north carolina libraries

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Exalting Learning and Libraries

NORTH CAROLINA LIBRARY ASSOCIATION

From the President

Benjamin Disraeli once said that "... the secret of success is constant purpose." Successful people often assert that a prerequisite for achievement is the formation of specific goals. These goals are subsequently utilized to inform decisions and maintain a focus.

In considering success, we observe that libraries in North Carolina are successfully advancing into the technological era. Though libraries may be at varying phases of movement, the number that are "on-line" and computerized grows daily. This is not occurring by chance. Individuals who work long and hard for the development and growth of libraries in North Carolina will tell you that the goal has not been just to computerize. The common theme for library development focuses on making information and learning accessible, exciting, and possible for all people.

This may appear to be a lofty purpose, but it is also realistic and meaningful. Libraries have the opportunity to foster excitement about new ideas, to generate the desire to know more, and to promote the search for possibilities. With new knowledge developing at such a rapid pace, we would lose these opportunities as human beings were it not for technologically-advanced libraries.

We can be proud in North Carolina that library development embraces this as its constant purpose. Relative to this purpose, the successes that libraries of all types enjoy in this state are measured by the height to which its population sees new knowledge as exciting and information as readily available and usable. Being "on-line" and computerized are strategies for achieving this higher purpose.

With this constant purpose in mind, the North Carolina Library Association's Media Committee has established as its number one goal for the biennium to increase awareness and highlight new technologies.

Regional networking meetings sponsored by the State Library were held in May to bring librarians in North Carolina up-to-date on the rapidly developing North Carolina Library Network. Howard McGinn, Coordinator of Network Development, discussed the opportunities and benefits in detail. Over 400 people across the state attended the three meetings held in Hickory, Greenville and Sanford.

Among those attending the Sanford meeting was Peggy Olney from Moore County Schools. Being anxious to provide the most appropriate services for students that assures for them the best educational opportunities, Olney became excited about what's happening and the challenge by newer technology facing educational leaders across the state.

Reflecting on past experiences with media, Olney sees the current revolution in information science rapidly moving school library/media programs into the newer realm of information storage and retrieval. "Students are learning to sift through the multitude of information in all formats," observed Olney.

The variety of uses and the new capabilities of today's technology provide unique learning opportunities in the classroom as well as in the library/media center. For example, the Down East Instructional Telecommunications Network of Hyde and Beaufort County Schools is linked by an interactive telecommunications system with the capability of both receiving and transmitting instructional programs. Possibilities with this program are limited only by the creativity of the minds of the users.

Another example is the Alexander County Schools' Computers in the Classroom, a model program, which will include the use of microcomputers as instructional tools in every school within the unit.

Local cooperative efforts among all types of libraries are becoming a reality in our state. Two active multi-type networks funded by the State Library are located in Cleveland and Wilson Counties. The area high schools participate in these projects called ZOC or Zones of Cooperation. By developing realistic plans and procedures, the schools' participation in this networking project is working well.

Many fine things are happening across our state as libraries are successfully advancing into the technological era. Do continue to share these with us as you plan, set goals and implement exciting programs.

The next Executive Board Meeting is scheduled for Wednesday, October 22, 1986, in Forsyth County Public Library, Winston-Salem.

Pauline F. Myrick, President

Book Week, November 17-23.

The Library of Congress 1987 Engagement Calendar

We are pleased to announce publication of the *1987 Library of Congress Engagement Calendar.* This is the third edition in what promises to be a long and wonderful tradition.

The Library of Congress is a treasure house of American and world culture. Its collections include rare books, early motion pictures, political cartoons, illuminated manuscripts, scientific drawings, old cookbooks, maps, graphics and other fine art.

This year's 70 images include a striking 1842 color daguerreotype of Notre Dame cathedral; portrait of an intense Orson Welles at age 21; letter signed by Houdini "from the grave"; page from 16th century choir book (the book weighed 60 pounds); early photograph of bike rider "Mile a Minute" Murphy going nowhere; Toulouse-Lautrec poster; and lots more!

The Calendar is 7″ × 9″, 128 pages, printed on fine paper, and "Wire-O" bound to lie flat. ("Wire-O" is the best of the mechanical bindings.) Each calendar page covers one week, and there is lots of room for making notes and appointments.

The Calendar also contains a valuable 10-page supplement which outlines how to access and order material from the Library, including new books, braille, recordings, photographs, and posters.

We are pleased to make the Calendar available at special discounts to library people and friends of libraries for fund raising.

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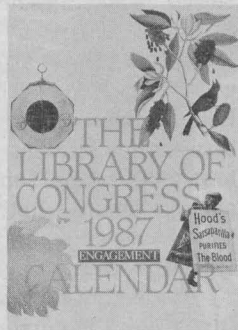
Honorary and Life Memberships Nominations

The North Carolina Library Association, through its Honorary and Life Membership Committee, is seeking suggestions for nominees for Honorary and Life memberships.

It has been the custom of NCLA to make these two awards based on the following criteria:

1. Honorary memberships may be given to non-librarians who have rendered important services to the library interests of the state.

2. Honorary memberships for non-librarians should be given at a time considered appropriate in relation to the contribution made.

3. Life memberships may be given to librarians who have served as members of the North Carolina Library Association and who have made noteworthy contributions to librarianship in the state. These memberships are limited to librarians who have retired.

Recommendations for nominations *should be accompanied by biographical information, including contributions to librarianship.*

Recommendations for nominations should be submitted to: Dr. Mell Busbin, Committee Chair, NCLA Honorary and Life Membership Committee, P.O. Box 411, Boone, N.C. 28607, *no later than January 31, 1987.*

Foreword

Howard F. McGinn, Jr., Guest Editor

This issue of *North Carolina Libraries* is devoted to the topic of NETWORKING. Since the King Research study in 1982 and the subsequent creation and funding of the now-famous ZOCs (Zones of Cooperation), Networking has undergone significant development in North Carolina. In the 1984 Summer issue of *North Carolina Libraries* John Welch, in his introductory remarks, posed these questions. He asked: "What is the future for networking in our state? Will we develop a vast, integrated, multitype network of libraries or find that our networking needs are handled more efficiently by local or regional ZOCs? The answer to these intriguing questions will unfold for us as we continue to examine and experiment with networks." And the answers have, indeed, been unfolding.

The past year has seen the implementation of the North Carolina Information Network, a statewide information service that is being designed to function as the "information infrastructure" that the state needs to continue its educational and economic development into the 1990's. The North Carolina Information Network is the state's "Good Roads" of the future. But the network and its programs are the results of successful projects created, developed and implemented by talented and resourceful North Carolina librarians during the past ten years. The ZOCs worked and are being used as models for the rest of the state. The North Carolina Online Union Catalog, maintained at OCLC, Inc., began operations in late May of this year. It provides unprecedented access to the resources of North Carolina libraries of all types to all libraries in every corner of this geographically diverse state. Access to the OCLC Interlibrary Loan subsystem and the late Fall 1986 introduction of the North Carolina Union List of Serials expand even farther the use of these dial access services. For the first time our libraries can now afford to use the massive North Carolina Databases at OCLC via dial access using any standard microcomputer and telecommunications. Soon the State Library will launch a one year test of an electronic mail/bulletin board service and will make available to the far-flung librar-

ies of the state access to over 700 major business, technical and educational databases. Other information networks will soon follow.

But Networking in North Carolina is very alive on the local and regional levels. Electronic mail/bulletin board programs are in operation, local union catalogs and union lists of serials are being created, automation continues in many libraries, retrospective conversion projects are numerous, and the University of North Carolina's Linknet program is just entering its start-up phase. The Triangle Research Libraries Network (TRLN) nears completion and is serving as a national model of cooperation. The western North Carolina network linking Appalachian State University, Western Carolina University, and the University of North Carolina at Asheville is well into development.

John Welch's questions can be answered. The networks of North Carolina are vast, integrated,

multitype networks, *and* vital sophisticated local and regional networks. This issue describes some of these success stories. Remember, these articles do not predict what the author thinks will happen. They reflect what is now happening in North Carolina. Diane Kester describes how networking can aid the school library; she discusses school library networking developments in other areas of the country. Douglas Perry and Peter Bileckyj describe the successful electronic mail/bull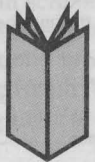etin board systems they developed in Cleveland and Wilson Counties respectively. Deborah Babel tells how a bibliographic network is being constructed to serve the needs of our mountain area public universities. Don Beagle shows how his Lee County Library automated and began the retrospective conversion of the system's collection by using Dynix and the Lee County computer facility. Barbara Anderson and Joy Wilson describe the development and implementation of business, demographic, and statistical database services at the Forsyth County Library System. This writer presents his thoughts on the role of networking in economic development. Finally, in a marvelous example of international networking, Marjorie Lindsey, Multitype Library Cooperation Consultant for the State Library of North Carolina until her retirement in 1985, describes her participation in a networking conference conducted by the government of Nepal during her recent several month assignment in that country.

Since the last issue on this topic in *North Carolina Libraries* in 1984, the North Carolina Information Network and the many local and regional networks, have begun operation. The future has arrived, aided by rapid advances in microcomputers and telecommunications. But more than this, the future was brought to us by the hard work, talent and dedication of many North Carolina librarians. Technology didn't make the network possible; people have. And because the spirit of cooperation and common purpose continues to grow among libraries and librarians of all types in the state, we will be able, in a way, to constantly have the future as part of the present. I hope you enjoy this Networking issue of *North Carolina Libraries*.

Join NCLA

Return the form below along with your check or money order made payable to North Carolina Library Association. All memberships are for two calendar years. If you enroll during the last quarter of a year, membership will cover the next two years.

To enroll as a member of the association or to renew your membership, check the appropriate type of membership and the sections or roundtables which you wish to join. NCLA membership entitles you to membership in one of the sections or roundtables shown below at no extra cost. For each additional section, add $4.00 to your regular dues.

Access to Information — Can Schools Provide It?

Diane D. Kester

"I'm sorry. That issue is missing from our collection. Why don't you try the public library or the community college? They should have that issue for you to use."

Does it sound familiar? Have you felt guilty that you could not provide the resources your students need? Do you find yourself referring students to other libraries, not even sure whether or not the item will indeed be available? There must be a better way.

