of linking computers together by wire so that the computers can share information.

With growing frequency all patrons will be challenged by the use of computers in the course of information access and retrieval. Patrons use terminals to access an automated online catalog, the Internet, locally developed information systems, word processing programs, databases, and for the use of CD-ROM databases. Shields (1996) has indicated that library patrons manage and manipulate information at stand-alone computer workstations, but would better benefit from the ability to "access research tools stored in the school's library media center" to retrieve information through the use of a local area network (p. 41).

Advances in information technology, according to Van Orden and Wilkes (1992), expand the role of computers in school library media centers and allow a more complete integration of activities occurring at the computer center, the reference desk, and other locations throughout the library media center. One such technology, the local area network

(LAN), exhibits a way to provide consistent shared access of computer-based resources to a variety of patrons.

### Local Area Networks In School Settings

The research that I pursued in this paper pertained to local area networks (LANs) located in school library media centers. The study details in more depth what a LAN does, and the benefit of a LAN in a library media center. In order to determine the benefit and how the LANs are used in media centers, I conducted media center visitations at three different school districts to experience first-hand what effect a LAN has on the library media center and the effect a LAN would have on the patrons, both student and staff.

### Holly Glen Media Center

The Holly Glen Library Media Center, where I was previously employed, is currently automated for circulation and cataloging, while patrons conduct searches at four workstations. The patron workstations are now connected by a basic LAN that was installed with the original system. According to Van Orden and Wilkes (1992), "networking has brought more patrons into the library media center environment and sparked a renewal of interest in the library" (p. 13). This is evident in the Holly Glen Library Media Center today. I see more use and excitement by patrons using the computers that are housed in the library media center.

This paper specifies the components of the Holly Glen Library Media Center LAN and develops a more extensive LAN with the addition of one patron workstation at another location adjacent to the four current workstations and a new filer server.



### Instructional Lessons

A final chapter details instructional lessons used by the educational media specialist for grades three through five. These lessons will serve as a demonstrative tool to the school students on how to operate the IBM computer workstations in the library media center. The lessons for students cover how to conduct an author, title, and subject search and how to proceed or back track while conducting a search. I have provided additional information during these lessons on what the various screen searches look like for a basis of visual familiarization for the students. Students will also receive instruction on how to conduct various search strategies during their research.

### Educational Purpose

The purpose of this thesis is to give all students a better chance of success with the automation system through instructional lessons by the media specialist prior to actual hands-on usage of the automated workstations. By providing detailed instruction to students, the automation system should be used to a greater extent, therefore, increasing media circulation. At the same time, the image of the library media center would be enhanced. This LAN, and automation system with instructional lessons as a whole, would highlight the value of the taxpayer's dollars and meet the needs of students and staff through technology for the 21st century as stated in Libraries 2000: New Jersey's Technology Plan for Libraries in the 21st Century (New Jersey State Library, 1996).

## DEFINITION OF TERMS

CD-ROM	(Compact Disc-Read Only Memory) -- A prerecorded, nonerasable disc that stores approximately 650 MB of digital data.
CPU	(Central Processing Unit) -- Houses the microprocessor which is a single chip that contains the "brains" of the computer.
File Server	The computer in a LAN that stores and distributes the files for the workstations. A high-speed, large capacity computer that acts as a central repository of data and/or application programs for the network.
Hard Disk	Non-flexible storage media.
Hardware	The parts of the computer itself (modem, printer, hard drive, keyboard).
ISDN	(Integrated Services Digital Network) -- A new technology for telephone systems that is totally digital. Computer data can be intermixed with voice communications.
LANtastic	A 10BaseT networking cable which requires significantly less RAM to operate than Novell and most older systems will function as workstations on this LAN.
LAN	(Local Area Network) -- An interlinked microcomputer system, the dimensions of which are usually less than two miles. Transmission rates are usually above one megabyte per second.
Modem	(Modulator - Demodulator) -- Modems are used to link computers through telephone lines. Modulation is the process of changing computer data into tones that can be sent through a telephone line, and demodulation is the process of changing the tones back into the computer.
Network	Connecting two or more computers and peripherals by cabling so they may exchange information and share hardware such as printers. A method of communication or a connection system that lets your computer talk with another computer or other devices.
Node	Any device or peripheral connected to the network that has a unique "address" for routing of information.
Peripheral	Hardware that is controlled by a computer such as a printer or external drive.
RAM	(Random Access Memory) -- Temporary storage on the computer's chips. It stores programs and information for processing. RAM is erased when you turn off your computer.
Workstation	Individual unit, consisting of a computer and other peripherals, used to deliver lessons or provide a work area. A workstation can be connected on a LAN that is used by students and teachers to run programs.

## CHAPTER TWO

### Review of the Literature

#### Local Area Network

A local area network, or LAN, is simply a high speed communication system for interconnecting computers located within a relatively small geographic area such as in a school computer lab, the library media center, administrative and/or secretarial office, department or school (Jones, 1996). According to Barron (1995), the computers connected to a LAN are usually within the same room or building. In some cases, a LAN might be distributed among several buildings, such as on a university or college campus. Rarely are LAN computers more than one or two miles apart.

Scheib (1993) further explains that a local area network links computers in a computer configuration. This configuration will allow multiple computers cabled together to "communicate with each other and share resources facilitating communication among patrons who are now able to share hardware, software, and data resources on the LAN. Each computer on the network is called a node. A node can be installed as a file server or as a workstation" (p. 22). The components of a LAN, as listed by Kinnaman (1991), include computers, a file server, cabling, a network interface with each computer, and network software. The LAN will allow the fast transfer of information between computers and peripherals on the network.

The LAN runs the software that allows the entire system to operate. The network software allows shared access from the workstations to the server's files, which might include data or software programs, such as word processing and database packages. Shared access can, as in the case of many software packages, include simultaneous access by multiple users, but can also be limited to shared access, one user at a time. A patron using one of these workstations can use the programs on the hard drive of the file server as easily as if the files were stored on a drive in the patron's workstation.

The size, physical layout, cost and appropriate applications of LANs vary widely. LANs are described according to topology, protocol, cabling types, speed, and operating systems.

### File Server

Among the computers on a LAN, most are workstations, or nodes, and one or more is designated to function as a file server. A file server usually contains a large hard disk storing files and programs to which other patrons on the network need access. It is usually a dedicated computer fitted with a fast microprocessor, increased RAM, and large, fast hard disks to improve its versatility and responsiveness. A file server provides services to the other workstations on the network. The workstations request services from the file server. The file server, workstations, and related peripherals which are part of the system are connected together using some form of cabling or optical fibers. According to Barron (1995), the file server or another similar computer may also control one or more printers. If these printers are accessible by everyone using the LAN, the computer that runs the printers is called a printer server.

### LANs In The Media Center

School boards want to see appropriate use of materials in conjunction with the school curriculum as well as an overall increase in the use of media by students and staff. For many library media specialists, budgets have continued to decline. School boards and administrators are demanding justification of funds spent within the library media center as well as requiring the media specialist to detail the benefits of specific materials purchased. Media specialists could save the school and district money in the long run by making joint purchases of materials and resource sharing through the use of a local area network.

One example of resource sharing would be the use of interlibrary loan materials. One of the responsibilities of the library media specialist is to provide greater access of materials to patrons. Interlibrary loans for patrons throughout a district or county would eliminate the need to purchase duplicate materials, allowing a greater variety of media to be purchased.

Van Orden and Wilkes (1992) state that in a library media center's online public access catalog or at the computer center, a LAN improves the quality and efficiency of software circulation and provides a common interface to the most commonly used software packages. Daly (1994) adds that the automated library media center should have its own local area network and software "designed to permit students to search more efficiently for materials, to learn instantaneously which books are available for borrowing, and to print out lists of suitable resources" (p. 11). The necessity of a LAN in the library media center is best reflected in the following statement by Jones (1996):

Library media specialists have the responsibility for organizing access to information, teaching the necessary information literacy skills, and providing consultation to teachers and other staff members on how to use the vast quantities of information available to create and present new knowledge. The learning environment that evolves goes far beyond traditional technology and information for instruction and far beyond the traditional role of the school library as a warehouse of resources. It places educational technology, the use of the information as a strategic learning and working resource, and the school library at the heart of a knowledge building community (p. 120).

According to Van Orden and Wilkes (1992), several reasons support why local area networks are essential to the library media center. The initial reason would be to "provide patrons with greater access to resources" (p. 37). Van Orden cited this reason as the chief benefit of networking. One such example is found at the Clear View Elementary School in California. Axelson (1996) states that the school "has a LAN linking eight to ten computers in all twenty classrooms and five center rooms. From their classrooms, students can search the library and have books delivered" (p. 52).

Media specialists also become isolated within individual library media centers. Networking would decrease some of the isolation while increasing the opportunity for

media specialist to communicate with other media specialists within the district or staff throughout the building. According to McElmeel (1996) the LAN connected to the automated circulation and catalog system would allow media specialists to "interact with more patrons; assisting children in locating materials and recommending titles. It permits more time to plan with teachers and creates the ability to interact with any patron who uses the library media center" (p. 7).

Space within the library media center can be limited due to barriers in crowded schools where classes are overtaking library space and where the offices or audiovisual closets of media centers are being used as skill rooms or as offices by other staff. The use of a LAN between computers within the school building can save space and can connect the library media center to the computer lab and individual classroom computers by accessing the library media center's file server, allowing patrons to conduct online research of the automated catalog system from other locations (Van Orden and Wilkes, 1992).

A LAN can benefit library media specialists in several important ways. Initially, there will no longer be the need for individual program or data disks, while at the same time, the worry and task of loading, formatting and cataloging disks for each patron workstation is eliminated through the use of a local area network (Kinnaman, 1991). The image of the school library media center improves or is enhanced with the new technology and greater benefits are offered to patrons. KJasing (1991) believes that a LAN will make an "architectural statement that speaks to the personnel and the community it serves. The library media center facility must accommodate the ongoing change in the curriculum, staffing patterns, and available resources and technologies" (p. 42). This will be a positive message that says the environment in which learning takes place is important. Van Orden and Wilkes (1992) state that there is an increase in standardization for the library media specialist by using a LAN to connect the automated online catalog and other equipment such as CD-ROM computers. What is evident here is that a LAN will also permit the sharing of equipment for patron use which proves to be a cost benefit for the library media center program.

School library media centers have an important role to play in information networks. The library media centers have unique collections that are useful to all patrons within the given community. School library media specialists need to work with public and university librarians to develop networks that will benefit all patrons. Networking, according to Van Orden and Wilkes (1992), has the potential to create library media centers as “libraries without walls” (p. 7). In the study conducted by Van Orden and Wilkes (1992) one library media specialist stated that at their media center they could now “offer courses, backed by materials never before available. Online searching would be useless without Inter-Library Loan services provided. We serve an academic population and can prepare students for college more easily now. For a rural school library media center, networks removed isolation and expanded resources” (p. 16).

#### Networking Purposes

Scheib (1993) provides an example of the importance of networking. “Networking the CD-ROM periodicals index which is often-used and in high-demand may indeed eliminate the long line at a stand-alone computer system” (p. 22). The elimination of lines at a computer center could very well be an initial reason to develop a LAN. However, the library media specialist needs to determine whether eliminating long lines in a library media center is an appropriate reason for networking. A second purpose to develop a LAN is to “increase use of periodicals to which the media center currently subscribe by providing electronic access” to their contents for more than one patron. Another reason to develop a LAN would be to network the library media center’s online catalog because other nearby libraries have done so and assures that your library is not left behind in the technology revolution, but this is not the only reason for networking as well. The most significant purpose to develop a LAN, according to Scheib (1993), is to “increase the circulation of the library media center’s collection by providing electronic access to it by multiple patrons” (p. 22).

Libraries or school boards, administrators or directors will buy into this purpose of increasing circulation because they will see that the books and other media they are buying will be used by a greater number of patrons. What library media specialists have found from experience is that libraries or school boards really don't want to know what educational or service benefits patrons will see. Therefore, the purpose should always be curriculum-driven or patron-needs-driven.

It is also important to never forget that patrons are not just students. Teachers and school or library staff may have needs for networked software such as word processors, databases, spreadsheets, courseware, gradebooks and the online circulation records that may be appropriately added to a network in the library media center for maximum access. Not only will the people sitting on designated boards allocating funds see a great benefit for their dollars spent, but these groups or individuals will come to see the library media center as helping to meet their needs as well, therefore gaining very valuable supporters for your library media center.