There is. School library/media coordinators are establishing a link to other libraries by sharing resource information — be it a simple list of periodical holdings or a microfiche copy of a union list of serials of the libraries in the community. To make contact with other libraries, school library/media coordinators are beginning to utilize online bulletin boards and electronic mail.

Cooperation among school libraries had its beginning with system level centralized acquisitions and processing. Often the system level supervisor provided this service to the teachers or teacher-librarians who were in charge of the school library. Expensive items such as 16mm motion picture films were purchased by the school system for all teachers to share. Gradually the film collections were loaned to other libraries and school library networking was on its way.

In 1978, the Task Force on the Role of the School Library Media Program in the National Program quoted the National Commission on Libraries and Information Services in defining a *library network.*

Two or more libraries and/or other organizations engaged in a common pattern of information exchange, through communications, for some functional purpose. A network usually consists of a formal arrangement whereby materials, information, and services provided by a variety of types of libraries and/or other organizations are made available to all potential users. (Libraries may be in different jurisdictions but agree to serve one another on the same basis as each serves its own constituents. Computers and telecommunications may be among the tools used for facilitating communication among them.)[1]

Research Reports

Literature on school library cooperation is

Diane Kester is media coordinator at Western Wayne Junior High School in Goldsboro, NC.

scant. Research reported in 1981 by Barbara Immroth revealed that the multitype library network in Colorado successfully includes schools.[2] Writing in 1982 on a study of attitudes of school library media specialists on networking Ann Carlson Weeks stated, "Few references are made to this participation [school libraries and other types of libraries] in the body of literature dealing with multitype networks."[3] She continued, "Information available on the topic is primarily philosophical or descriptive in nature, appearing in professional journal articles and conference papers geared toward the school library professional audience. Few evaluative studies have appeared in the literature."[4] What has been happening?

The research generally concerns two factors relating to networking — the holdings of libraries and the attitude of librarians. As supporting evidence of the value of sharing resources, Marilyn W. Greenburg studied the collections of school libraries for evidences of an overlap or duplication of holdings. Over 50% of the titles were unique to an individual school collection; they were not duplicated in other schools. She identified factors that contribute to the availability of library materials in secondary schools. Schools which demonstrated a high availability of books and materials participated in interlibrary loan.[5]

Carol A. Doll researched the overlap of school and public libraries collections in Illinois in 1980. She found that the average overlap in school collections was 30 percent and the average overlap in school and public library collections was 50 percent. School collections differed from each other more than they differed from public library collections.[6]

Weeks surveyed the media specialists in New York State. The school librarians there ranked interlibrary loan as one of the most important services they would like to add to their program.[7] In 1985 Peggy Chapman conducted an attitude survey of public and school librarians in a large metropolitan city in North Carolina. She reported that, "While both groups agreed that there are many benefits to be derived from networking, many more public librarians than media specialists expressed a willingness to participate in

inter-library cooperation."[8] You see, there is a wide variance in attitudes of school library professionals concerning the sharing of resources.

Two years ago Mary Holloway, writing for *North Carolina Libraries*, identified the assets that public school libraries can bring to a multitype library network. First, there are over 2,000 school library/media centers just in North Carolina. Second, both print and nonprint resources, along with the equipment to utilize audiovisual materials, are available in these schools. Third, microcomputers are already in the schools and are being used for instruction as well as library management. Holloway went on to identify short and long-range plans for school participation in a statewide network.[9]

An overview of the role of school library/media centers in multitype library networks was presented by Janice K. Doan in 1985. In addition to Holloway's reasons for school library participation in networks, Doan points out that the school library is the entry point for future adult library users. If we want adults to have access to resources, we must also provide the service to school children, young adults, and educators.

Schools Collections in a National Bibliographic Database

Several school systems across the nation have become members of a state or regional vendor of the national bibliographic data base compiled by OCLC in Dublin, Ohio. *School Library Media Annual 1985, Volume Three* lists 58 school libraries and library systems which are members of a network and direct users of OCLC services as of April 1985. "Other school users receive OCLC services via a contract with an OCLC member, such as a processing center, state library, public library, or academic library."[10]

Most academic libraries and large public libraries in North Carolina subscribe to the services of SOLINET, the vendor for OCLC. Acquisitions, cataloging, and interlibrary loan activity is done on-line with either a direct computer line or with a microcomputer and dial access with a telephone. Two school systems, Greensboro and Charlotte-Mecklenburg, are members. In both systems it is used primarily for cataloging in the centralized processed service. Therefore, the OCLC record does not identify the individual school which has an item, only that it is held by a school within the system.

Schools in State and Local Networks

New York City. The New York City School Library System (NYCSLS) is a state-funded program which seeks to provide a coordinated approach to library service in the public and nonpublic schools of New York City. The high school libraries were given the option to join NYCSLS. An agreement between the principal and librarian on one part and the Library Unit of the Board of Education on the other, enables the school to become a part of the New York City School Library System. As an incentive, the Library Unit, using LSCA Funds, provides a modem and the phone installation charges if the school principal agrees to purchase the computer system and pay the monthly phone bill. Presently, 20 of the 111 high schools in New York City are members. Their goals are to enrich library collections and enhance library services through the sharing of materials and information. The NYCSLS contracts with the New York Public Library which operates the Metropolitan Inter-Library Cooperative System Database, MILCS. MILCS contains most of the holdings of the major public libraries in the New York metropolitan region and the NYCSLS Database. The NYCSLS administers the interlibrary loan program through which member libraries may borrow materials from one another as well as from other school library systems and public, academic and special libraries. This summer elementary, intermediate and junior high school libraries are installing computers and telephones to begin participation in the NYCSLS.

Three other programs are administered through NYCSLS — cooperative collection development, homework hotline, and computerized information retrieval (online data base use). Cooperative collection development is gaining in popularity. In NYC participants met to identify collection strengths and needs. Based on these results, the system designates one library to strengthen or develop a special collection. Subjects of these special collections include areas such as folk tales, ethnic literature, Asian countries, history of specific periods of American history, computers, law, and specific sciences. An informal agreement allows materials to be borrowed by member libraries. The idea of cooperative collection development is one which should be considered in North Carolina, not only by individual administrative units but also among neighboring systems and public libraries.

New York State. The Legislature appropriated $3.9 million to foster the development of 48 school library systems. Each system is developing a computer-based union catalog of materials in the schools within the system. An interlibrary loan and delivery system is being established. Each system is to become a member of one of the nine

state public, academic, and special library networks. A recent study of the interlibrary loan activity of these schools in New York showed that 85% was between schools, 9% was with public libraries, and 6% was from other types of libraries. Within the state, adjoining school districts are meeting for cooperative collection development planning. Unnecessary duplication of expensive items is prevented. (One school purchased *Newsbank* and distributed the index on microfiche to cooperating libraries.) District and regional depositories have been established as "last book repositories."

Alaska. Schools in the Anchorage School district are fully participating members of the Alaska Library Network. The holdings of district libraries are on microfilm. High school libraries may dial into Western Library Network (WLN) for holding information as well as for electronic mail. Also available is a microfiche catalog of the holdings of the twenty-eight systems that belong to WLN.[11]

New Jersey. The state library is providing leadership in the development of six regional library cooperatives. The interim planning committees in each region included school librarians. Emphasis during 1986 has been in network membership approval by superintendents and boards of education followed by reference services, citation location, interlibrary loan, and delivery. The computerized data base is the next phase.[12]

Connecticut. In a recent presentation at a session at ALA, Catherine Murphy, Stanford, CT, explained school and public libraries use of OPACs (Online Public Access Catalog). Teachers, students, and the library staff have subject access, as well as author and title access, to the collections of member libraries. Murphy identified eight ways that OPACs affect collection development.

Better cataloging improves access; networking makes other collections accessible; improving the catalog record makes selection of materials more accurate; new ways to search the catalog makes searches faster and more successful; successful and unsuccessful searches can be recorded and used in evaluating new acquisitions; bibliographies and inventories can be used to increase collection usage and aid in the weeding process; acquisition modules of the online catalog can provide records of materials purchased by classification and subject and can be compared to online catalog use; circulation statistics can be compared to the collection and goals set for increasing sections which have high usage."[13]

In developing a record for a bibliographic data base, Murphy pointed out that schools require unique fields such as grade level, curriculum area(s), special aspects, and relationships to other curriculum areas. She warns that, "School library media specialists need to become more aware of standards so that they are not disen-

franchised in the larger automation world." (Murphy)

Colorado. The Colorado Regional Library Service System, in operation since 1976, included school library media personnel as equal partners in the development of the state network. RLSS has provided inservice programs for the school library media personnel and worked for passage of legislation which included schools as equal members in multitype library cooperation. Links have been formed to enable smaller school districts to utilize ILL, reference computer searches, and communications from RLSS.

In other states, schools are becoming active participants in library cooperative networks, i.e., Illinois (through ILLINET), Indiana (18 systems in INCOLSA), Ohio (OHIONET), Pacific Network of OCLC (6 systems in PACNET), Montgomery County Maryland (MILO), and now, in North Carolina - Wilson Library Network, and CLEVE-NET.

North Carolina. In our state, multitype library cooperation has been supported with LSCA grants administered by the State Library. These local cooperative networks have been called ZOCs, Zones of Cooperation. Two projects involve school library media centers.

CLEVE-NET. The high schools in Cleveland County were included from the beginning in the proposal to form a multitype library network. A history of cooperation and reciprocal borrowing through use of a common library card for the libraries in Cleveland County provided the foundation for their ZOC project. With Cleveland County Memorial Library as the center, CLEVE-NET links two public libraries, a technical college, four high schools, and a private college (Cleveland County Memorial Library, Mauney Memorial Library in Kings Mountain, Cleveland Technical College, Burns High School, Crest High School, Kings Mountain High School, Shelby High School, Gardner-Webb College). The first project of the network was an on-line union list of patrons. Second was the Union List of Serials, accessible both in print format and on-line. The third project, which is still in the information gathering stage, is an on-line local information file of community agencies and organizations. Electronic mail provides resource sharing opportunities and personal contact among the librarians. Public events, college programs, and school activities are posted on the electronic bulletin board. The Project Director for CLEVE-NET is Douglas Perry, Director, Cleveland County Memorial Library.

Each high school in the network received a computer, printer, modem, and telephone. Al-

though school patrons were not added to the on-line list, schools have added their holdings to the Union List of Serials.

WILSON COUNTY LIBRARY NETWORK. After overcoming the technical difficulties of linking a variety of brands of microcomputers, the Wilson County Library Network began operation in the fall of 1985. The headquarters of the network is the Wilson County Public Library. Other members include two academic libraries, three high schools, a hospital library, and the School for the Deaf (Atlantic Christian College, Wilson County Technical College, Fike High School, Hunt High School, Beddingfield High School, Wilson Memorial Hospital, and Eastern North Carolina School for the Deaf). The interactive electronic mail/bulletin board system is used to transmit interlibrary loan requests, reference requests, and professional information among member libraries. Projects being developed include a consortium union list of serials, union list of audiovisual materials and a union list of patrons. Peter A. Bileckyj, Reference Department, Wilson County Public Library, is Project Director.

The school system has recently purchased new computers for the high schools to allow all members to take advantage of the share-ware that the Network has obtained. School library/media center activity on the system was picking up as the school year ended. [Note: See articles on Cleve-net and the Wilson Library Network in this issue.]

School Participation in Networking in North Carolina

What does this mean for school/library media centers in North Carolina where even a telephone is a rarity? First, do your homework. Seek the advice of consultants in Raleigh — both in the Department of Public Instruction and at the State Library. Read, read, and read about the elements involved in networking.

Networking works, even without telecommunications. Local schools can develop plans and procedures to participate in cooperative collection development. Lists of periodical holdings can be shared with local colleges and public libraries. Just today, a community college librarian needed an educational journal for a patron. She suspected that one of the schools in the county would have it — but the schools have not provided the college a listing of our holdings, even though they have provided a listing of their holdings to the schools. With consolidation of schools many libraries have duplicate copies of reference materials. How do you find out who could use

that second copy of *Current Biography 1954*?

Have you learned to use electronic mail? Many areas of this state have bulletin board services available for a nominal fee. No more "telephone tag!" Visit the ZOC projects in the state which include school libraries. Visit selective users of the North Carolina Information Network.

The key to sharing is advanced planning. If your county has not formed an association of librarians, start one. Work together to plan the sales pitch to be presented to appropriate administrators. The administrator must be convinced of the values of the network before being presented with membership fees, yearly maintenance fees, telecommunication costs, and other expenses.

Why network? School library/media coordinators are vendors of information. The quantity and quality of information will be enhanced with networking. Students of all ages should not be denied the access to information just because their own school library/media center does not subscribe to a specific magazine or cannot afford a special reference tool. Networking is sharing. Sharing begins in each administrative unit and each county. Networking is not a question; it is a necessity.

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OCLC UPDATE

Unanimous Decision for LS/2000 System
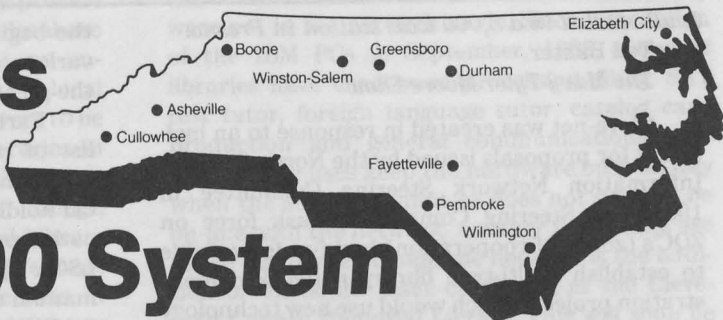
Libraries at twelve campuses of The University of North Carolina have unanimously agreed to purchase the LS/2000 system. Installation of the first four systems has begun. All systems will be installed by June 1987.

In November 1985, the University of North Carolina released a request for proposals which aimed to provide integrated library systems at twelve of its campuses. In March 1986, following evaluation of the eight responses, all twelve libraries recommended the selection of the LS/2000 system.

> According to Dr. Robert W. Williams, Associate Vice President, Academic Affairs, "The University of North Carolina looks forward to a most satisfactory association with the LS/2000 system. Of special significance to us is the fact that the LS/2000 system is a product of OCLC Online Computer Library Center, Inc., whom most of our libraries have depended on for computerized cataloging, interlibrary loan, and related services. The LS/2000 staff at OCLC provides the level of vendor support and product development that The University needs to afford maximum service to its users."

With these additions, OCLC now supports 79 LS/2000 computer installations serving 143 libraries throughout the United States and the United Kingdom.

LS/2000 Sites

Boone	Appalachian State University
Elizabeth City	Elizabeth City State University
Fayetteville	Fayetteville State University
Greensboro	North Carolina A & T State University University of North Carolina at Greensboro
Durham	North Carolina Central University
Winston-Salem	North Carolina School of the Arts Winston-Salem State University
Pembroke	Pembroke State University
Asheville	University of North Carolina at Asheville
Wilmington	University of North Carolina at Wilmington
Cullowhee	Western Carolina University

OCLC Local Systems

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614-764-6000

The Cleve-net Library Project: An Electronic Mail and Shared Data Network

Douglas Perry

It all started in a 5,000 watt station in Fresno.
> Ted Baxter
> *The Mary Tyler Moore Show*

Cleve-net was created in response to an invitation for proposals issued by the North Carolina Information Network Steering Committee in 1984. The Steering Committee's task force on ZOC's (zones of cooperation) had funds available to establish multi-type library network demonstration projects which would use new technology for resource and information sharing. Cleveland County librarians had worked together for years in various low-tech cooperative ventures and felt that the time was right to propose an ambitious and pioneering project.

Like Ted Baxter's start, Cleve-net's origins were humble indeed. Library directors from local colleges invited the new public library director to a welcome luncheon at a Shelby Chinese restaurant in July of 1980. These administrators enjoyed each other's company enough to say, "Why don't we do this more often?" Within three months the heads of five Cleveland and neighboring county public and academic libraries had met, proposed a constitution and formed the Broad River Library/Media Association. In response to the perceived weakness of other local or regional library associations, Broad River established itself as an association of institutions rather than individuals. On this basis, the voting membership (library directors or their appointed representatives) could commit the staff and resources of participating libraries necessary to the success of cooperative projects. Projects were envisioned and participation was encouraged for those institutions which felt that some particular benefit was to be gained for them. An altruistic appeal to self sacrifice for the greater good of library science or of other institutions was never encouraged. From

Douglas Perry is the former Director of the Cleveland County Memorial Library and the former Project Director of Cleve-net. Carol Heaven Wilson was appointed Library and Project Director on July 1, 1986. Mr. Perry is now Director of the Asheville-Buncombe Library System in Asheville, N.C.

the beginning the glue of self-interest has stuck various Cleveland County libraries together for the greater good of each and all.

Early Broad River projects included: a union list of periodical subscriptions generated by a common vendor, EBSCO, a union list of genealogical holdings and various shared continuing education projects. In 1983, Broad River was granted LSCA Special Project funds to standardize the manual circulation systems of Cleveland Technical College, Gardner-Webb College, Mauney Memorial Library and the Cleveland County Memorial Library.

The above mentioned "Common Card Project" provided a standardized plastic library card to patrons registered at each library and allowed them to borrow and return books in any "Common Card" library. These cards were to be used with Gaylord Model C chargers which each library had acquired through the project. A weekly courier service was also established to route books returned at participating libraries to their home library. This courier duty was rotated through the participating libraries, which promoted weekly personal contact among librarians.

The Broad River Library/Media Association's activities from 1980 to 1984 are well characterized by the quotation from John Naisbitt's *Megatrends* that we used in applying for the Cleve-net grant:

"... networks are people talking to each other, sharing ideas, information and resources ... networking is a verb, not a noun.

Networks exist to foster self-help, to exchange information, to change society, to improve productivity and work life, and to share resources."[1]

Our early experiences with networking had been successful and had proven beneficial to each participant. By 1984 we felt confident that more complex and involved network projects would be practical and again beneficial. At this time the State Network Steering Committee's task force on ZOC's was making a second round of grants for

local networking. We envisioned a project that would feature many of the elements that the state committee would like to see and which would be a logical extension of the groundbreaking cooperative projects Broad River had already established. We planned to create a system that could eventually be expanded as a means for the comprehensive automation of functions in any of the participating libraries.

Our proposal to the task force on ZOC's was to establish an on-line communications and shared data network that would initially provide four products: electronic mail, a shared database of "Common Card" patron registrations, an on-line data base of periodical holdings and a local information data base. These functions were to be provided for an expanded group of libraries in Cleveland County including: Cleveland County Memorial Library, Cleveland Technical College, Gardner-Webb College, Mauney Memorial Library and the four high schools from the county's three school districts. This consortium had become, in fact, an all-inclusive roster of Cleveland County public, academic and secondary school libraries.

The management plan for the Cleve-net project called for a project director, assistant director and task forces to address the questions associated with the four products proposed. The heads of each member library agreed to meet as a group on a monthly basis and the task forces were to meet as often as necessary. Each library was involved in the project design and the acquisition of project hardware and software. The final configuration reflected a consensus of opinion that it was the most beneficial design available given the extent of our funding.

Proposals were heard from a variety of business and library market vendors. A major consideration in selection was to acquire a system which was first expandable, then flexible enough to support software from more than one source. The multi-task, multi-user Datapoint 3200 super microcomputer was chosen as the host processing unit of the network because it could handle the rather modest initial needs of the network and could later be expanded to hold 300 megabytes of storage, have 8 megabytes of main memory and support 28 users. As communications between remote users was to be provided over regular voice business telephone lines, ten 1200 baud modems were installed, one at each of the seven remote libraries and three at Cleveland County Memorial, home of the host computer. Funds were not sufficient to provide seven modems and seven incoming lines at the host, so the remote libraries were divided among the

modems and schedules were worked out for their access to the system. Schools have priority in the morning and after they close at 3:00 pm, the other public and academic libraries each can be on-line for the rest of the day.

One of the most efficient aspects of the hardware configuration was the use of IBM Personal Computers as the workstations at each site. Use of PCs instead of dumb terminals allowed the member libraries access to the vast world of off-the-shelf business, educational and library applications software which could be used when they were not in the network mode. Since installation of the IBM PCs in September, 1985, different libraries have used word processing, filing, SAT test tutor, foreign language tutor, catalog card production and general communications software. These uses keep the hardware busy all day when the station cannot or does not need to be on-line with the network. Another interesting use of the hardware outside the network is the addition of "Bibliofile" laser cataloging at the Cleveland County Memorial Library. This will soon be tied into the expanding network system as the source of MARC cataloging for an on-line data base of library holdings.