The LAN is also able to assist with automatic inventory of all hardware attached to it, making it easy to keep track of the computer equipment in the school. When appropriate software is used, tracking student progress through instructional programs can be accomplished through the computer on the teacher's desk. Students or staff can print out bibliographies using other grade level or department hardware then bring it to the library media center to check out materials (Haynes, 1993).

#### Advantages of a Local Area Network to Teachers and Students

A LAN can benefit teachers and students. The value of a LAN to teachers includes the ability to provide special attention to some students while other individuals work independently (Daly, 1994). Jones (1996) states that the most significant benefit of a LAN for educators is that they now have a "vehicle for improving learning enabling teachers to engage students in an interactive learning environment that covers the spectrum from basic



skills development to complex real world problem solving” (p. 119). Teachers use LANs most extensively for instructional purposes and, just as the media specialists or computer teacher, they no longer have to worry about loading and formatting disks for each student workstation. Van Orden and Wilkes (1992) continue by stating that “elementary school teachers involved in whole language programs benefited from interlibrary loans and science teachers encourage students to use networking when doing science projects” (p. 11).

Students using networked computers and peripherals will see the greatest effect on the extent and variety of their computer experiences (Jones, 1996). A LAN would allow students to interact with a computerized system to prepare them for the future. What is extremely important for students is the preservation of user independence by being “more responsible for his or her learning. Each student on the network is free to carry out individual computing activities, such as computer-assisted instruction, word processing, spreadsheet analysis, and use of the automated online catalog without affecting or being affected by others” (Jones, 1996, p. 119). Here students can have the capability to access different programs or to utilize one specific program that will meet their individual needs when they need it. Networking, according to Van Orden and Wilkes (1992), “offers the greatest amount of student computer access time at the lowest cost per students hour. The rationale is that a networked classroom computer lab allows students to have more time working on their assignments while teachers are able to work individually with students” (p. 10).

For any patron or user of a LAN, the capability is created “to relate electronic searches to local holdings through a networked, automated catalog and integrated circulation system” (Haynes, 1993, p. 253). There is better management of the computer resources connected to the LAN, while students, teachers and the library media specialist are offered the opportunity to work at their own individual pace. LANs permit computers connected to it to share files or data and process information. This means that a word processing task started by one person can be finished by another person at another location on the LAN. When compared to alternative options, a LAN offers a more rapid method of

sharing and expediting files. For example, without a LAN, files are shared by copying them to floppy disks, then carrying the disks from one computer to another. This rapidly becomes time consuming when two or three computers are involved. What must also be considered here is the fact that CD-ROM programs do not have the ability to be copied for use in other workstations, rather, the purchase of additional CD-ROMs becomes necessary unless a local area network is developed.

#### Advantages of a Local Area Network

The educational applications offered by LAN computers have now become an integral component of the daily lives of many teachers and students. Teachers are now no longer responsible for managing and upgrading instructional software and tracking students' computer activities since this task is done by the computer teacher, technician, or library media specialist. A LAN makes it possible for all software to be centralized on a designated file server so that a single license for a specified number of patrons can be purchased for each piece of software. Most LAN software licenses specify a maximum number of concurrent patrons. This is usually smaller than the total number of workstations that are connected to the LAN because not all workstations use the same software at the same time. Without a LAN, licensing issues are far more complex to manage for the library media specialist, computer teacher, or technician as copies of a program become distributed throughout a school.

Although the initial investment in a school LAN may be high, the operation of a well-used, properly designed LAN consistently costs less over a period of time than the operation of a group of individual computers because of the centralization of software and management. A simple example provided by Barron (1995) illustrates the relative efficiency of a LAN:

Assume that twenty-five independent stand-alone computers in a school have all been equipped with a popular math tutorial such as Treasure Math Storm. This tutorial program is designed to keep track of student progress so that when a student returns to continue a lesson, the computer can pick up where the student left off a day earlier. Because the computers are not interconnected, each student is assigned to a specific computer that stores his or her records on its hard drive. A problem arises when two students assigned to the same computer want to use it at the same time. Even if an adjacent computer is available, neither student can switch to it because it does not have the appropriate records on it. Now consider what happens when an improved version of the program arrives. Let's assume that even though the instructions for installing the new version are clear and direct, it still requires thirty minutes to install the new software. Unfortunately, this applies to each of the twenty-five student computers. This situation represents one of the most common problems with stand-alone computers; it takes more time to properly maintain the software. In this case, it would take an extra twelve hours just to install the new software on those computers. With a LAN and a LAN version math tutorial, a different scenario unfolds. Because all student records are stored on the file server, a student can work at any available LAN computer. The LAN software keeps track of who is working and on what computer. When a new version of the software arrives, a teacher or media specialist might spend approximately half an hour loading the new software into the file server. After that, all the workstations can use the new software (p. 166).

Additional potential benefits of a local area network include reduced costs of software since the necessity of purchasing multiple copies of software would be eliminated. This is a significant issue for library media specialists because school staff tend to bring in software from home or other locations and according to Barron (1995), "LANs allow a control of software against pirating because all application software has controlled access. It is even possible to install diskless workstations that make it impossible to copy programs or to infect the system with computer viruses" (p. 183). Since multiple copies of software for stand alone computers would no longer be necessary a greater availability of software resources can be developed by purchasing new titles to support the curriculum.

Management of the computer resources would become more productive and less time consuming for the library media specialist. For example, software is easy to update or change because only one copy of each program would now exist on the file server. If a revised version of a program arrived, only the file server copy would need to be updated. All workstations use that single copy of the software.

LANs offer a great deal of efficiency through connectivity. The peripherals, such as printers, hard disks, and modems, can be shared using a LAN; therefore, saving additional funds by eliminating the additional equipment necessary for stand alone computer centers. All workstations on a LAN can share the hardware, software and data information resources of the LAN.

## CHAPTER THREE

### School Visitations

#### Logan Township School District

#### Grades K - 8

##### System Equipment

The computer system hardware at Logan Township consists of a Token Ring Network with three Model 90 Servers and one Model 95 Server connected through a Novell Network ICLAS system to over one hundred and sixty Model 55, 386 or 486 IBM machines, dedicated to student and staff use. Eight traveling labs are available consisting of three machines each. Hardware is distributed as two permanent lab situations of approximately twenty-five machines each, with a minimum of one computer per classroom, and six classrooms containing four or more computers, with an additional twelve machines available in the media center. All clerical and managerial stations have available one or more computers.

##### Major Software Systems

- Systems 3000: Payroll, budget, and personnel management for administrative offices.
- Columbia: This system handles attendance, scheduling, discipline tracking, grading, student records and transportation.
- Winnebago: Circulation and Catalog systems for the media center. The media center also features Grolier's Encyclopedia, Encarta, World Book CD-ROM programs, and all networked educational software.
- Two Boca 14,4 modems are connected to stand-alone stations in the media center

with software enabling connections to NJ Link, America Online, and the Rowan College Saturn Internet server. Additional Boca modems are installed in Computer Lab 234 and in the Board Office. All are linked to direct phone lines. Additional phone lines are available in the media center.

- WICAT: An Integrated Learning System networked to all stations.
- Edunetics: Science Integrated Learning System available at four workstations in each grade five to eight.

### Curriculum Software and Instruction

Major pieces include Microsoft Works, Express Publisher, Linkway Live, Excelsior Grade, Excelsior Quiz, LanSchool, Lego Logo, as well as over fifty software packages appropriate to virtually every academic area. Major academic use includes reading, Language Arts, and Mathematics instruction on the WICAT ILS, as well as other more limited pieces such as the primary level Cat 'N Mouse, or Children's Writing and Publishing. Social Studies has available PC Globe, Dimensions, Cross Country, and the popular "Where in the World/USA is Carmen SanDiego". The Edunetics Interactive Science Systems is utilized in grades five to eight with sixteen stations in four classrooms. Some interdisciplinary units are underway, notably in sixth grade, based in Science and Social Studies. The eighth grade classes are currently working on a multidisciplinary project about Washington D.C. which incorporates research, language arts, social studies, and technology education.

The Computer lab concentrates instruction on word processing, data base, and spreadsheet applications as well as Express Publisher and Linkway Live, an interactive presentation piece.

In the Arts and Technology, Lego Logo and Kidpix are available and these areas also utilize word processing and research available from the media center, particularly for interdisciplinary units in educational technology.

The mainstays of the Media Center use include the Winnebago Online Catalog and

Circulation system, and the Grolier's Multimedia Encyclopedia. These are supplemented by CD-ROM Encarta research bank and a modem linked to research and limited Internet availability.

### Instruction

Grades five to eight receive a quarter course (approximately 44 days, 45 minutes of instructional time) in word processing, database, spreadsheets, multimedia, and communications. In addition, all students receive at least one 30 minute period of WICAT instruction per week with Basic Skills students receiving additional time as prescribed by their remedial program.

Grades one to four receive one 30 minute instructional period per week in the computer lab for various computer skills. Other instruction is integrated throughout the content areas. Instruction in the use of media center system is handled through the media center curriculum time held in the media center at the twelve workstations or in Computer lab 234.

### Additional Media Center Equipment and Resources

A Reader's Index for online searching of periodicals is currently available for patrons. The Discovery Channel and Accelerated Reader will be available by the end of the year and the media center will link to Sojourn and the Logan Public Library in the future.

### Technology Staff

- 2 full-time media specialists
- 1 full-time computer teacher
- 1 full-time computer technology coordinator
- 1 full-time computer technician

## Woodstown-Pilesgrove Regional School District

Grades K - 12

### System Equipment

The computer system hardware at Woodstown Middle (5-8) and Woodstown High School (9-12) consists of Ethernet and AppleShare Networks. The bus topology cable network is linked from hub to hub by fiber optic cable and category five twisted pair wire is run to the individual rooms housing computers. The Mary Shoemaker Elementary School (K-4) in Woodstown has a Token Ring Network that is outdated. The administration is currently looking to put in a new network. The servers at the high school and middle school are all Macintosh systems which are housed in a centralized computer center for security purposes. The high school has Power Macintosh and IBM computers for administrative and student use with some existing Macintosh LCII systems for students and staff to use as well. The middle school uses Power PC's, Macintosh LC 520, 550 and 580 computer systems for both administration and students. The library media center for the high school and middle school (these two areas share the same room, but have separate collections and computers) use Mac Plus computers. The high school media center has six Mac Plus computers. The high school has four computer labs. There are two application and programming labs that house thirty Mac PowerPC's each, one writing lab that also uses twenty-four Mac PowerPC's, and one business lab that houses twenty-six IBM computers. The middle school has a Macintosh lab consisting of twenty-nine computers and there are no traveling labs available within the district. Hardware is distributed to each classroom as well. The high school uses the computer labs for class instruction and individual classrooms have original Macintosh computers. The middle school classrooms have a minimum of one printer and four computers per classroom.



### Major Software Systems

- IBM Programs: Payroll, budget, and personnel management for administrative offices.
- ClarisWorks: This program is used to handle discipline tracking.
- MacSchool: Tracks students grades and attendance.
- Computer Curriculum Corporation (CCC): SuccessMaker. An integrated learning system.
- Alexandria by COMPanion Corp.: Circulation and Catalog systems for the media centers. The media center also features Grolier, Discovering Author's, SIRS, Infotrac, and Encarta CD-ROM programs, and all networked educational software.
- Four Zoom v.32bis modems at the high school are 28.8 speed, two modems at the middle school which are 14.4 and 28.8 speeds. The elementary school has five modems. The district online services are provided from Salem Community College. Through a county wide collaboration the county schools obtained a five year grant so that all the schools can connect onto the Internet. All of the modems are connected to dedicated phone lines.
- Integrated Services Digital Network (ISDN Line): High school and middle school connect to this line.

### Curriculum Software and Instruction

Major pieces include Logo Plus 2.0, ClarisWorks 4.0, Print Shop Deluxe, Tesselmania, Divide and Conquer, Grolier and Encarta CD-ROM Encyclopedias, Hyperstudio, SIRS (Social Issues Resources Series), and numerous software packages appropriate to virtually every academic area. Major academic areas using specific software include English, social studies, science, business, the media center, and technology. The

computer lab concentrates instruction on word processing, database, and spreadsheet applications.

The mainstays of the Media Center are Macintosh computers with one seven CD-ROM tower which operate the Alexandria Online Catalog and Circulation system, SIRS, and the various CD-ROM programs available. These are supplemented by other software programs and a modem linked to conduct research through limited Internet availability. The media center file server is set to conduct an automatic system backup each evening.

### Instruction

Grades five to eight receive a quarter course in the computer lab on word processing, database, spread sheets, multimedia, and communications. The high school students receive computer instruction all year long.

The high school media specialist, who operates on an open schedule, uses the computer writing lab to provide incoming freshman with an orientation class on the Alexandria Online Circulation and Cataloging system. The media specialist feels this method of instruction is necessary for the students so that each pupil has his or her own terminal to learn the system by hands-on experience. The network links the writing lab to the media center allowing students to have access to the media center's records. This permits students or staff to conduct research, view the media collection, and reserve books prior to visiting the media center.

### Additional Media Center Equipment and Resources

The high school media specialist is also responsible for the television and broadcast production throughout the school. The media center also has Channel One and regular satellite dish programming available for the staff to incorporate into their lessons.

### Technology Staff

- 1 full-time media specialist in each school
- 1 full-time individual serving as the middle school computer teacher, coordinator, technician, and district Internet liaison
- 1 full-time individual serving as the high school computer teacher / technician and district computer coordinator
- 1 full-time individual serving as a high school computer teacher / technician

## Delsea Regional High School

Grades 9 - 12

### System Equipment

The computer system hardware at Delsea Regional High School consists of an Ethernet Network which runs Novell 4.1. The star configuration network is linked from hub to hub by a fiber optic cable serving as the campus backbone and category 5 twisted pair wire is run to the individual rooms housing computers. The Macintosh labs are not networked at this time, but will be in the near future. Hardware is distributed to nine permanent lab situations of approximately twenty-five machines each. There is a minimum of one computer per classroom with four of these classrooms containing four or more computers. There are also fourteen machines available in the media center computer lab and an additional five machines in the media center for OPAC services. The Science Department contains Power Macintosh Computers and the remaining computer labs contain Zenith IBM PC compatible machines or Pentium 133 multimedia machines. The two file servers are housed in a central location for security purposes. All clerical and managerial stations have available one or more computers, but are not integrated at this time.

### Major Software Systems

- AS400: A proprietary account with the EMC Corporation. This provides a source to maintain the payroll, budget, and personnel management for administrative offices. This system also handles attendance, scheduling, discipline tracking, grading, student records, and transportation.
- Follett: Circulation and Catalog systems for the media center. The media center also features Grolier's Encyclopedia, Encarta, World Book CD-ROM programs, and all networked educational software.

- Modems are connected to computers in the media center and various computer labs. The Internet provider has not been determined at this time; however, the school district is looking at Bell Atlantic. There is also a possibility that the district will link with the Gloucester County Library to tie into their Internet provider for frame relay access. All modems will be linked to direct phone lines with additional phone lines available in the media center.

### Curriculum Software and Instruction

Major pieces include Word Perfect 7.0, KDP for keyboarding skills, Encarta, Borland Database, Microsoft Works, CCC (Computer Curriculum Corporation) for basic skills, Print Shop Deluxe, Mathematica, Math Track, Grade Quick for teachers to keep track of student grades, Microsoft Word, Correll Draw 5.0, and Turbo Pascal, as well as other software packages appropriate to virtually every academic area. Major academic use includes Language Arts, Mathematics, Science, and Guidance which uses a program called PC SIDs which provides college searches for seniors and expands on careers searches.

The Computer lab concentrates instruction on word processing, database, and spreadsheet applications, Lotus 1,2,3, as well as other interactive software.

The mainstays of the Media Center use include the Follett Online Catalog and Circulation system, and the Encarta CD-ROM Multimedia Encyclopedia. The media center computer lab is linked into the school network for access to other software programs, and by the close of the 1996-1997 school year, patrons will have access to the Internet for research capabilities. The English Department uses the media center computer lab often to provide their students with additional time to utilize networked software for research and to conduct word processing for papers or reports.

### Instruction

Grades nine to twelve receive semester or year long courses in computers to learn word processing, database, spreadsheets, multimedia, and communications. Some of the computer courses offer 2.5 credits towards graduation requirements. In addition, all students receive related computer skills in almost all other academic areas since computer technology is integrated into the school curriculum.

### Additional Media Center Equipment and Resources

The media center was recently built and opened in September 1996. Resources include SOJOURN for interlibrary loan services and patron access to microfiche for periodicals. The media specialists are evaluating the possibilities for adding additional resources in order to keep the media center the focal point of the school and up-to-date at all times.

### Technology Staff

- 2 full-time media specialists
- 1 full-time computer teacher
- 1 full-time computer technology coordinator
- 1 full-time computer technician

## CHAPTER FOUR

### Holly Glen Elementary School

#### Grades K - 5

#### System Equipment

The network cabling at Holly Glen Elementary consists of a Token Ring Network connected by coaxial cabling. The computer system hardware on the LAN consists of one 486 12 MB RAM, CD-ROM drive, Server/Station with tape drive capability for backup connected through a Novell Network Operating System. There are three Model 486 IBM machines and one Model 486 IBM machine with a single CD-ROM tower serving as patron workstations throughout the library media center. There are no traveling labs available in the building. Additional hardware is distributed to one permanent computer lab with twenty-five Power Macintosh 5260 machines and one system server. The library media center and computer lab have different operating systems and are not connected by a network system at this time. There are eight stand-alone Macintosh computers throughout the building for classroom use with two housed in the library media center. The two computers in the library media center are Macintosh LC580 and Power Macintosh 5260 machines. The library media center also has one Pentium 75 16 MB RAM used for clerical duties and record keeping by the media specialist. This operating system will, at some point, be used for a Union Catalog to conduct inter-library loans with SOJOURN throughout the district and county.

#### Major Software Systems of the Library Media Center

- Winnebago: Circulation and Catalog systems for the media center. The media center also features Grolier's and Encarta Encyclopedia CD-ROM programs with World Book being added during the 1997-1998 school year. The

library media center also has twelve additional CD-ROM programs such as Time, Rainforest, The Animals, Hyperstudio, and MacMillan Dictionary. The Winnebago Online Circulation / Cataloging System has the potential to store numerous data bases, but there are no funds at this time to purchase this media. At this time there is no networked educational software since the building is not wired for a network and due to the fact the building operates two separate operating systems.

- \* One 14.4 FAXMODEM connected to the library media center's Pentium 75 system awaiting a phone line ( one that is a dedicated line as well ), and an online service such as America Online, AT & T, Bell Atlantic, or Prodigy.

#### Curriculum Software and Instruction from the Library Media Center

Major pieces include Microsoft Word 6.0, ClarisWorks 4.0 and Print Shop Deluxe. Major academic areas using this software include all subjects on a kindergarten through five level. The primary uses of the software used within the library media center are lesson plans, newsletters, notices, banners, graphics, and other word processing, database, or spreadsheet activities. At this time, the staff uses the Macintosh operating systems about 98% of the time and the remaining 2% is student usage. The reasoning for this is that the library media center is on a fixed schedule and used only for academic instruction of library skills. The students do not have a teacher to guide them with their use of the Macintosh computer skills. The students do use the stand-alone Macintosh computers periodically to conduct research related to social studies or science topics.

The computer lab concentrates instruction on word processing, data base, and spreadsheet applications using ClarisWorks 4.0. The computer lab has additional software for instructional use such as Kidpix and other programs. However, the computer lab is also on a fixed schedule and is not open for student or staff use other than instructional lessons taught by the computer teacher.



### Instruction

Throughout the school year, grades kindergarten to five receive computer instruction within the lab by the computer teacher for 45 minutes of instructional time per week in word processing, database, spreadsheets, multimedia, graphics, and communications.

Grades one to five receive one 45 minute instructional period per week in the library media center. These skills are in conjunction with the library curriculum and any form of computer instruction is not included. However, as the school media specialist, I do teach an orientation class to grades three through five students on the Winnebago Online Catalog System and when time permits assist students who wish to use the Macintosh computers housed in the media center.

Other instruction is integrated throughout the grade level areas by classroom teachers.

### Additional Media Center Equipment and Resources

At this time there are no additional resources other than the Gloucester County Audio-Visual Association. This is a service that conducts county wide inter-library loan of videocassettes, laserdiscs and film.

### Technology Staff

- 1 full-time individual serving as the media specialist, instructional teacher of library skills, building technology coordinator, and technician
- 1 full-time computer teacher

## CHAPTER FIVE

### Instructional Lessons for Patrons Using the LAN

#### Third Grade

**Objective:** To help the learner develop an awareness of online searching and identify three types of searches.

The following lesson provides the instructor with materials that can be reproduced as transparencies for instructional purposes. The instructor can develop activities and discussions for students on the familiarization of what the various search screens look like, how to use a computerized card catalog, and to conduct three types of searches.

- I. Questions
  - A. Why use the online catalog?
  - B. What can I find in the online catalog?
- II. Three types of online searches / screen cards
  - A. Author
  - B. Subject
  - C. Title
- III. Anatomy of a card
- IV. Winnebago Computerized Card Catalog
  - A. Three types of search screens
- V. Display information
  - A. Material status and Call numbers
  - B. Author and Title
- VI. Four material types
- VII. Keyboard
  - A. Keys needed for operation

## **CATALOG SEARCHING**

### **Online:**

- **Author**
- **Subject**
- **Title**

**Online Screen Card**  
**Author**

**E**                    **Seuss, Dr.**  
**SEU**                    **The butter battle book / Illustrated by**  
**Dr. Seuss. --**  
**New York: Random House, c1984.**  
**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle,**  
**the Yooks and the Zooks develop more and more**  
**sophisticated weaponry as the attempt to outdo each**  
**other.**

**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

**Online Screen Card**  
**Subject**

**WAR -- FICTION**

**E**            **Seuss, Dr.**  
**SEU**            **The butter battle book / Illustrated by**  
**Dr. Seuss. --**  
**New York: Random House, c1984.**  
**42 p. : illus. ; 28 cm.**

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**1. War -- Fiction. 2. Stories in rhyme.**  
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Title

**The butter battle book.**

**E**            **Seuss, Dr.**  
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**42 p. : illus. ; 28 cm.**

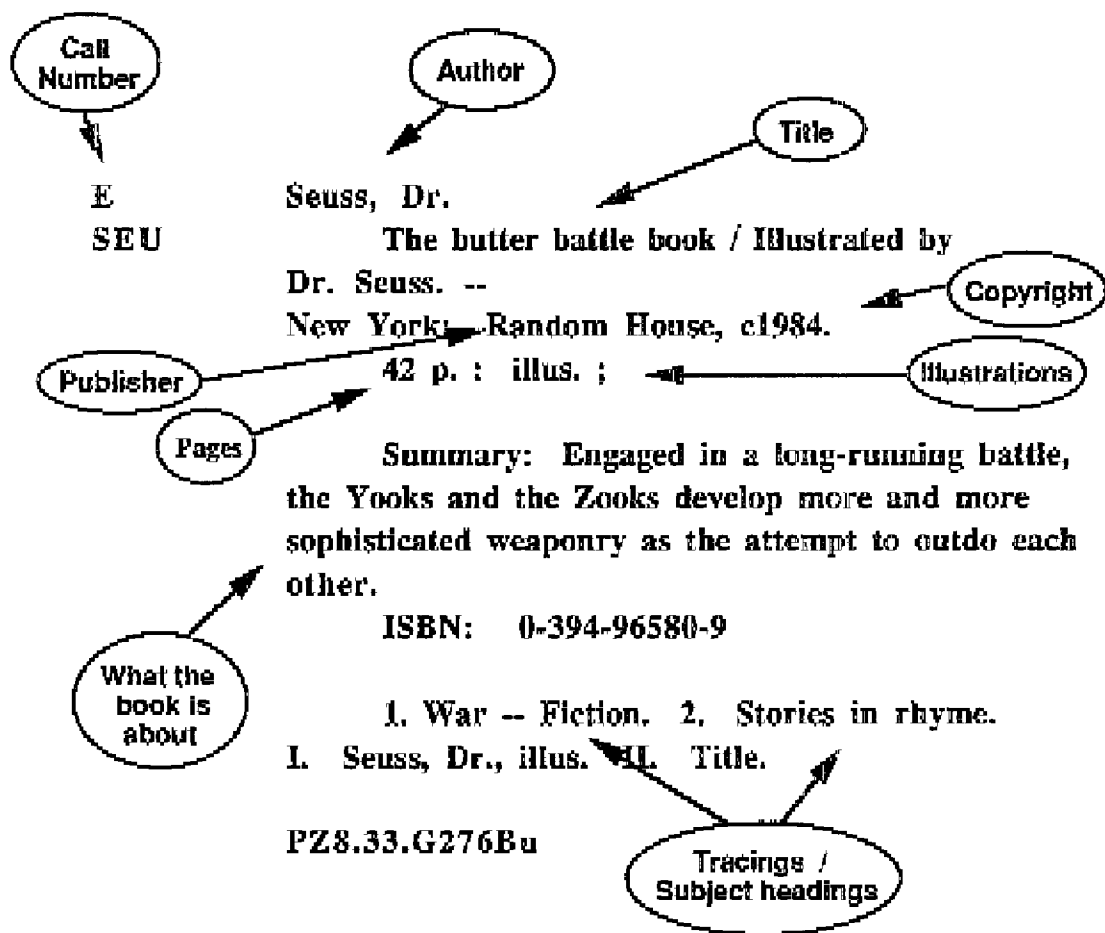
**Summary:** Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.