Another networking feature of Cleve-net is the emergence of an IBM PC user group among members who share help and information about non-system use of the PCs. Cleve-net has been built on an existing non-electronic network and in turn is spawning new sub-networks.

... Cleve-net's origins were humble indeed.

One of the important features of the Datapoint 3200 host computer that has not been mentioned is that it runs a version of the Unix operating system that allows the selection of system software from more than one source. It was initially planned to use some standard business software and some custom-written software to provide the four promised network products: mail, patrons, periodicals and local information. This plan was modified as non-LSCA funds were made available to the project. Cleveland Memorial funds were used to acquire Sirsi Corporation's Unicorn Library Management System which could provide the Cleve-net products plus bibliographic and circulation control. As mentioned before, the Library Corporation's "Bibliofile" laser disk system has also been added as a source of MARC records for the emerging catalog and circulation functions of the network.

Cleve-net has been up and on-line since September, 1985. As soon as the host computer, modems, telephone lines, remote PCs and software were installed, electronic mail was fully functional. Early messages were often of the "Hi! How are you?" genre. As the novelty of electronic mail wore off, many more useful communications were seen. The most frequent early messages were requests for information on patrons registered at other common card libraries who had overdue books. This question has become less frequent as thousands of patrons from all over the system have been re-registered and input into the system patron database. This database is searchable from any Cleve-net terminal by name or registration number.

Much use of electronic mail has been made to supplement the education of network members in the use of the system. More knowledgeable users are able to monitor off-site use of the system by others and offer advice and correction. Through the bulletin board feature of mail, events are posted for all to read, and meetings of the members are called.

Requests for reference assistance are sent to members who are perceived as appropriate choices. For instance, questions thought to be answered by government documents are sent to Gardner-Webb College, a selective government document depository library. The high schools especially use electronic mail for reference and interlibrary loan as they cannot use the State Library in-watts system. Cleve-net has provided a revolutionary breakthrough that remedies the isolation of the high schools. Most of them did not even have telephones in their libraries before Cleve-net. Outside information assistance was rarely sought. Cleve-net has given high school librarians daily electronic contact and regular in-person contact with professionals and collections from which they were isolated in the past.

Those readers who constantly play the office game of "telephone tag" can appreciate the surety of messages getting through as members check their electronic mail boxes twice a day. The telephone is still used if someone must be reached for an answer immediately, but one must still catch the intended party. Simply writing an electronic mail message and looking for the answer the next day can save a lot of wasted time. In an electronic mail system which provides constant on-line access to all members, it is possible to create a feature to alert individual members as mail is created for them. This was investigated but the expense was not warranted at this stage of our network's development.

The on-line patron registration file was envisioned as a way to check the permanent record of library users at the point of check out. The expense in labor of maintaining a paper (Rolodex type) file on patrons at the check out counter and the time needed to check each borrower had prevented us from having this kind of control in the past. We have had no pre-checkout screening of borrowers from other Cleveland County libraries since the inauguration of the "Common Card" project.

Persons have been re-registered at the participating libraries since October, 1985 and now the status of users from any "Common Card" library can be quickly checked before lending materials. The Cleveland County Memorial Library has noticed an increase in the receipt of fines since using the on-line patron file. By making comments on the items long overdue or unpaid fines on the individual patron record, any Cleve-net library can have a convenient circulation control tool short of implementing fully automated circulation control.

The advantage of using the patron data base software from an existing circulation control package is that when Cleve-net libraries are ready to invest in the additional communications and item data base production necessary, they will already have a usable patron file on-line. In keeping with our design of a flexible system the patron data base can be useful as an aid in a manual or automated circulation control system.

The on-line patron registration file was envisioned as a way to check the permanent record of library users at the point of check out.

The union list of magazine holdings and the local information data base have been configured to use the Sirsi bibliographic control module. Both fit into what is basically a bibliographic format which can be searched by author, title or subject. The magazine union list is being easily created by filling in the blanks on a bibliographic template screen. The Western North Carolina Library Association Union list of serials is being used as our source of cataloging. Printed copies of the Cleve-net magazine data base are placed in the magazine index areas of each library to direct patrons to the holdings of all Cleve-net libraries.

Patrons who seek a magazine held in another Cleve-net library can most quickly get the desired

article by going to the holding library. Interlibrary loan of photocopies can also be arranged by sending a message over electronic mail. The desired item can either then be mailed or slipped into a courier box for delivery within a week. (High school libraries have not yet been linked with the courier.)

The local information data base uses the bibliographic template of the item data base to store data on local agencies, organizations and clubs. This includes the following: agency name, contact person, address, telephone number, hours of operation, eligibility, service provided and subject and keyword classification of the organization. The software will allow subject and agency name searching of the data base from any Cleve-net location. Subject searching will be based on an authority file of subject headings which is supplied to each operator. A hard copy file of agency publications is being established for an in-depth back-up to the data base, and a regular schedule of information updating has been established.

The local information data base is a project of special interest to the United Way. They had previously determined that such a resource was a priority need in Cleveland County and they have been very supportive of our efforts. They have granted Cleveland County Memorial Library funds for a special local information telephone line and are helping gather and process information for the data base. This feature should come on-line in late summer of 1986. Jo Anne Owens of the Cleveland County Memorial Library has taken much of the responsibility for the creation of this Cleve-net product as the Master's project for her MLS degree from the University of North Carolina at Greensboro.

True to our design and intent, the completion of our four initial projects does not mark the maturity of Cleve-net, only its adolescence ("the onset of puberty" doesn't seem to be the right phrase). The immediate future will bring the conversion and loading of Cleveland County Memorial's complete book and audiovisual data base into the host computer's disk. This disk memory has just been upgraded from 40 to 160 megabytes. With Cleveland Memorial's item data base on-line, automated circulation control will begin. Other Cleve-net libraries will be able to search Cleveland Memorial's data base by author, title or subject and request items for interlibrary loan on electronic mail.

It was hoped that all Cleve-net libraries would be able to use the full circulation control capability of the system this year, but the Cleveland County Commissioners turned down a capital fund request to bring our software license to that level. This network enhancement is still desirable and possible and can be accomplished if the members pool resources from their separate funding bodies or find other grants. When that stage is finally reached, any Cleve-net library will be able to search the holdings of any other member. With this type of on-line access, interlibrary loan requests should show a mighty increase and our courier system might need to be increased to a daily operation.

It could be possible to offer access to some of the data bases of Cleve-net directly to the at-home public in the future. We would need to add a modem and telephone line dedicated to public access and supply an access software diskette to outside agencies or members of the public who have IBM compatible personal computers and modems. These outside users could search the item and local information data bases and request materials or information on a local bulletin board type of setup without having access to confidential patron records.

Benefits of the consortium approach to automation of circulation and later the public access catalog include: reduced software costs, shared hardware and software maintenance costs and access to one another's collections. This all-inclusive approach to automation has brought libraries along which might not have gotten this far in their development for years. We have all learned from one another and feel the richer for having worked together.

Much use of electronic mail has been made to supplement the education of network members in the use of the system.

It is my opinion that public libraries exist to serve any patron or client who comes to them for help. This includes the young, the old, the rich, the poor, the general public, and school and college students. These students, whether public librarians like it or not, come to us for help every day. The network approach to fulfilling our mission best serves those clients (i.e. students) for whom our collection emphasis is not primarily geared. By cooperative effort with local school and college libraries we can help those librarians better serve their user groups on campus or allow them to send their users to us with a reasonable idea of what service they can expect. In like manner, these cooperating school and academic libraries should welcome our primary user group, the

general public, and with the enhanced user and item control afforded by the union patron data base and the courier service relax any barriers to outside access which may have existed in the past.

Within a service area like Cleveland County the uplifting of any one library enhances all other libraries. Cleve-net has brought progress in some degree to all participants and especially has ended the isolation of the high school libraries. This enhancement has, in the final analysis, brought greater access to information and professional assistance to the publics of each and all Cleve-net libraries. For the public, the whole is definitely greater than the sum of its parts.

References

1. John Naisbett, *Megatrends: ten new directions transforming our lives* (New York: Warner Books, 1982) 192.

Appendix

Cleve-net participating libraries
Burns High School, Hazel Olsby, Librarian
Cleveland County Memorial Library, Douglas Perry, Director
Cleveland County Technical College, Haley Dedmond, Dean of Learning Resources
Crest High School, Melba Chandler, Librarian
Gardner-Webb College, Thelma Hutchins, Director
Kings Mountain High School, Sara Griffin, Librarian
Mauney Memorial Library, Rose Turner, Director
Shelby High School, Alma Carpenter, Librarian

"ESTABLISH JUSTICE"   OUR CONSTITUTION—GOOD READING   "THE BLESSINGS OF LIBERTY"

CBC Celebrates the Bicentennial of the U.S. Constitution

The Children's Book Council is observing the bicentennial of the U.S. Constitution with three striking full-color posters created by Charles Mikolaycak. The posters depict groups of writers whose work conveys the spirit of American letters. The 17″ × 22″ "Our Constitution. Good Reading" center piece is a sampling of American literary notables. A precept in the Preamble of the U.S. Constitution ties together the authors on each 11″ × 22″ side poster: "Establish Justice" includes proponents of civil liberties and human rights; "The Blessings of Liberty" shows expatriates who appreciate the American concern with individual freedoms. A two-color schematic "Who's Who" key, suitable for display, accompanies the poster set; it identifies the authors whose portraits appear in the posters and includes titles and publication dates of famous works.

Charles Mikolaycak, creator of the Constitution posters, has illustrated more than 45 books for young readers. He is a recipient of the Society of Illustrators Gold Medal.

The full-color posters are printed on 100 lb. cover weight stock. The set is shipped rolled in a protective tube. The Constitution Poster Triptych is available only as a set (three posters and the "key") from CBC for $27.50.