**ISBN: 0-394-96580-9**

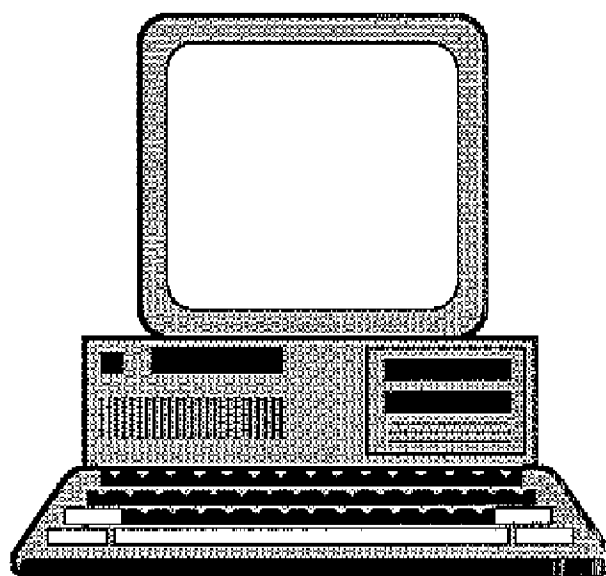
**I. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

## Anatomy of a Card



## The Winnebago Computerized Catalog



Grade 3: transparency 6 of 17



**Computer Screen**  
**Author**

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Author: \_\_\_\_\_

Search

**Commands**

- Help
- Browse Subjects
- Clear Screen
- Search by Title  
or Subject
- Key Word Catalog
- Select Language

Computer Screen  
Subject

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Subject: \_\_\_\_\_

Search

**Commands**

- Help
- Browse Subjects
- Clear Screen
- Search by Title  
or Author
- Key Word Catalog
- Select Language

Computer Screen  
Title

<p><b>Winnebago CAT -- Computerized Catalog</b> <b>Written For: Holly Glen Elementary School Library</b></p> <p>Enter Title: _____</p> <p><input type="button" value="Enter"/> Search</p>	<p><b>Commands</b></p> <p><input type="button" value="F1"/> Help</p> <p><input type="button" value="F4"/> Browse Subjects</p> <p><input type="button" value="F5"/> Clear Screen</p> <p><input type="button" value="F6"/> Search by Author or Subject</p> <p><input type="button" value="F7"/> Key Word Catalog</p> <p><input type="button" value="F8"/> Select Language</p>
---	---

## **DISPLAY INFORMATION**

- **Material status**
- **Call numbers / letters**
- **Material type**
- **Author**
- **Title**

Online Computer Screen  
Material Search

Call #	Material Title	Author	Mat. Type	Status
E SEU	The butter battle book	Seuss, Dr.	Easy	In
F MAC	All the place to love	MacLachlan, P.	Fiction	In
910.4 TAN	On board the Titanic	Tanaka, Shelley	900-999	Out
B ANG	Meet Maya Angelou	Spain, Valerie	Biography	In

---

[F1] Help   [F9] Sort Results   [F10] Print Bibliography  
[Esc] Exit   [Enter] Select   [Del] Delete   ↑ ↓ PgUp PgDn Home End Move

**Online Screen Card**  
**Easy -- Picture Book**

**E**                    **Seuss, Dr.**  
**SEU**                    **The butter battle book / Illustrated by**  
**Dr. Seuss. --**  
**New York: Random House, c1984,**  
**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as they attempt to outdo each other.**

**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

**Online Screen Card**  
**Fiction Book**

**F**  
**MAC**

**MacLachlan, Patricia.**

**All the places to love / Illustrated by  
Mike Wimmer. --**

**New York: HarperCollins Publishers, c1994.**

**28 p. : illus. ; 29 cm.**

**Summary: A young boy describes the  
favorite places that he shares with his family on  
his grandparents' farm and in the nearby  
countryside.**

**ISBN: 0-06-021099-0**

**1. Farms -- Fiction. 2. Country life -- Fiction.  
I. Wimmer, Mike, illus. II. Title.**

**PZ7.M2225A1**

**Online Screen Card**  
**Nonfiction**

**910.4**            **Tanaka, Shelley.**  
**TAN**                **On board the Titanic / Illustrated by**  
                      **Ken Marschall. --**  
**New York: Hyperion / Madison Press, c1996.**  
                      **48 p. : illus. ; 24 cm.**

**Summary: Seventeen-year-old Jack Thayer explores the Titanic and forms a brief friendship with another passenger before experiencing the wreck of the great ocean liner.**

**ISBN: 0-7868-0283-9**

**1. Titanic (Steamship) -- Nonfiction.**  
**2. Shipwrecks -- Nonfiction. III. Ocean liners -- Nonfiction. I. Marschall, Ken, illus. II. Title.**

**PZ8.33.G276Bu**



**Online Screen Card**  
**Biography**

**B**

**Angelou, Maya.**

**ANG**

**Meet Maya Angelou / by Valarie Spain.**

**New York: Random House, c1994.**

**92 p. : illus. ; 20 cm.**

**Summary: Travel with Maya from a tiny town in Arkansas to exciting cities and far away countries. Discover how she became an actress, a dancer, a TV producer, and a famous writer.**

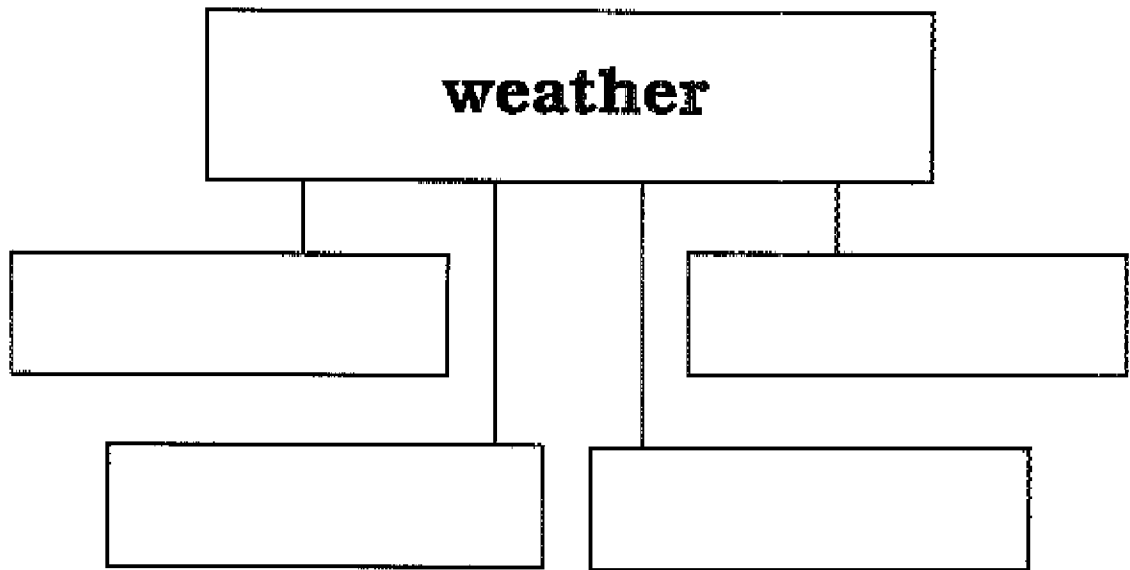
**ISBN: 0-394-96580-9**

- 1. Angelou, Maya -- Biography.**
- 2. Afro-American women authors -- 20th century -- Biography.**
- 3. Afro-American women entertainers -- Biography. I. Title. II. Series.**

**PS3551.N464Z886**

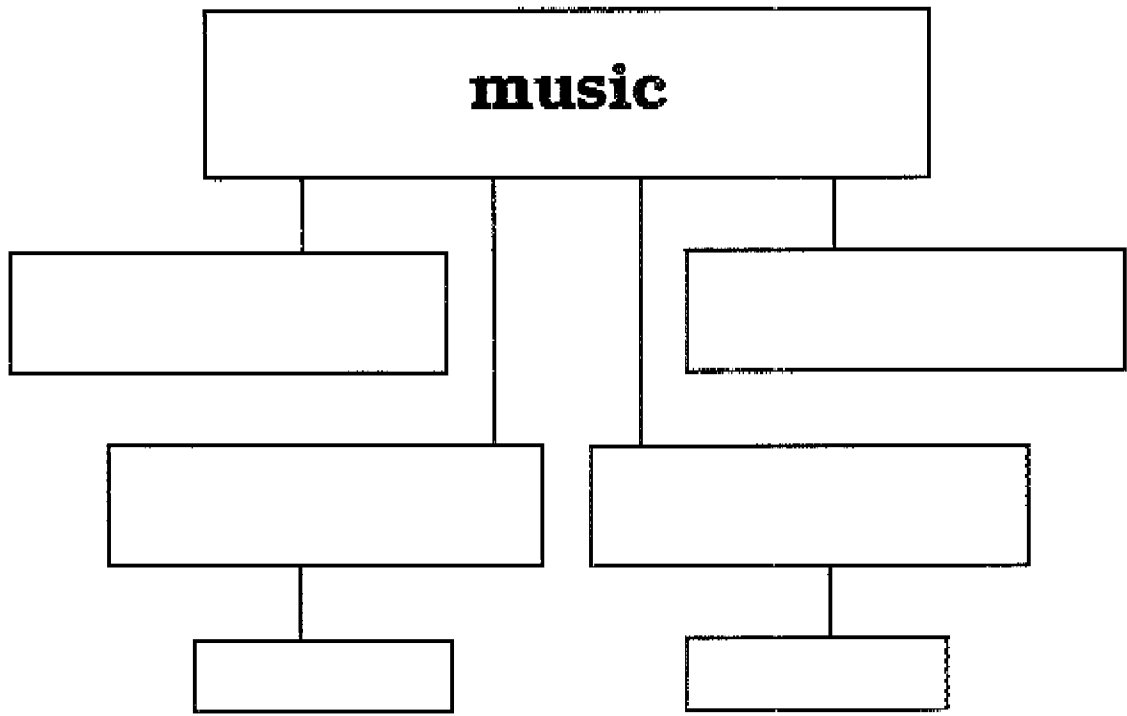
## Word Association I

Tree format modeled by instructor



## Word Association II

Tree format completed with students



## CHAPTER FIVE

### Instructional Lessons for Patrons Using the LAN

#### Fourth Grade

Objective: To help the learner define and illustrate a type of strategy.

The following lesson provides the instructor with materials that can be reproduced as transparencies for instructional purposes. The instructor can develop activities and discussions for students on why having a search strategy is important to them.

- I. Review
  - A. What are the three types of searches?
  - B. Display information
    1. Material status and Call numbers
    2. Author and Title
  - C. Four material types
  - D. Keyboard
    1. Keys needed for operation
- II. Strategy
  - A. Definition
    1. Ask the question "What is a strategy?"
    2. Give the answer: A plan of action to find the information you want.
- III. Synonyms
  - A. From students
  - B. From instructor -- plan, map, pattern, diagram, outline, scheme
- IV. Examples
  - A. Pet web
  - B. Holidays web

## **CATALOG SEARCHING**

### **Online:**

- **Author**
- **Subject**
- **Title**

## Online Screen Card

Author

E                    Seuss, Dr.  
SEU                 The butter battle book / Illustrated by  
                       Dr. Seuss. --  
                       New York: Random House, c1984.  
                       42 p. : illus. ; 28 cm.

Summary: Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.

ISBN: 0-394-96580-9

I. War -- Fiction. 2. Stories in rhyme.  
I. Seuss, Dr., illus. II. Title.

PZ8.33.G276Bu

**Online Screen Card**  
**Subject**

**WAR -- FICTION**

**E**            **Seuss, Dr.**  
**SEU**           **The butter battle book / Illustrated by**  
**Dr. Seuss. --**  
**New York: Random House, c1984.**  
**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.**

**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

**Online Screen Card**  
Title

**The butter battle book.**

**E**            **Seuss, Dr.**  
**SEU**           **The butter battle book / Illustrated by**  
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**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.**

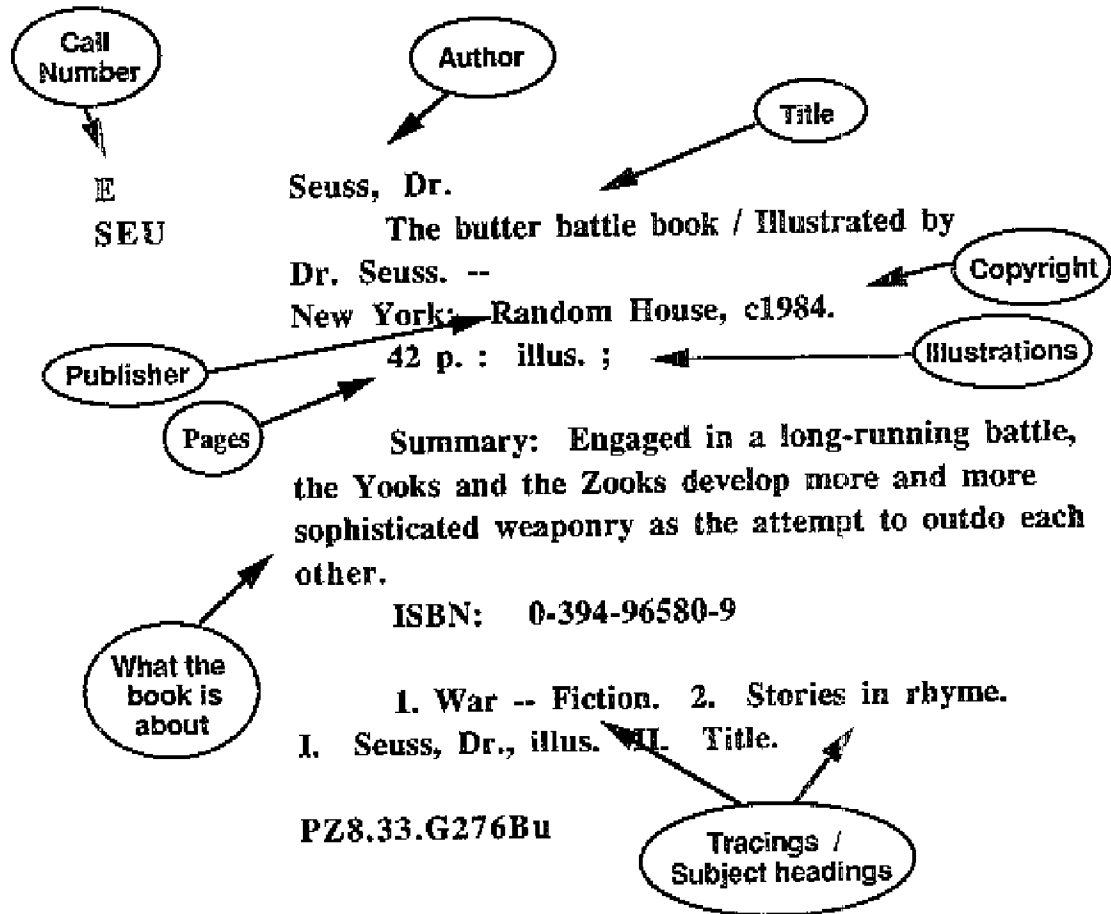
**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

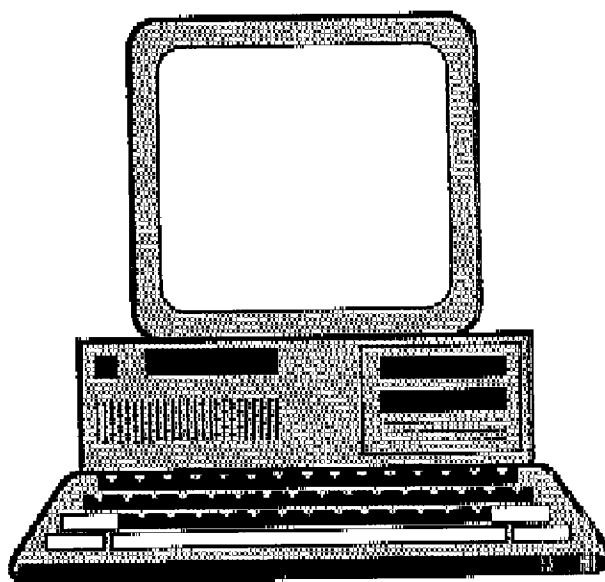
**PZ8.33.G276Bu**



## Anatomy of a Card



## The Winnebago Computerized Catalog



Grade 4: transparency 6 of 18

Computer Screen  
Author

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Author: \_\_\_\_\_

Search

Commands	
<input type="button" value="F1"/>	Help
<input type="button" value="F4"/>	Browse Subjects
<input type="button" value="F5"/>	Clear Screen
<input type="button" value="F6"/>	Search by Title or Subject
<input type="button" value="F7"/>	Key Word Catalog
<input type="button" value="F8"/>	Select Language

Computer Screen  
Subject

<p><b>Winnebago CAT -- Computerized Catalog</b> <i>Written For: Holly Glen Elementary School Library</i></p> <p>Enter Subject: _____</p> <p><b>Enter</b> Search</p>	<p><b>Commands</b></p> <p><b>F1</b> Help</p> <p><b>F4</b> Browse Subjects</p> <p><b>F5</b> Clear Screen</p> <p><b>F6</b> Search by Title or Author</p> <p><b>F7</b> Key Word Catalog</p> <p><b>F8</b> Select Language</p>
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Computer Screen  
Title

<p><b>Winnebago CAT -- Computerized Catalog</b> <b>Written For: Holly Glen Elementary School Library</b></p> <p>Enter Title: _____</p> <p><input type="button" value="Enter"/> Search</p>	<p><b>Commands</b></p> <p><input type="button" value="F1"/> Help</p> <p><input type="button" value="F4"/> Browse Subjects</p> <p><input type="button" value="F5"/> Clear Screen</p> <p><input type="button" value="F6"/> Search by Author or Subject</p> <p><input type="button" value="F7"/> Key Word Catalog</p> <p><input type="button" value="F8"/> Select Language</p>
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## **DISPLAY INFORMATION**

- **Material status**
- **Call numbers / letters**
- **Material type**
- **Author**
- **Title**

Online Computer Screen  
Material Search

Call #	Material Title	Author	Mat. Type	Status
E SEU	The butter battle book	Seuss, Dr.	Easy	In
F MAC	All the place to love	MacLachlan, P.	Fiction	In
910.4 TAN	On board the Titanic	Tanaka, Shelley	900-999	Out
B ANG	Meet Maya Angelou	Spain, Valerie	Biography	In

---

**[F1]** Help    **[F9]** Sort Results    **[F10]** Print Bibliography  
**[Esc]** Exit    **[Enter]** Select    **[Del]** Delete      PgUp PgDn Home End Move

**Online Screen Card**  
**Easy -- Picture Book**

**E**  
**SEU**

**Seuss, Dr.**

**The butter battle book / Illustrated by  
Dr. Seuss. --**

**New York: Random House, c1984.**

**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle,  
the Yooks and the Zooks develop more and more  
sophisticated weaponry as the attempt to outdo each  
other.**

**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.**

**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**



**Online Screen Card**  
**Fiction Book**

**F**  
**MAC**

**MacLachlan, Patricia.**

**All the places to love / Illustrated by  
Mike Wimmer. --**

**New York: HarperCollins Publishers, c1994.**

**28 p. : illus. ; 29 cm.**

**Summary: A young boy describes the  
favorite places that he shares with his family on  
his grandparents' farm and in the nearby  
countryside.**

**ISBN: 0-06-021099-0**

**1. Farms -- Fiction. 2. Country life -- Fiction.  
I. Wimmer, Mike, illus. II. Title.**

**PZ7.M2225A1**

**Online Screen Card**  
**Nonfiction**

**910.4**      **Tanaka, Shelley.**  
**TAN**            **On board the Titanic / Illustrated by**  
**Ken Marschall. --**  
**New York: Hyperion / Madison Press, c1996.**  
**48 p. : illus. ; 24 cm.**

**Summary: Seventeen-year-old Jack Thayer explores the Titanic and forms a brief friendship with another passenger before experiencing the wreck of the great ocean liner.**

**ISBN: 0-7868-0283-9**

**1. Titanic (Steamship -- Nonfiction.**  
**2. Shipwrecks -- Nonfiction. III. Ocean liners --**  
**Nonfiction. I. Marschall, Ken, illus. II. Title.**

**PZ8.33.G276Bu**

**Online Screen Card**  
**Biography**

**B**

**ANG**

**Angelou, Maya.**

**Meet Maya Angelou / by Valarie Spain.  
New York: Random House, c1994.  
92 p. : illus. ; 20 cm.**

**Summary: Travel with Maya from a tiny town in Arkansas to exciting cities and far away countries. Discover how she became an actress, a dancer, a TV producer, and a famous writer.**

**ISBN: 0-394-96580-9**

**1. Angelou, Maya -- Biography.  
2. Afro-American women authors -- 20th century -- Biography. 3. Afro-American women entertainers -- Biography. I. Title. II. Series.**

**PS3551.N464Z886**

# Strategy

***Definition:***

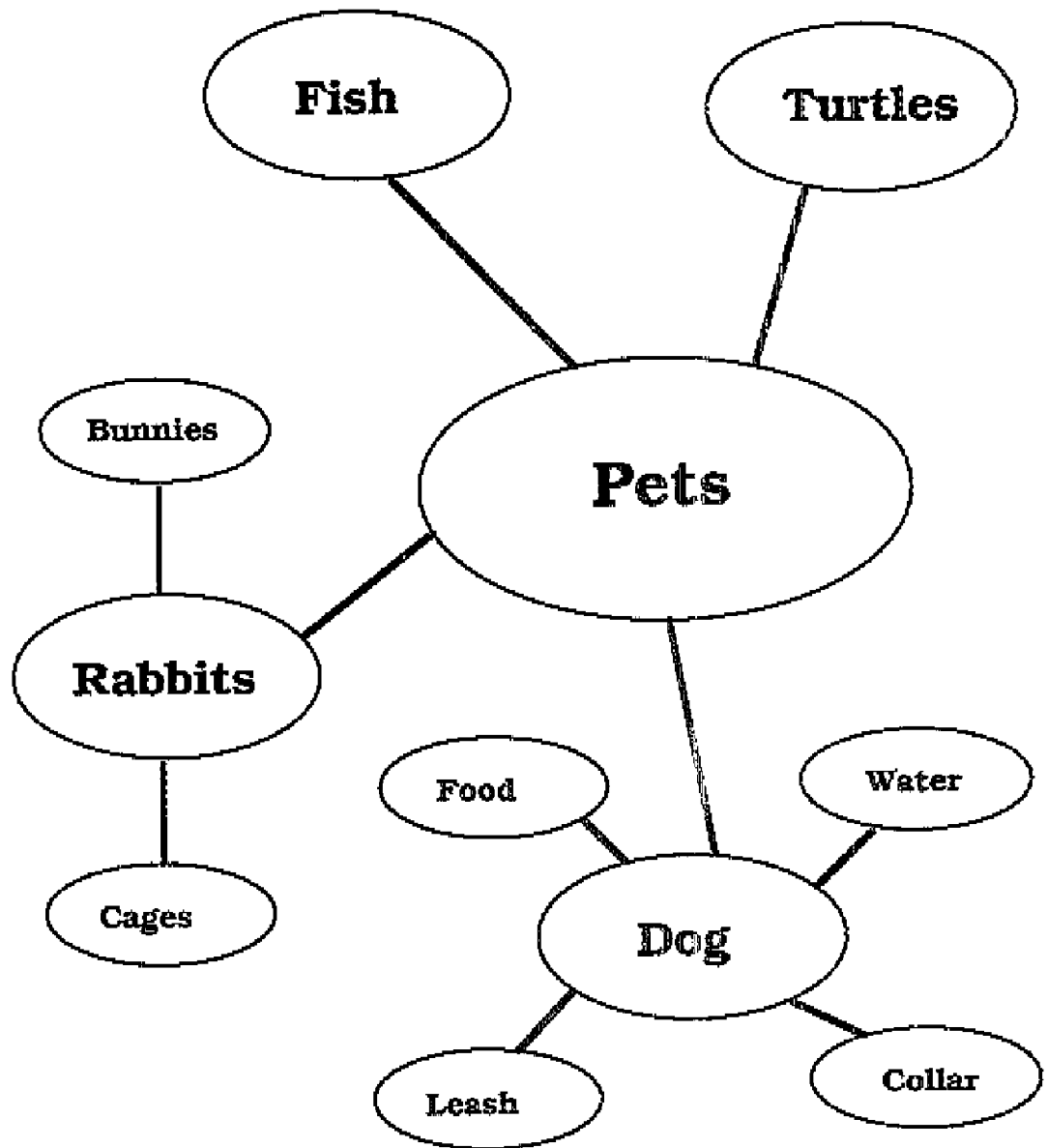
**A strategy is a plan of action to  
find the information you want.**