"Our Constitution: 200 Years," a companion piece to the Constitution Poster Triptych, appears in the June, 1986—March, 1987 issue of *CBC Features*, the Council's newsletter. The piece includes a brief, annotated bibliography of titles currently available from many publishers on the subjects of the U.S. Constitution, the founding fathers, and the birth of the Republic. Accompanying the bibliography are statements about the U.S. Constitution from prominent authors Avi, Christopher Collier, Jean Fritz, Jamake Highwater, Scott O'Dell, and Elizabeth George Speare. Single copies of "Our Constitution: 200 Years" are available from CBC for a 22¢-stamped, self-addressed, 6½″ × 9½″ envelope.

An illustrated materials brochure that includes order and discount information for the Constitution Poster Triptych and other CBC materials is available from CBC for a 22¢-stamped, self-addressed #10 envelope.

The Children's Book Council, sponsor of National Children's Book Week, is a non-profit association of children's and young adult trade book publishers. Proceeds from the sale of materials support CBC projects related to young people and books.

The Wilson County Networking Project

Peter A. Bileckyj

The Wilson County Libraries Networking Project is one of the five projects to grow out of the response to the North Carolina Networking Feasibility Study performed by King Research, Inc. Some of the directors of libraries in Wilson County—Josie Tomlinson, Wilson County Public Library (WCPL); Jeannette Woodward, Atlantic Christian College Library (ACCL); Shirley Gregory, Wilson County Technical College Library (WCTCL); Marian Spencer, Wilson Memorial Hospital Learning Center/Library (WMH); and Jinny Beddingfield, Eastern North Carolina School for the Deaf (ENCSD)—had spoken informally among themselves about the possibility of increased cooperation among libraries in Wilson County and had already begun work on a "Wilson County Libraries Brochure." In May 1983 many of the county's librarians met at a luncheon meeting at the Wilson County Technical College Library to discuss the libraries' response, if any, to the King Study (in particular the matter of whether or not to submit a proposal to become a ZOC [Zone of Cooperation])and any other networking efforts among themselves. At that meeting it was concluded that most of the librarians did not feel that their libraries were in a position to prepare a proposal at that time; networking was a new concept; and the King study appeared to imply a need for very large projects, which most of the librarians in Wilson did not feel ready to undertake. Having made their reservations clear, the librarians nonetheless expressed great interest in joining together in local cooperative efforts, thereby continuing in the spirit of the King study without venturing dangerously into unknown areas. The five libraries that had cooperated in developing the brochure then decided that the next useful project would be to develop a union list of periodical holdings, the first version of which was finally produced in early 1984.

Nineteen eighty-three and 1984 were the years that microcomputers, mostly Apples, were entering libraries and schools in Wilson County. The "Micro Revolution" was having its first effects on Wilson librarians, who with so many others, were confronting a strange but potentially useful tool. I had accepted the assignment of overseeing the introduction of automation at the Wilson County Public Library with its new Apple IIe and hard disk drive; Shirley Gregory at the Wilson County Technical College Library and Jeannette Woodward at the Atlantic Christian College Library were at similar stages with their institutions' Apples. All the librarians involved with microcomputers were beginners and very soon were confronting the sometimes exasperating challenge of integrating microcomputers into their institutions' routines and of somehow also tapping more of the potential claimed for microcomputers. Responding as time and need permitted, the librarians were able to bring word processing and database management—at different levels of sophistication and complexity—into the work routines of all three libraries. The sense remained, however, that something more was possible.

This sense was in great part inspired by the then heady microcomputing literature, particularly microcomputing magazines. The professional wisdom had it that to become comfortable with microcomputers, one had to have time to "play" with them and that one needed to read the literature to keep up with developments in the quickly changing field. The more I read about modems, baud rates, the Source, Compuserve, electronic mail and electronic bulletin board systems, the more it sounded as if an electronic bulletin board system might be just the thing to link libraries in Wilson County. Did not the letter of the State Interlibrary Loan Code mandate a thorough check of all local resources before directing requests for materials and information to the State Library in Raleigh? The longstanding informal arrangement among WCPL, WCTCL and ACCL whereby public services staff would call the other libraries if they felt that another library might have the book or information needed demonstrated that information exchange within the county could work. Why, then, not automate it?

The notice of a request for proposals for the

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second year of ZOC projects precipitated the vague feelings of networking potential in the county into something more definite. I shared my ideas about a bulletin board system with Shirley Gregory and Jeannette Woodward. In 1984 staff members from the three libraries attended a MUGLNC [Microcomputer Users Group for Librarians in N.C.] workshop on telecommunications and microcomputers, which demonstrated that information exchange by way of microcomputers was already being done in the microcomputing community and in such a way that it would also be feasible in Wilson County. To the feasibility discussions I brought my very strong interest in setting up a bulletin board system to facilitate exchange information (ILL, reference, news, notices, electronic mail) among libraries in the county; while interested in this potential, Shirley Gregory and Jeannette Woodward wanted to see a networking project that would provide more services than just a bulletin board system. The successful union list of periodicals had demonstrated the feasibility of producing very useful bibliographical tools at a local level. Woodward and Gregory saw in a countywide network of linked microcomputers a new way to build union lists and bibliographies, one that would make it possible for librarians to exchange large amounts of information without having to leave their libraries or to exchange diskettes or hardcopy. The three librarians, having cooperated often before, found it easy to combine their respective interests into what became the vision of the proposal.

... the libraries had offered an excellent model that was, regrettably, technologically unfeasible ...

After explaining the goals and the likely benefits to my director, Josie Tomlinson, I was able to proceed with Gregory and Woodward to plan and produce the proposal. Joining the original core group of five libraries were the three high school libraries (Beddingfield High School, Fike High School and Hunt High School), whose participation was championed by Rebekah Overman, media supervisor of the Wilson County Schools. The diversity of types of librarianship (academic, public, school and special) represented and the nearness of the libraries to each other (all in the same county and calling area) boded well, we thought, for "ZOC-ing."

What the eight libraries finally offered was in concept quite simple. They envisioned a network that offered two major functions: a capacity to exchange reference and related reference information by way of a bulletin board system and a capacity to build bibliographical products. The literature abounded with references to successful bulletin board systems, so the librarians felt secure that they would be able to develop this function. To show the capacity to produce useful bibliographies, the libraries turned for a model to the earlier success of the union list of magazines and proposed to produce a union list of audiovisual materials held by the eight libraries. Because the two functions were related but different, the planners had envisioned the network as having at least two nodes. WCPL would serve as the site for the bulletin board system and its related activities, while ACCL would serve as the major workstation site for any bibliographic efforts.

To understand some of the problems that the project later encountered, one needs to understand the planners' thoughts about how to equip the proposed network. The planners' libraries all had Apple IIe's, as did, for the most part, the high school libraries. We saw the microcomputers already in the institutions as a base for any future network. To complete this base, each library that did not have a microcomputer would be provided with an Apple. All the libraries needed modems; cables; telephone lines—which the proposal would fund for all libraries for a specified period; communications software; data base software and any other hardware or software necessary to maintain compatibility throughout the network. Since two of the libraries, WCPL and WCTC, were already using Condor III, a CP/M-based data base management system [dbms], it was decided to use that program throughout the network; this meant that all the libraries also had to have CP/M capacity.

During the preparatory deliberations for the proposal, Woodward recommended that since all the librarians in the county were still beginners in the use of microcomputers, the planners should also budget for a technical consultant who would be able to guide the libraries through the inevitable technical problems. This recommendation was incorporated into the proposal and proved, as will be seen below, to be one of the important safety nets for the entire project. When the Wilson County Libraries were granted funding in June 1984, they knew that they were embarking on a trip into new territory; but none of the librarians had any sense of how new *new* could be. Among the earliest efforts of the consultant was making that fact clear to them.

The planners of the original proposal, with the support of Josie Tomlinson, were able to send out a request for a proposal for a technical consultant by the end of the summer 1984. The Request for a Proposal (RFP) was sent to five organizations, only one of which, the Center for Urban Affairs and Community Services, North Carolina State University, responded. (The planners had decided that geographic proximity was an important factor in the choice of a consultant so we limited the distribution of the RFP to possible consultants in the Triangle and Piedmont areas of the state. We reasoned that any consultant from outside these areas would expend most of the limited allotted funds in travel costs.) Needing the technical assistance and seeing no reason to expect that the center would not meet the libraries' needs, the libraries accepted the bid as offered by the center. With that acceptance, the libraries began an intense nine-month relationship with the center and their representative, Gary Miller.

I met with Miller repeatedly in Raleigh, first to explain what the libraries were attempting to do and, as the enormity of the central problem became clear, to learn how to correct it. Miller, after listening to me, reviewing the proposal and conferring with other experts at the center, reported to me that what the libraries were attempting to do was (1) in practice in advance of the times (i.e., at the cutting edge of networking), and (2) impossible in terms of the hardware configuration of the original proposal. This report announced the first crisis of the project and made clear in dramatic terms how limited the experience of the Wilson County librarians was at that stage.

In effect, the libraries had offered an excellent model that was, regrettably, technologically unfeasible with the equipment brought to the project and the equipment that the planners had thought necessary to purchase with funding from the grant. Miller made it clear that the bulletin board system functions of the network were not under question; there were already hundreds of functioning bbs's, some at libraries, so there was demonstrated precedent for that capacity. The construction of bibliographic products over telephone lines, however, offered problems that the planners had not even known to consider. Our vision saw the network allowing each librarian to work at his or her library while building the union list of audiovisual material at a workstation microcomputer (at ACCL); the microcomputer in the librarian's library would work as a dumb-terminal extension of the workstation microcomputer,

with the two microcomputers being linked by the telephone lines and telecommunications software. As Miller explained, the eight-bit technology represented in the original proposal cannot support the type of signal and file control that the librarians' vision demanded. There was at least one software package that might work as the required intermediary between the distant-user's signals and the workstation microcomputer's operating system, but it would not work on any eight-bit microcomputer. His recommendation was, in short, that the network would absolutely need to have at least one IBM PC-XT (with a 10 megabyte hard disk drive) to serve as the workstation microcomputer. It should also seriously consider having a second XT at the WCPL for the bulletin board system function, since that would provide backup coverage for the network in case the workstation microcomputer were to malfunction and would provide the technology and storage capacity to run a bulletin board system adequately.

The successful union list of periodicals has demonstrated the feasibility of producing very useful bibliographical tools at a local level.