***Synonyms:***

<b>plan</b>	<b>sketch</b>
<b>scheme</b>	<b>map</b>
<b>diagram</b>	<b>pattern</b>
<b>outline</b>	

## Web Activity: Pets

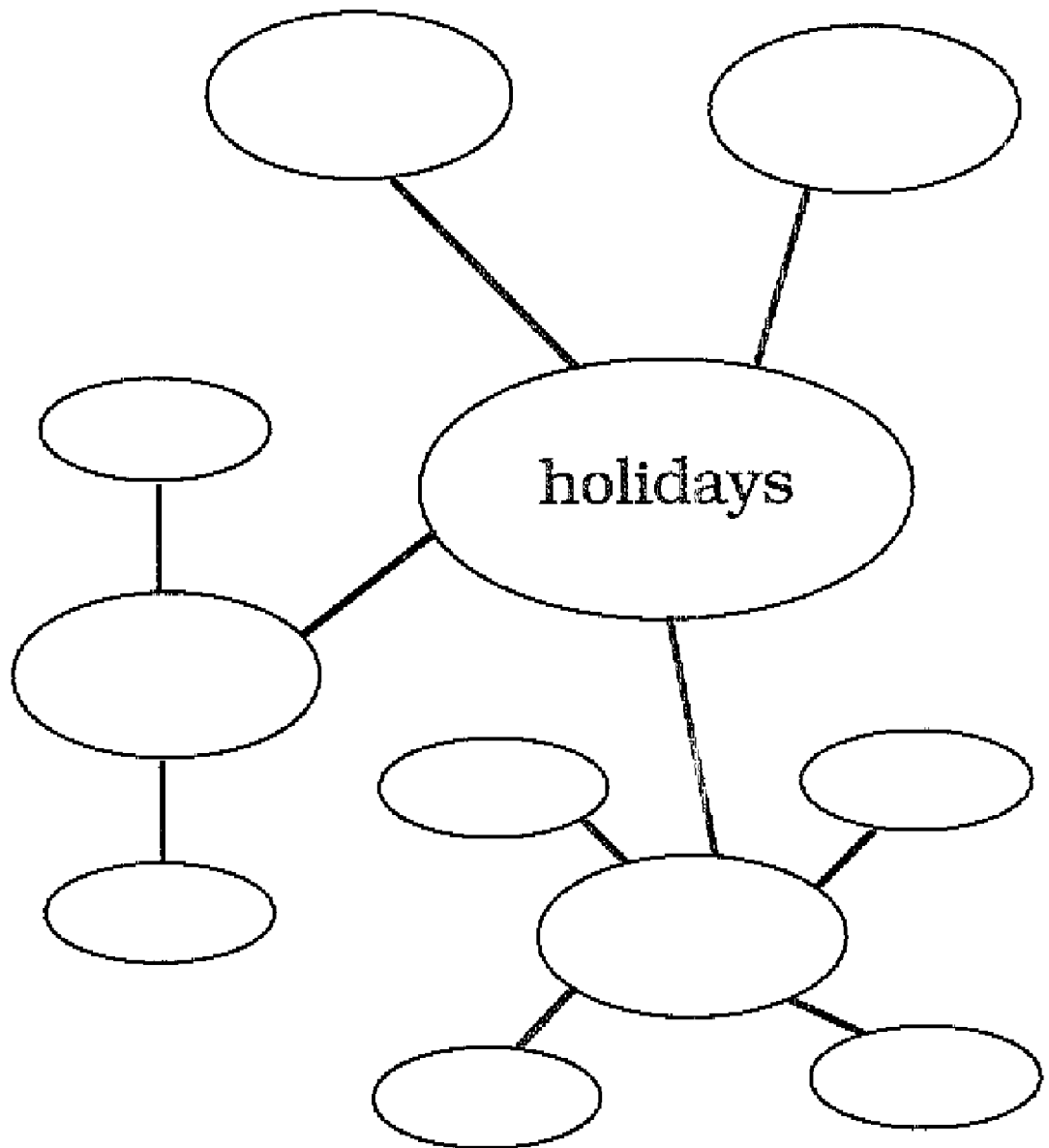
Web format modeled by instructor



Grade 4: transparency 17 of 18

## Web Activity: Holidays

Web format completed with students



## CHAPTER FIVE

### Instructional Lessons for Patrons Using the LAN

#### Fifth Grade

**Objective:** To help the learner focus research and prepare a research statement.

The following lesson provides the instructor with materials that can be reproduced as transparencies for instructional purposes. The instructor can develop activities and discussions for students on why having a research statement is important to them. It also gives them reference tools to aid them in narrowing a research statement.

- I. Review
  - A. Types of searches and cards
  - B. Anatomy of a card
  - C. Screen cards
  - D. Display information and Material types
  - E. Search strategy
    1. What is a search strategy?
    2. What are some examples of a search strategy?
- II. Introduce keyword search screen
  - A. Key words
  - B. Synonyms
  - C. Synonyms activity
  - D. Related terms activity
  - E. Answer key sheet
- III. Research statement
  - A. Definition
  - B. Broad -- unfocused / Narrow -- focused
  - D. Search strategies

## **CATALOG SEARCHING**

### **Online:**

- **Author**
- **Subject**
- **Title**
- **Keyword**



**Online Screen Card**

Author

**E** Seuss, Dr.  
**SEU** The butter battle book / Illustrated by  
Dr. Seuss. --  
New York: Random House, c1984.  
42 p. : illus. ; 28 cm.

**Summary:** Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.

**ISBN:** 0-394-96580-9

**I.** War -- Fiction. **2.** Stories in rhyme.  
**I.** Seuss, Dr., illus. **II.** Title.

**PZ8.33.G276Bu**

**Online Screen Card**  
**Subject**

**WAR -- FICTION**

**E**            **Seuss, Dr.**  
**SEU**            **The butter battle book / Illustrated by**  
**Dr. Seuss. --**  
**New York: Random House, c1984.**  
**42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as the attempt to outdo each other.**

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**1. War -- Fiction. 2. Stories in rhyme.**  
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Title

**The butter battle book.**

**E**            **Seuss, Dr.**  
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**Dr. Seuss. --**  
**New York: Random House, c1984.**  
**42 p. : illus. ; 28 cm.**

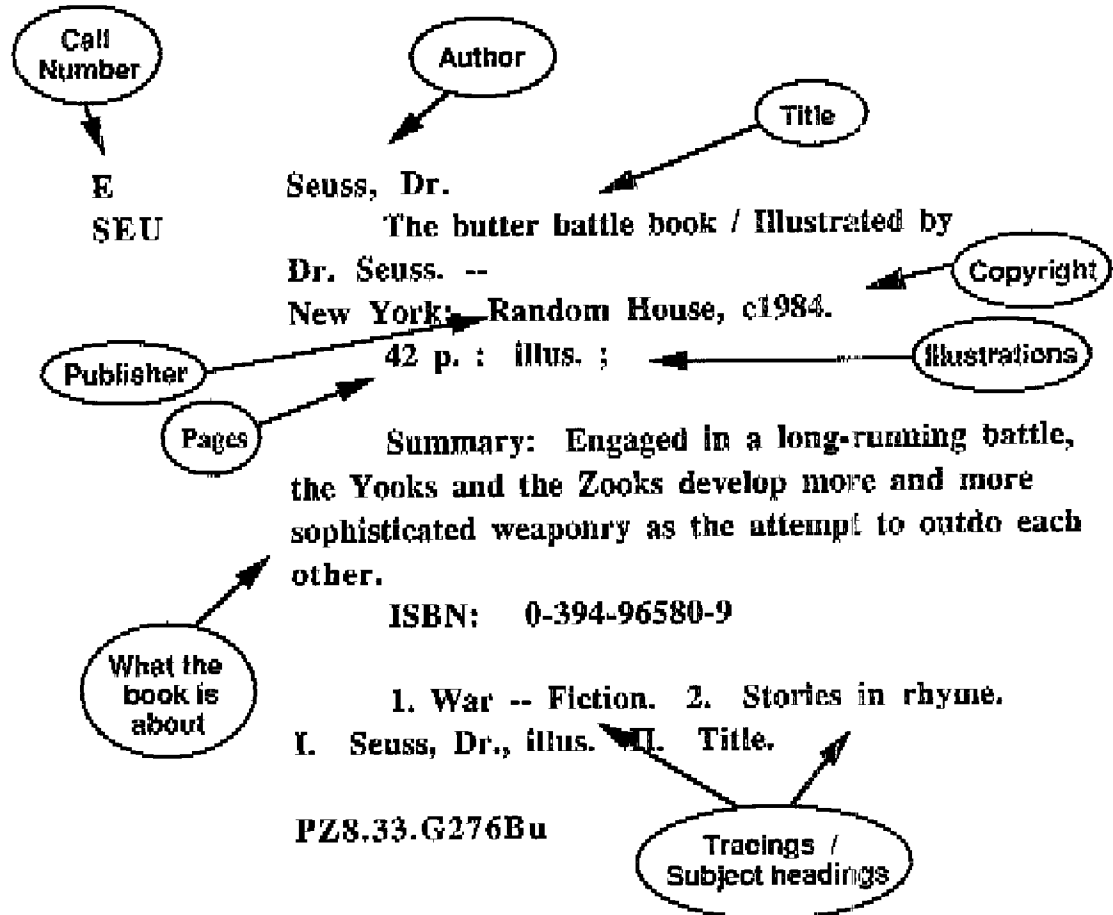
**Summary:** Engaged in a long-running battle, the Yooks and the Zooks develop more and more sophisticated weaponry as they attempt to outdo each other.