I reported the news of the crisis to the other planning librarians. After explaining the problem to the State Library, we received permission to modify the original configuration in whatever manner necessary to make the network work. Because the proposal had already been funded, we had to work within the total amount of the grant. At first, this limitation was a source of concern for us, but as we worked with the consultant's hardware and software recommendations, we were able to recast the configuration more easily than we had expected, in particular because the new software recommendation appeared to make the multiple copies of Condor that the libraries had originally budgeted unnecessary. We found that the crisis appeared to be a blessing in disguise.

The planning librarians and Miller presented the results of our respective findings to all the librarians involved with the project in a special meeting in November 1984. Now that an all-Apple network was shown to be unworkable but that a mixed-type-network appeared to be feasible, the two institutions not bringing microcomputers into the network—ENCSD and WMH—had to

decide which type of microcomputer each wanted the project to purchase for it. ENCSD chose an Apple because of that microcomputer's proven capacity to serve well in an educational context; WMH chose an IBM PC to maintain compatibility with the Hospital's commitment to IBM hardware.

With the consultant's assistance, the libraries were able to prepare the requisite bids for hardware and software and to send them out just before the Christmas holidays. The next few months saw a complex round of complications and errors. Orders for microcomputers, in particular for the two XT's, were either lost or significantly delayed. Serving as the project's fiscal agent, Atlantic Christian College Library spent much time tracing down orders that vendors had misdirected or misunderstood. Out of the process of trying to sort out what happened with the orders, ACCL discovered that one institution ordering for another often disrupts vendors' ways of providing services. The delay in receiving needed equipment inevitably slowed down all networking efforts.

While the libraries were dealing with the frustrations of ordering and receiving hardware, the consultant was looking into the utility of the software package, Softerm PC, which we hoped would enable the libraries to build the union list of audiovisual materials on the workstation microcomputer. Working with Softerm PC and Condor III, Miller and his associates discovered that the project had been stymied by technology again. The Softerm PC performed very well as the telecommunications intermediary between the outside caller and the host microcomputer's operating system. It was possible to call up Condor III, open files, etc. from another microcomputer, but with an important restriction: the user at the distant microcomputer could not see anything on the screen. The designers of Condor and of most single-user software had not intended their programs to rely entirely on calls to DOS, which can slow down the performance of the software; in certain functions the software bypasses the operating system to engage the microcomputer's hardware directly, thereby adding to the speed of operation and also effectively guaranteeing that the program cannot be used in a multiuser environment. While it was possible to access the data base management system (dbms), it was useless to do so. The vision of building the data base at one workstation while working at a distant microcomputer appeared, once again, to be an unobtainable one.

The planners had no recourse but to reconfigure the networking arrangements yet another time. In light of the consultant's discoveries, we struggled to maintain as much networking capacity as the then-current state of microcomputer technology would permit. We were also constrained by the hardware that was already in the system and the hardware that had been ordered. The power of the vision still gripped us, however, so we looked into other operating systems, in particular the Pick operating system and Xenix. From the literature, it appeared that both offered multiuser capacity similar to what the libraries had proposed originally, so we made use of our consultant again to see what he could find out. His research brought news that disappointed us again, but at least in the case of the Pick operating system, it showed that we were looking in the right area.

The Pick operating system had sparked much hope because of its nature as a dbms-Ucum-operating system and its multiuser capacity. (Its dbms capacity makes it an ideal system for library-type applications, which is why at least one of the major library system automation vendors, Dynix, uses this operating system.) Regrettably, we had to abandon this lead to fuller networking because the consultant learned that Apples could not communicate with an IBM PC running Pick.

That left the other option, Xenix, a Microsoft version of the multiuser operating system Unix, which had become available for the IBM PC-XT. While affording multiuser capacity, this operating system could not guarantee that all the libraries would have access to or compatibility with the necessary applications software. The libraries also had to consider the fact that all the operating system and applications software, not at all inexpensive, would still need to be purchased out of already depleted funds. The consultant also warned us of the likely steep learning curve involved in using the system and of the lack of technical expertise in the area to draw upon for assistance. The Pick operating system, while admittedly a risk, had the "built-in" dbms component to commend it; Xenix had nothing similar and offered more uncertainties than the libraries felt comfortable in confronting.

Finally convinced that their vision of multiuser capacity was unobtainable in terms of what the libraries had to work with, the planners concentrated on making the best of what they had. After two crises and an increasing amount of experience using microcomputers, it became apparent that the thinking behind the configuration originally offered in the proposal was quite sound overall for what the libraries could actually

do. The bulletin board system capacity at WCPL had never been lost, so we knew that we had a base for networking. To make the capacity to develop bibliographical products a real one, we now saw the network in terms of distributive capacity, in which each institution would build its own data bases, which each in turn would send to the workstation microcomputer at ACCL over the telephone lines using the telecommunications software that each would need to access any of the other microcomputers. At the workstation microcomputer, the separate files would be joined and sorted to produce a master union list.

The decision to standardize on one dbms program, Condor, meant that despite the "Apples and IBMs" problem, each institution would be producing files for the same program, either in MS-/PC-DOS format or in Apple CP/M format. By using the same program on different machines, we were assuring compatibility of data files. Experiments with the exchange of trial data bases between an Apple IIe and an IBM PC-XT confirmed what the planners knew in theory. But what if the communications link broke down or otherwise became unusable? Or what if it took too long to transfer a very large file to the workstation microcomputer? An article in the December 1984 issue of *Byte* indicated that transfers of large files can be lengthy operations, whereby the two microcomputers would be tied up for what could be long periods of time. After our experiences in just coordinating meetings among all the librarians involved, we wondered how practical transferring files over telephone lines would always be in the real world of the very different types of schedules in the eight libraries; therefore we also hoped to find another means to transfer files to supplement the telephone lines or, if that route finally proved to be impractical, to replace it. Fortunately I had chanced upon an advertisement for a utility card, the Apple Turnover card from Vertex, that converts Apple CP/M files to MS-/PC-DOS files and vice versa. (The literature indicated that such a program such as Media Master alone, which appears to offer this type of conversion for every other (or almost so) CP/M format could not work for Apple CP/M files because of the special nature of CP/M for Apples. This information was our first indication that the many parts of the CP/M world were not as compatible as some of the literature had claimed.) The project purchased the card to test it and found that it works well for the libraries' purposes, thereby guaranteeing file transfer and networking capacity between the two types of microcomputers.

The matter of the bulletin board system had

almost been forgotten in the many crises attending the area of file transfers and file compatibility. Since working within the total budgetary amount after the networking reconfigurations had left the project with fewer resources, it became important for the libraries to maximize the return on what was left. The consultant had been involved in all the planners' deliberations and understood our position. His recommendation for the remaining software needed was to use public domain and shareware software; the low cost involved and the reputed reliability made this route appear to be the best course. For the telecommunications software, the libraries would use Modem7, an older but well-tested CP/M program, for the Apples and PC-Talk for the IBMs. For the bulletin board system itself the consultant recommended "RESPOND Bulletin Board System" (RBbsS-PC), a very inexpensive but very functional program from the Capital Area PC Users Group in Silver Springs, Md. He arranged through his sources for the libraries to receive Modem7, and the libraries procured RBbsS directly from the source.

Once these decisions had been made, the problems of "lost" and missing hardware resolved and the equipment brought to the right owners, it was possible, so the libraries thought, to get down to the matter of bringing up both parts of the network. That meant arranging for telephone lines to be installed wherever needed, getting the bulletin board package running at WCPL, arranging for all the institutions to receive the needed version of the Condor data base entry form, etc. for the audiovisual list, preparing instruction sheets and solving all the little problems that kept cropping up. Fall 1985 and early winter 1986 were devoted to this endeavor. Without the assistance of all the librarians involved in the project and the special assistance of Mark Turik, local dentist and computer dealer/consultant, the project would have fallen even more behind.

The planners aimed for a special meeting in January 1986, to be held at ACCL, to which all the librarians involved in the project and representatives of the State Library were to be invited. Working with the assistance of all the librarians involved, we were able to establish the foundation of networking capacity in the county in time for that meeting. At that meeting all the librarians were introduced to the operational bbss and its potential uses and were given preliminary instruction about entering their institutions' data into the audiovisual materials data base. After so many crises and interruptions, the parts of the network had begun to come together and were working.

This optimism was soon to prove premature, as some of the librarians involved discovered new problems. It had become apparent even before the January meeting that the network might yet experience more problems of incompatibility, even in cases where the planners had ensured compatibility. The first major problem involved the CP/M cards needed by the Apple-using libraries to run Condor and to communicate with the bbss using Modem7. The planners all had older Apple IIe's and older CP/M cards, for which the version of Modem7 that was supplied to the network was configured. With our Apple IIe's it worked well, so we assumed that this version would work in the other Apples in the system. The newer Microsoft CP/M cards that the Project had purchased were, however, so significantly different in structure and in placement in the Apples that the version of Modem7 configured for the network's use would not work. Microsoft, the libraries discovered, was not necessarily consistent with Microsoft.

The planners immediately recognized the seriousness of this problem and decided as a stop-gap measure to see whether there was any software at hand that the Apple-using libraries could use to access the bulletin board system. The details of transferring CP/M files would have to wait until the more pressing problem of how to enable these libraries to access the bbss was solved. ACCL has been using Data Capture succesfully for its on-line searching, so we decided to see how that program would work on the other Apples. We quickly discovered that the program would not work on the newly enhanced Apple IIe's that had entered the network. Apple Computers had changed the design of the Apple IIe by using the 65C02 chip, a modified version of the 6502 found in the older Apples; the changes were sufficient to make different models of the same basic microcomputer at best only semicompatible.

While puzzling over the communications impasse, the librarians who were to use the CP/M version of Condor and the planners were also confronting the arcana of CP/M as an operating system and the logistical shuffle of running a sophisticated dbms such as Condor on a two-floppy-disk-drive microcomputer. Gregory and I, who frequently went to these libraries to assist as we could, quickly discovered that despite much good will, the staffs at institutions such as Eastern North Carolina School for the Deaf Library and the three high school libraries found it difficult to find time away from their other, often non-library-related responsibilities to master enough of the CP/M operating system to make

working with Condor a pleasant (or at least tolerable) experience. Even we who had some experience with CP/M were far from expert at using it and were occasionally stymied by CP/M's cryptic (and erratically produced) error messages. While the decision to bring "inherited" microcomputers into the network necessitated the use of CP/M and CP/M-based software, the complexity of the operating system made it less than ideal for training inexperienced microcomputer users.

In contrast to the setbacks with the Apple IIe's, the experience of libraries using IBM PC's were generally forward-looking and positive. As I became more comfortable with using the IBM PC-XT at WCPL and explored more of the software available for it, I began to understand what the consultant had meant when in the November 1984 meeting he had said that eight-bit microcomputer technology was out of date. The IBC PC users had no software problems accessing the bulletin board system. In the beginning they used PC Talk and later shifted to Qmodem. With both programs, after a few minutes of instruction they were able to access the bbsm and were ready to explore the software by themselves to discover its other capabilities. Their experience with Condor, while not quite so simple, proved similar.

Through continued reading in microcomputing magazines and purchases, I soon discovered large amounts of inexpensive, reliable free- and sharewise programs for the IBM PC that, because of its easiness to use, made us realize how much simpler it would have been for all had the project been configured to give each institution an IBM PC-XT—or at least an IBM PC. In that way all the libraries would be using the same hardware and software. Learning problems, while always present, would have been fewer and less severe because the universe of potential problems would be smaller and more easily addressable. Just the increased ease-of-use factor in the software, which would be a criterion of selection and use, would have reduced a potentially severe problem. The increased ease-of-use factor in the hardware would have saved both planners and users many frustrating and exasperating hours.

... (the libraries) have benefitted from the greatly increased awareness of each other and of their respective natures and responsibilities.

An important, if also partial, solution to the network's problems appeared late in the 1985-86 school year, when each of the three high school libraries received an IBM PC-XT from the county school administration. These microcomputers arrived too late for the libraries to be fully integrated into the network before the end of classes, but barring major hardware problems (e.g., a faulty hard disk drive), it will be a simple process of double checking for correct cables and of instructing the librarians in the use of the telecommunications software (Qmodem), which the network has tried and tested, to enable them to access the bbs when the 1986-87 school year begins. These libraries have already made provisions to purchase the PC DOS version of Condor, so these libraries are ready to join the network fully. (Any files that they have already prepared using the Apple CP/M version of Condor can easily be converted using the Apple Turnover Card at ACCL, so none of their efforts have been wasted.)

The project has still to solve the problem of the enhanced Apple IIe at the ENCSD, which will not be replaced by an IBM PC of any kind. At absolute minimum, the planners need to find a telecommunications package that can connect ENCSD with the bulletin board system and that is inexpensive. (Since July 1985, the effective end of the grant, the project has had no funds.) More desirable would be a program that also would enable ENCSD to transfer Apple CP/M files over the telephone lines; this capacity is not absolutely necessary, however, since the network can, as noted, already translate Apple CP/M files into MS/PC-DOS files.

Much of this case study has dealt with the problems of the project. I have dealt openly with them because the project has had to confront what has sometimes felt like an overabundance of problems, and the libraries would like to save other libraries working with networking from similar problems. The final story about the project in Wilson County, however, concerns its successes, which have been real and exciting.

In the more than two years since networking has come to the libraries, they have benefited from the greatly increased awareness of each other and of their respective natures and responsibilities. Real acquaintance and honest, useful professional exchanges have grown out of the interactions to bid for the project and all the trials to build the networking capacities. The idea of cooperation has taken on a prominence among the libraries that it never had before 1984. This does not mean that the county librarians no longer have their differences or that everyone involved in the project is always excited about everything that is being done. For example, there still are problems with getting everyone who can access the bbs to use it frequently, and no one knows how much the high schools and ENCSD will be able to use the bbs once they can access it. But overall the librarians in the county have moved closer to each other professionally, which has meant that we have been able to exchange more with each other and to help each other more readily.

The project has forced the libraries to confront the new technology in ways that, without the impetus of the project, many of the libraries probably would not have considered. The planners and other librarians alike have had to learn from all the problems. While none of us is an expert in microcomputers, our efforts against the "technological odds" have been remarkably successful. The libraries have worked out feasible, effective means to deal with the problem of operating system and file incompatibility; while not as "ideal" as any of us might like, the measures do work. Our experiments with transferring files led to some practical observations. One of the most useful is that it is possible to transfer files from a local library to a larger utility, in our case

the VAX system of North Carolina Educational Computing Services (NCECS), and then to download the file to another microcomputer in the county from NCECS—only it is too expensive to do so with the current rate structure. The use of a local bbs, such as the one at WCPL or the duplicate one that can be set up at any time at ACCL, makes much more sense for unattended file transfers.

Continuing in this vein, the libraries are getting ready to experiment with file transfers using null modem cables. In this arrangement, two computers, either of the same type or different, are connected by a null modem cable, a special cable that permits data to move from one microcomputer to the other without the use of modems. The libraries have produced two union lists of periodicals for the first five libraries that worked together. The planners have decided, however, that the next updated version will list the periodicals holdings of all eight of the libraries and will not be done on an Apple IIe using General Manager, a cumbersome approach in light of the newer hardware and software options available in the network. But what of the files that the five libraries have already developed, which with relative ease could be updated instead of being redeveloped on another package? Once again the literature offered a suggestion, the null modem route. Why not stream the fixed-length-field data files from General Manager into Condor, also a fixed-length-field dbms, on the IBM PC-XT at ACCL, on which we shall have duplicated the General Manager form? If it works, five of the libraries will have saved themselves a great deal of work; if not, they will know that they have tried and will have to redo their records using Condor. Either way, all the institutions' records would end up in the same (or close enough) file format. If not successful with that particular combination of packages, the approach might work with other, more closely related packages. Out of the challenge of adversity, the libraries have shown themselves willing to address the challenge.

None of the planners would deny that had we the opportunity to take what we know now and address the project anew, we would configure everything very differently from the way we did in May 1984. We knew that we were inexperienced then—just not how inexperienced. The efforts to develop the project into a working Zone of Cooperation have forced all of us to react and to learn, and thereby to become much more knowledgeable. Gregory, Woodward and I have learned from each other; we have also learned much from

Woodward's special assistant at ACCL, Joann Rago, whose natural affinities for microcomputers should be the envy of any microcomputer expert and whose efforts were often crucial in determining the results of our experiments and in solving problems. We four in turn have profited greatly from working with Mark Turik, the local dentist who also is an expert on IBM PC's. This teaming interaction has in turn made it possible for us to assist the high school librarians, the librarians at WMH and the librarian at ENSCD. As these librarians have become more secure in using microcomputers, they have been able to give us new insights into how microcomputers can be used by all of us. Even when there has been friction or misunderstanding among us, it has been a creative process, since it has forced the parties involved to look at the other library's or libraries' needs in another light and to invoke a variant of the "Golden Rule" of behavior and expectation.

Before the proposal was sent out in 1984, a librarian confronted me with a question about the "worth" of a certain type of library in the system: What could they possibly give if they do not have many … etc.? The experience of the project has shown that the giving has actually gone both ways. It has been possible to give in time and expertise and still take away new professional knowledge. The fact that the "consulting" and exchange of ideas has been given freely and received openly (but not without questions and criticism) has forged a mutually respectful atmosphere among the librarians and has made the project anything but stale or routine. The libraries have grown to expect this sense of cooperation among themselves even as they may disagree about details. The exchanges during planning sessions or over the bbs show this.

The efforts to develop the project into a working zone of cooperation has forced all of us to react and to learn, and thereby to become much more knowledgeable.

Apparently the experiment is working, since libraries outside the county have also been availing themselves of the potential. The State Library has been a very active user of the bbs and thereby has demonstrated that a bbs is a very effective means to avoid telephone tag when trying to leave someone else a message, something

that those of us who have been able to access the bbs within the county have long known. Other librarians, both near to and far from Wilson County, have also "visited" the bbs, and with one of these I have had talks about the possibility of more exchange of ILL and reference information between that librarian's county and the libraries. On a still broader statewide front, the willingness of three of the libraries, ACCL, WCTC and WCPL, to accept the State Library's offer to join the new networking arrangements (OCLC, ILL and the state-wide electronic mail/bulletin board system) derives in good part from the strides the libraries have made in networking in the county.

Networking has not come easily to Wilson County, as this study has made clear, but it has come and will stay. With more experience at the beginning, the libraries might have had fewer problems developing capacity; but despite the early inexperience, the libraries have developed the double capacity that they proposed to develop. In the process, all of us who have been working on the project have been able to develop new skills and prepare ourselves and our colleagues better for the technological and conceptual changes that have already made themselves felt throughout the profession. ◪

Instructions for the Preparation

of Manuscripts

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1. *North Carolina Libraries* seeks to publish articles, book reviews, and news of professional interest to librarians in North Carolina. Articles need not be of a scholarly nature, but they should address professional concerns of the library community in the state.

2. Manuscrips should be directed to Frances B. Branburn, Editor, *North Carolina Libraries*, Central Regional Education Center, Gateway Plaza, 2431 Crabtree Boulevard, Raleigh, N.C. 27604.

3. Manuscripts should be submitted in triplicate on plain white paper measuring 8½"x11".

4. Manuscripts must be double-spaced (text, references, and footnotes). Manuscripts should be typed on sixty-space lines, twenty-five lines to a page. The beginnings of paragraphs should be indented eight spaces. Lengthy quotes should be avoided. When used, they should be indented on both margins.

5. The name, position, and professional address of the author should appear in the bottom left-hand corner of a separate title page.

6. Each page after the first should be numbered consecutively at the top right-hand corner and carry the author's last name at the upper left-hand corner.

7. Footnotes should appear at the end of the manuscript. The editors will refer to *The Chicago Manual of Style*, 13th edition. The basic forms for books and journals are as follows:
   Keyes Metcalf, *Planning Academic and Research Library* Buildings New York: McGraw, *1965), 416.*
   Susan K. Martin, *"The Care and Feeding of the MARC Format,"American Libraries* 10 (September 1979): 498.

8. Photographs will be accepted for consideration but cannot be returned.

9. *North Carolina Libraries* is not copyrighted. Copyright rests with the author. Upon receipt, a manuscript will be acknowledged by the editor. Following review of a manuscript by at least two jurors, a decision will be communicated to the writer. A definite publication date cannot be given since any incoming manuscript will be added to a manuscript from which articles are selected for each issue.