**ISBN: 0-394-96580-9**

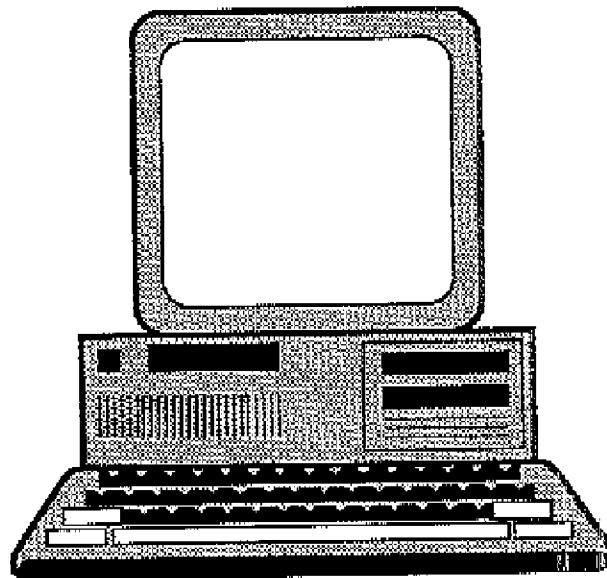
**1. War -- Fiction. 2. Stories in rhyme.**  
**I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

## Anatomy of a Card



## The Winnebago Computerized Catalog



**Computer Screen**  
**Author**

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Author: \_\_\_\_\_

Search

**Commands**

- Help
- Browse Subjects
- Clear Screen
- Search by Title  
or Subject
- Key Word Catalog
- Select Language

Computer Screen  
Subject

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Subject: \_\_\_\_\_

**Enter** Search

**Commands**

- F1** Help
- F4** Browse Subjects
- F5** Clear Screen
- F6** Search by Title  
or Author
- F7** Key Word Catalog
- F8** Select Language

Computer Screen  
Title

**Winnebago CAT -- Computerized Catalog**  
**Written For: Holly Glen Elementary School Library**

Enter Title: \_\_\_\_\_

**Enter** Search

**Commands**

- F1** Help
- F4** Browse Subjects
- F5** Clear Screen
- F6** Search by Author  
or Subject
- F7** Key Word Catalog
- F8** Select Language





## **DISPLAY INFORMATION**

- **Material status**
- **Call numbers / letters**
- **Material type**
- **Author**
- **Title**

Online Computer Screen  
Material Search

Call #	Material Title	Author	Mat. Type	Status
E SEU	The butter battle book	Seuss, Dr.	Easy	In
F MAC	All the place to love	MacLachlan, P.	Fiction	In
910.4 TAN	On board the Titanic	Tanaka, Shelley	900-999	Out
B ANG	Meet Maya Angelou	Spain, Valerie	Biography	In

**[F1]** Help    **[F9]** Sort Results    **[F10]** Print Bibliography  
**[Esc]** Exit    **[Enter]** Select    **[Del]** Delete      PgUp PgDn Home End Move

**Online Screen Card**  
**Easy -- Picture Book**

**E**  
**SEU**

**Seuss, Dr.**

**The hutter battle book / Illustrated by  
Dr. Seuss. --  
New York: Random House, c1984.  
42 p. : illus. ; 28 cm.**

**Summary: Engaged in a long-running battle,  
the Yooks and the Zooks develop more and more  
sophisticated weaponry as the attempt to outdo each  
other.**

**ISBN: 0-394-96580-9**

**1. War -- Fiction. 2. Stories in rhyme.  
I. Seuss, Dr., illus. II. Title.**

**PZ8.33.G276Bu**

**Online Screen Card**  
**Fiction Book**

F  
MAC

MacLachlan, Patricia.

*All the places to love / Illustrated by  
Mike Wimmer. --*

New York: HarperCollins Publishers, c1994.

28 p. : illus. ; 29 cm.

**Summary:** A young boy describes the favorite places that he shares with his family on his grandparents' farm and in the nearby countryside.

ISBN: 0-66-021099-0

I. Farms -- Fiction. 2. Country life -- Fiction.  
I. Wimmer, Mike, illus. II. Title.

PZ7.M2225A1

**Online Screen Card**  
**Nonfiction**

**910.4  
TAN**

**Tanaka, Shelley.**

**On board the Titanic / Illustrated by**

**Ken Marschall. --**

**New York: Hyperion / Madison Press, c1996.**

**48 p. : illus. ; 24 cm.**

**Summary: Seventeen-year-old Jack Thayer explores the Titanic and forms a brief friendship with another passenger before experiencing the wreck of the great ocean liner.**

**ISBN: 0-7868-0283-9**

- I. Titanic (Steamship -- Nonfiction. 2. Shipwrecks -- Nonfiction. III. Ocean liners -- Nonfiction. I. Marschall, Ken, illus. II. Title.**

**PZ8.33.G276Bu**

## Online Screen Card Biography

B  
ANG

Angelou, Maya.

Meet Maya Angelou / by Valarie Spain.  
New York: Random House, c1994.  
92 p. : illus. ; 20 cm.

Summary: Travel with Maya from a tiny town in Arkansas to exciting cities and far away countries. Discover how she became an actress, a dancer, a TV producer, and a famous writer.

ISBN: 0-394-96580-9

1. Angelou, Maya -- Biography.  
2. Afro-American women authors -- 20th century -- Biography. 3. Afro-American women entertainers -- Biography. I. Title. II. Series.

PS3551.N464Z886

# Strategy

***Definition:***

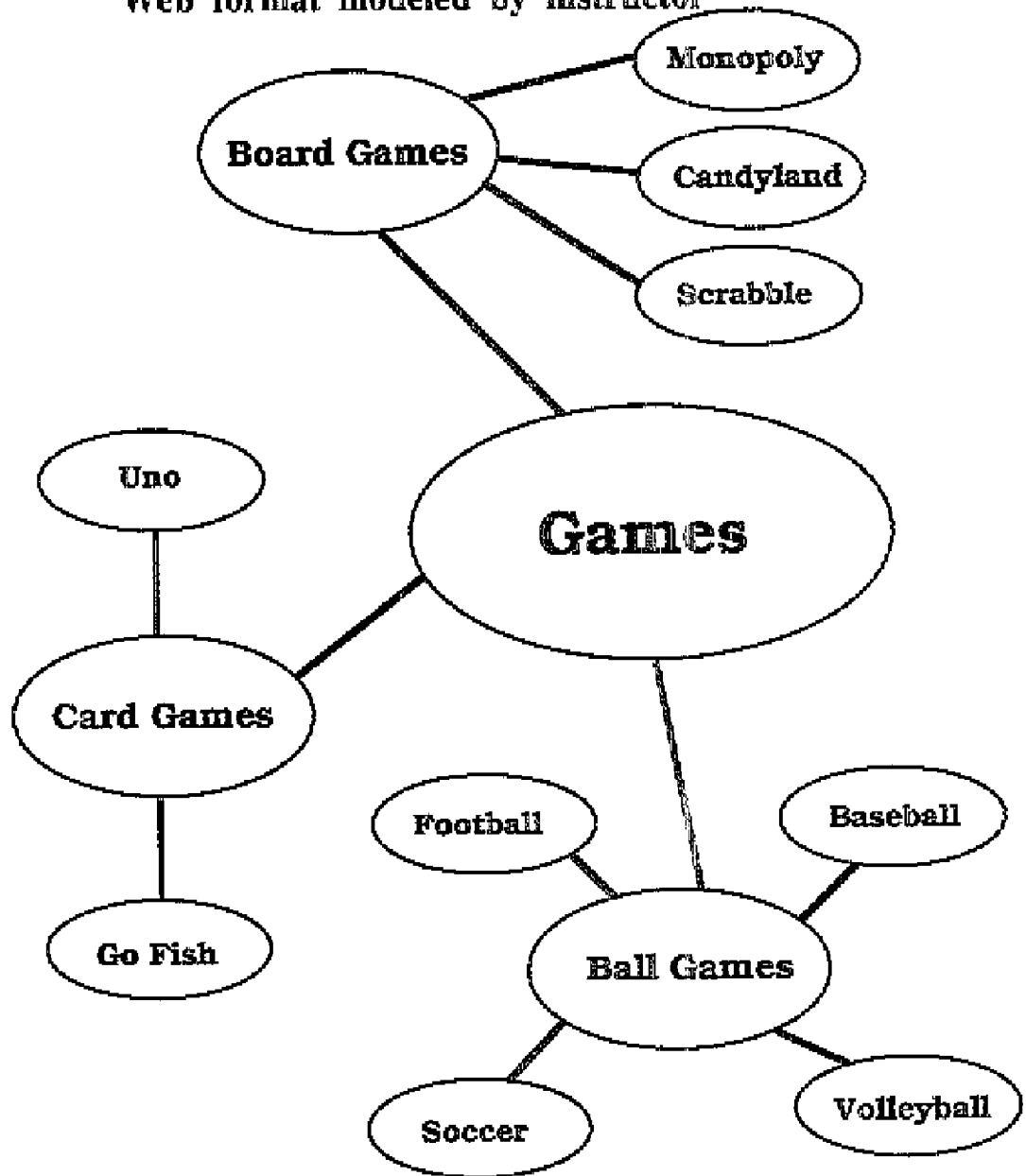
**A strategy is a plan of action to  
find the information you want.**

***Synonyms:***

<b>plan</b>	<b>sketch</b>
<b>scheme</b>	<b>map</b>
<b>diagram</b>	<b>pattern</b>
<b>outline</b>	

## Web Activity: Games

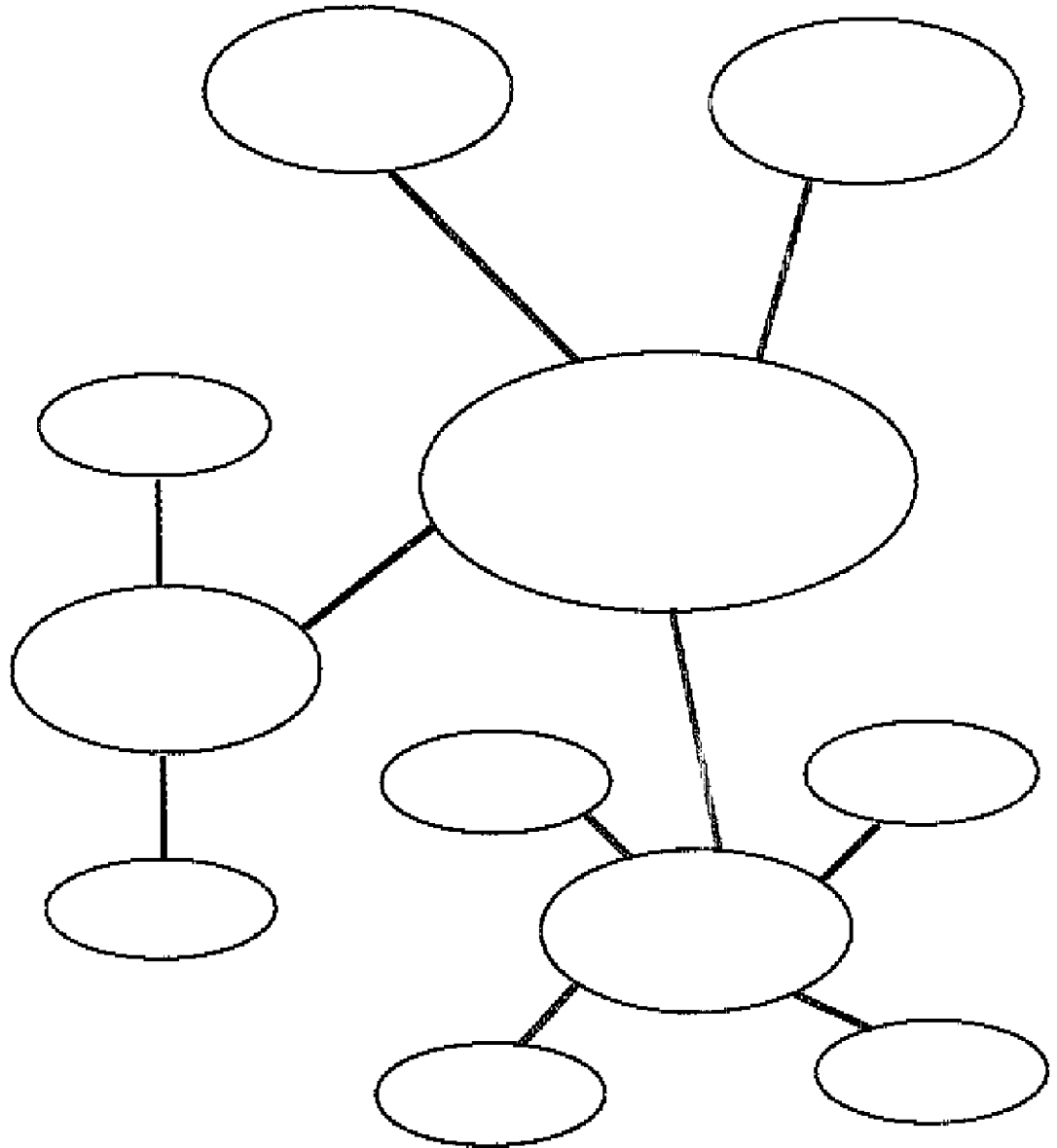
Web format modeled by instructor







## Web Activity: Student Generated

Web format completed with students



Online Computer Screen  
Keyword Search

<b>Winnebago CAT -- Computerized Catalog</b> <b>Written For: Holly Glen Elementary School Library</b>	
	<b>Commands</b>
	<b>F1</b> Help
	<b>F4</b> Browse Subjects
	<b>F5</b> Clear Screen
	<b>F6</b> Change Source
	<b>F7</b> Regular Catalog
	<b>F8</b> Select Language
<b>Matches</b>	
<b>Word /Phrase:</b> _____ (From Subjects or Titles or Notes	
<b>AND</b>	
<b>Word /Phrase:</b> _____ (From Subjects or Titles or Notes	
<b>AND</b>	
<b>Word /Phrase:</b> _____ (From Subjects or Titles or Notes	
<b>Using:</b> <input checked="" type="checkbox"/> <b>Material Database</b>	
<b>Enter</b> Search   <b>Move</b>	

## **Key Words**

- **Synonyms**
- **Related terms**
- **Proper names**
- **Plurals**

# Synonyms

- **Synonyms** -- words that mean the same or almost the same thing
- **Thesaurus** -- a book that contains words and their synonyms

bushes	shrubbery
creek	stream
air	atmosphere
dirt	soil
child	youth
country	nation

## Synonyms Activity

- |             |                 |
|-------------|-----------------|
| 1. earth    | A. medicine     |
| 2. sea      | B. world        |
| 3. sneakers | C. canine       |
| 4. drugs    | D. ocean        |
| 5. math     | E. grown-up     |
| 6. teenager | F. arithmetic   |
| 7. learning | G. cartoons     |
| 8. dog      | H. bowl         |
| 9. adult    | I. pupil        |
| 10. comics  | J. youth        |
| 11. dish    | K. nation       |
| 12. laugh   | L. nutrition    |
| 13. country | M. education    |
| 14. diet    | N. giggle       |
| 15. student | O. mug          |
| 16. cup     | Q. tennis shoes |

## Related Terms Activity

- |                |       |            |
|----------------|-------|------------|
| 1. store       | _____ | A sale     |
| 2. animals     | _____ | B reading  |
| 3. books       | _____ | C pets     |
| 4. health      | _____ | D rain     |
| 5. agriculture | _____ | E finger   |
| 6. family      | _____ | F children |
| 7. weather     | _____ | G farm     |
| 8. hands       | _____ | H sunshine |
| 9. tree        | _____ | I ring     |
| 10. jewelry    | _____ | J branches |
|                |       | K exercise |
|                |       | L necklace |
|                |       | M library  |
|                |       | N customer |
|                |       | O forest   |
|                |       | P zoos     |

## Answer Key Sheet

### I. Synonyms Activity

- |    |   |     |   |
|----|---|-----|---|
| 1. | B | 9.  | E |
| 2. | D | 10. | G |
| 3. | P | 11. | H |
| 4. | A | 12. | N |
| 5. | F | 13. | K |
| 6. | J | 14. | L |
| 7. | M | 15. | I |
| 8. | C | 16. | O |

### II. Related Terms Activity

- |     |             |      |
|-----|-------------|------|
| 1.  | store       | A, N |
| 2.  | animals     | C, P |
| 3.  | books       | B, M |
| 4.  | health      | K    |
| 5.  | agriculture | G    |
| 6.  | family      | F    |
| 7.  | weather     | D, H |
| 8.  | hands       | E    |
| 9.  | tree        | J, O |
| 10. | jewelry     | I, L |

# Research Statement

*Definition:*

**The gathering or collection of knowledge through a planned and organized investigation.**

**Broad -- unfocused**

*How big is the United States?*

**Narrow -- focused**

*What is the area and population of the United States?*



# **Search Strategies**

- 1. Introduce and ask questions**
- 2. Define and familiarize**
- 3. Develop a research question**
- 4. Recognize general and specific topics**
- 5. Identify key words**
- 6. Choose appropriate terms**
- 7. Recognize relationship of terms**
- 8. Compile a bibliography**

## CHAPTER SIX

### Summary and Recommendations

#### *Analysis*

It is recommended that the district media specialists, technology committee, and district administrators:

1. conduct school visitations to observe and acquire hands-on experiences on how local area networks are used in school and library media center situations.
2. complete an analysis of the district library media centers to conduct a comparison of the districts in which school visitations took place in order to determine what is necessary to further develop a more adequate local area network in each individual library media center of Monroe Township Public Schools.
3. recognize the importance of the library media center as the focal point of a school and, therefore, fund the library media center appropriately in order to keep media, equipment, and other materials up-to-date.

It is recommended that the Holly Glen School:

#### Hardware

1. install a Turbo Pentium 32 MB RAM, 1.2GB hard drive, CD-ROM drive, 133MHz Server/Station with 800MB tape drive capability for backup of data to replace the old file server.
2. install a LANtastic Network Operating System to replace the Novell Network.
3. add an additional Pentium 75 16MB RAM, 1GB hard drive, 133MHz workstation for patron access.

4. replace the coaxial cable connecting computer workstations with category 5 twisted pair cable.
5. purchase the Winnebago Spectrum Program which operates a dual platform for Macintosh and IBM computers so that, in the near future, the local area network can be expanded into the computer lab or classrooms for patron use.
6. purchase of the Winnebago Spectrum Program which operates a dual platform for Macintosh and IBM computers so that, in the near future, the local area network can be expanded into the computer lab or classrooms for patron use. If the program is not approved, then the purchase of Macintosh computers for the media center should be made in the next three to five years so that the school building has a standardized operating system for a local area network and the purchase of software.
7. network the media center to the computer lab to share software and provide instructional lessons.
8. purchase a CD-ROM tower with a fourteen to twenty-four disc capacity to store the CD-ROMs that will be networked to the computer lab and individual classrooms.
9. network the media center to each classroom or a minimum of one classroom per grade level to share software.
10. install two dedicated phone lines into the media center, one for interlibrary loan purposes via the Internet and the second for administrative uses by the media specialist.
11. select an Internet provider to conduct interlibrary loans.
12. purchase a Union Catalog to store MARC records from the district media centers.
13. subscribe to SOJOURN for interlibrary loan throughout Southern New Jersey.
14. network the district media centers for interlibrary loan purposes.
15. network the district media centers to the Monroe Township Public Library for interlibrary loan purposes.

### Instruction

1. provide a flexible schedule at all school levels for the library media specialist to operate and maintain the Winnebago Circulation and Cataloging Program.
2. provide a flexible schedule at all school levels or provide an increased preparation time to a minimum of ten periods per week for the library media specialist to operate and maintain the Winnebago Circulation and Cataloging Program.
3. complete a network system between the library media center and the computer lab so that the media specialist can provide patrons with instruction of the Winnebago Circulation and Cataloging Program in the computer lab. This would allow patrons to use the Winnebago Program individually while gaining hands-on experience.

### Other

1. library clerks be supervised, evaluated, and follow the directives of the educational media specialist.
2. administration, as well as that of the district, realize that the Winnebago Circulation and Cataloging Program is the responsibility of the educational media specialist and not the library clerk. The *only duty* the library clerk should have with the Winnebago Program is to check media in or out.
3. go to a flexible schedule. If this occurs, it will then be feasible to eliminate the library clerk full-time position to two three hour aides; one aide in the morning and then one aide in the afternoon.
4. go to a flexible schedule or provide the library media specialist with a minimum of ten preparation periods per week to maintain the Winnebago Circulation and Cataloging Program. If the flexible schedule does not occur, the library clerk position should remain as a full-time position. In addition, with this schedule, the library clerk position should be on a district rotational basis where clerks rotate to a different building at the close of each school year.

## WORKS CITED

- Axelson, Mary. (1996, September). Networking 101. Electronic Learning, 52-55.
- Barron, Ann E. & Orwig, Gary W. (1995). New Technologies for Education: A Beginner's Guide (2nd ed., pp. 163-191). Englewood, Colorado: Libraries Unlimited, Inc.
- Birmingham, Judy. (1996, October). StarkNet: A K-99 Education Network [On-line]. [jmb@bigbird.stark.k12.oh.us](mailto:jmb@bigbird.stark.k12.oh.us)
- Borelli, Frank. Personal interview. 22 January 1997. Dennison, Michael S. Interview during Delsea Regional High School visitation.
- Daly, Kevin. (1994, September). A planning guide for instructional network, part I. Computing Teacher, 22, 11-12.
- Foster, Tom. Personal interview. 20 November and 18 December 1996. Dennison, Michael S. Interview during Woodstown Middle and High Schools visitations. Available: [wtfostt@willie.salem.cc.nj.us](mailto:wtfostt@willie.salem.cc.nj.us)
- Haynes, Elizabeth. (1993, Summer). The evolution of a school library network: setting up a CD-ROM local area network (LAN). School Library Media Quarterly, 21, 253-257.
- Jones, A. James. (1996, Winter). Strategic planning for technology and library media specialists. School Library Media Quarterly, 24, 119-121.
- Kinnaman, Daniel E. (1991, Nov./Dec.). Networking-- the missing piece? Technology & Learning, 28-38.
- Klasing, Jane P. (1991, May). Designing a library media center for the information age. NASSP Bulletin, 37-42.
- McElmeel, Sharron L. (1996, April). Logging On. Technology Connection, 7.
- Moyer, Mary. Personal interview. 16 October 1996. Dennison, Michael S. Interview during Logan Township Public School visitation.

New Jersey State Library. (1996, July). Libraries 2000: New Jersey's Technology Plan for Libraries in the 21st Century, 1-14.

Scheib, Charlene M. (1993, April). Planning for networking in school libraries. Computers In Libraries, 13, 22-26.

Shields, Jean. (1996, April). Building your infrastructure: The basics of cabling and connecting. Technology & Learning, 40-49.

Shields, Jean. (1995, May/June). Tips and tools for building a network. Technology & Learning, 38.

Uznanski, Rich. Personal interview. 19 March 1997. Dennison, Michael S. Interview conducted by phone of the Delsea Regional High School.

Van Orden, Phyllis J. & Wilkes Adeline W. (1992, September) School library media centers and networks. LRTS, 7-17.

Vaughn, Sharon. Personal interview. 3 February 1997. Dennison, Michael S. Interview conducted by E-mail of the Woodtown Public Schools.  
Available: [vaughn@willie.salem.cc.nj.us](mailto:vaughn@willie.salem.cc.nj.us)

Winnebago. (1992 ) Searching the on-line catalog: a comprehensive teaching unit. Caledonia, Minnesota: Winnebago Software Company. [Kit]

## BIBLIOGRAPHY

- Almquist, Arne J. (1996, April). How to purchase, set up & safeguard a CD-ROM network. Technology Connection, 3, 14-17.
- Barry, Jeff, Griffiths, Jose-Marie & Wang, Peiling. (1996, April). Jockeying for supremacy in a networked world. Library Journal, 40-51.
- Bluhm, Harry P. (1986, May). Local area networks in the school setting. Educational Technology, 26-31.
- Farmer, Leslie S.J. (1996, October). Hardware. Technology and Learning, 27-34.
- Farmer, Leslie S.J. (1996, April). Growing your LAN piece by piece. Technology Connection, 3, 29-3
- Lipman, Art. (1994, Sept./Oct.). Networking Computers Schoolwide. Media & Methods, 10-12.
- Mintz, Dave. (1993-1994, Dec./Jan.). Networks in classrooms. Computing Teacher, 21, 27-29.
- Peha, Jon M. (1995, October). How K-12 teachers are using computer networks. Educational Leadership, 18-25.
- Polly, Jean Armour. (1993, March). Computer currents: This LAN is your LAN; Planning a local area network. Library Journal, 118, 104.
- Reilly, Peter. (1994, Nov./Dec.). Technical report on networking. Media & Methods, 8.
- Schuster, Judy. (1995, February). 5 things you should know about districtwide networking. Electronic Learning, 14, 32-46.
- Sprague, Mitchell & Morton, Mark. (1996, October). Mendocine Unified School District [On-line]. [mitch@mhs.mendocino.k12.ca.us](mailto:mitch@mhs.mendocino.k12.ca.us)

- Tess, Wayne. (1996, October). Computer networking: Our experience with LANs & WANs. [On-line]. wayntess@huroned.edu.on.ca.
- Urey, Gwen. (1988, October). Linking library workstations: Getting them up and running. Wilson Library Bulletin, 63, 42-45.
- Ward, Anne. (1993, September). A brave new information world. Electronic School, A16-A21.
- Weinstein, Stephen B. & Shumate, Paul W. (1989, Nov./Dec.). Beyond the telephone: new ways to communicate. Futurist, 3, 8-12.
- Zeisler, Al. (1994, September). Untangling the issue of school wiring: How to choose the right wiring for your network. The American School Board Journal, 181, A24-27.



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