Issue deadlines are February 10, May 10, August 10, and November 10.

The Western North Carolina Library Network: "Well Begun is Half Done"

Deborah B. Babel

This is the story of the beginning of a network. The libraries of the three western campuses of the University of North Carolina system agreed in 1983 to cooperate and form a network which would enable all three to have on-line catalog and circulation systems. The institutions are Appalachian State University (ASU) in Boone; the University of North Carolina at Asheville (UNC-A); and Western Carolina University (WCU) in Cullowhee. The network they formed is called the Western North Carolina Library Network (WNCLN).

The article describes the origins of the network, how it came to be, and the reasoning that went into its creation. The network itself is then described, how it functions and what it purports to do.

This story has only just begun. Early profiling for the local system has started, yet at the time of writing, the central computer has not been delivered, and the telecommunications have not been connected. The reason there is a story to tell at all is that the Western North Carolina Library Network has been a project well thought out and carefully planned. As the libraries encounter the early stages of implementing the local system, they already see the value in the hours spent in discussions and planning. They have faced decisions, and discussed problems and solutions that many libraries do not encounter until the questions are asked by the project manager.

This article is intentionally non-technical, and of necessity refrains from in-depth analysis and discussion. Its purpose is to describe how the network came to be, and what it is.

How Did the Western North Carolina Network Come About?

It would be nice to say that the network emerged because cooperation makes sense and is in itself an admirable, achievable goal. This was not entirely the case with WNCLN. As with so many other ventures, this one emerged as the

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result of several less lofty factors. The others fueled it. That the participants are inclined to cooperate anyway helped tremendously during the formative stages of the network.

Primary Factors

There were four main factors that contributed to the formation of the network. These were timing, common sense, economics and support.

Timing

Each of the libraries was already committed to preparation for an automated system. In 1983, when the initial talks took place, ASU had issued a request for information for an automated library system, and had completed more than half of a retrospective conversion project. UNC-A had begun a recon project, with the intention of closing the card catalogs. WCU had completed a recon project and was beginning to write a request for proposal for an automated library system. During the various interchanges that accompanied these events, it was evident that each school would need, within a relatively short time, a large infusion of money to support the purchase of an automated system. As each is a state-supported institution, the primary source of funds was the same for all. That is where common sense came in.

Western North Carolina Library Network

Boone (Appalachian State University)
Asheville (UNC-Asheville)
Cullowhee (Western Carolina University)

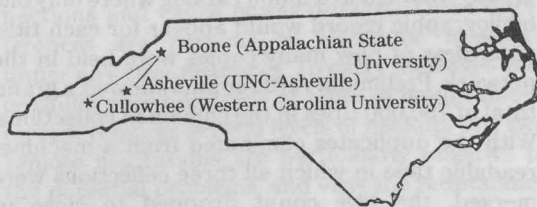Figure 1

Common Sense

It was obvious that the requests for automation should be coordinated. Each library understandably wanted full funding, and each wanted to keep its request in line with the others. Moreover, the libraries needed to convince the legislators that this would be money well spent. This

last consideration led to the third of the primary reasons for the network, economics.

Economics

In seeking to justify automation, the libraries suspected they might be able to afford a better system collectively than they would be able to purchase individually. General cost figures gathered during 1984 supported this theory. The initial figures showed that for the same amount of money it would take to put an on-line catalog in each library, a shared on-line catalog with circulation systems for each library could be purchased.

Support

Without early, whole-hearted support from the library directors and their respective administrations, the network would have remained a dream. Convinced by the factors listed above, the administrations of the three institutions have fostered the wide-reaching implications of cooperation by their support for this additional service to the western part of North Carolina. This support has been essential to the early success of the network.

Secondary Factors

Three secondary factors fueled the progress of the network. These were the similarities of the collections and the cataloging histories, and external events.

Similarities of the Collections

Each school supports a basic undergraduate curriculum, and is mandated by the state to have these materials available on campus. While this does not permit the libraries to save money by purchasing fewer copies of the books, it was thought that there was substantial overlap among the titles of the three collections. Storage requirements for an automated system would be greatly lessened in a union catalog where only one bibliographic record would appear for each title, regardless of how many copies were held in the network. Preliminary title counts showed a grand total of 750,000 titles in the combined collections. With the duplicates eliminated from a machine-readable tape in which all three collections were merged, the title count dropped to close to 600,000.

Similarities of Cataloging

The cataloging departments of the three libraries share similar policies in that they use Library of Congress classification and subject headings for current cataloging. Each has applied current cataloging rules and LC interpretations, and each was a charter member of SOLINET. That the policies were similar has not insured uni-

formity of practices. The foundations were similar enough so as not to preclude cooperation because of incompatible or unresolvable differences in cataloging records. Since the network is based on the idea of a union catalog, it was mandatory that the cataloging departments cooperate. The degree of cooperation that has taken place among these departments has been outstanding, and is becoming characteristic of the network.

External Events

At approximately the same time that early planning was taking place in the west, the University Librarians' Advisory Council, a committee of the library directors of the UNC system, began to explore the possibility of a coordinated request to the state legislature for funding to automate all the libraries of the UNC system. The reasons for this were essentially the same as those which propelled the western network. The result was a coordinated request for library automation funding from the UNC libraries. Funding was approved for this state-wide project in 1985. Receipt of this funding gave life to the Western North Carolina Library Network. Two years of planning an idea gave way that year to reality.

... the Western North Carolina Library Network has been a project well thought out and carefully planned.

What Is the Western North Carolina Library Network?

The description of the network will fall into two broad categories. The first is the purpose of the network; the second, its form and structure.

Intent and Purpose of the Network

The bylaws of WNCLN state three objectives for the network: to establish and maintain an on-line catalog and circulation system for the libraries of its members; to increase access of students and faculty of each institution to the resources of the members; and to investigate and pursue other avenues of cooperation.

On-line Catalog and Circulation System

The primary purpose of WNCLN is to automate the catalogs and to provide automated circulation for the libraries. This has been met through the acquisition and installation of the LS/2000 system. As implementation of the system takes place, careful consideration will insure that future cooperative agreements may take place

without technical interference from the profile. For example, although cooperative circulation is not in effect among the libraries, the profiling and planning for bar codes is being done so as not to preclude its taking place in the future.

Increased Access

The second objective is to increase access to the libraries' collections. By taking advantage of advances in automation and telecommunications, the three universities can expand access to their resources to a much broader area than has been possible traditionally. By making records available on-line, the collections of the universities will be available for the first time to one another. Access to the catalog will also be possible from outside the library buildings. Those with access to microcomputers equipped with modems will be able to dial into the system and search the holdings of the three libraries. Access will also be possible from terminals on each campus that are connected to the campus mainframes. Once this is done, the stage is set for the third objective, further cooperation.

Further Cooperation

Other services which will add value to the network include document delivery, a network interlibrary loan agreement, cooperative circulation agreements, and possibly cooperative collection development to support the research needs of graduate students and faculty. These are possibilities and do not necessarily constitute a plan of action.

Form and Structure of the Network

The network exists mechanically and technically through the data base, telecommunications, and governance structures.

Data Base.

The central product of the network is a data base of some 600,000 bibliographic records, or titles, with nearly 1,000,000 items, or volumes. The on-line catalog will provide for public access and bibliographic maintenance, and is integrated with a circulation subsystem that will operate independently at each library.

The libraries share a Data General MV10000, which is located at Appalachian State University, in Boone. OCLC's LS/2000 software will enable creation and maintenance of the union catalog. Holdings of the three libraries will be accessible from terminals located in each library. The union display will be complemented by an institution-only default, which will first display to the user the titles housed in that institution.

The libraries will download cataloging through the OCLC interface, directly into the local system.

Telecommunications

The network wouldn't exist if it had no way to connect the libraries. The connection system used by WNCLN is the state-wide data communications network operated by the University of North Carolina Educational Computing Service (UNC-ECS), an agency which also offers services to non-UNC institutions. The telecommunications network is known as LINC NET, and will provide access to the libraries of the UNC system, once all are on-line.

Telecommunications of WNCLN
with LINC NET (Western N.C.)

———— Western NC Library Network
-------- LINC NET (UNC-ECS)
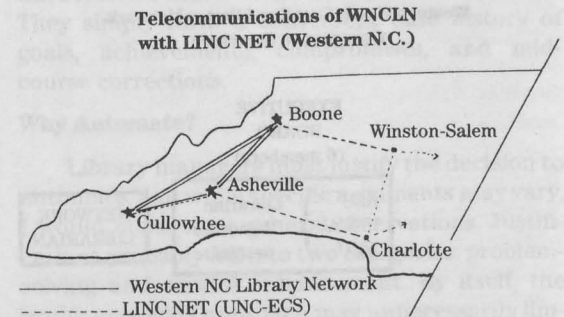
Figure 2

WNCLN will add additional high grade lines between the institutions, and use quad switching multiplexers (QSMs) to communicate between the libraries. The QSMs automatically calculate the most efficient route for message traffic. There will also be two lines connecting ASU to each of the remote locations, WCU and UNC-A. A single line will run between WCU and UNC-A to provide additional backup.

Redundancy is characteristic of LINC NET. The redundancy in the library network is considered crucial to the success of the shared system. All three libraries are well aware of the quirks of nature that periodically disable telephone connections and cause power outages. These interferences are perilous to electronic messages under any circumstances. To carry messages successfully over hundreds of miles of mountainous terrain requires several levels of backup. The two remote institutions are particularly sensitive to the potential problems, and view the redundancy as essential, and not at all frivolous.

Governance

The governance of WNCLN consists of even representation, not only institutionally, but across library functions. The structure is neither unique nor revolutionary. It functions. Although the current membership of the network contains three state-supported universities, the bylaws do not preclude membership in the network by other libraries.

Documentation for the network consists of a set of bylaws and a memorandum of understanding agreed to by the administrations of each institution. These two documents describe the structure outlined below.

The executive board directs and controls the affairs of the network, and is responsible for financial decisions. It is a six-member group, composed of the library directors of each library and a representative appointed by the chancellor of each institution.

Western North Carolina Library Network
Governance Structure

EXECUTIVE
BOARD
(6 members)

ASU
UNCA
WCU
} Librarian
Chancellor-
designate

NETWORK
LIBRARIAN

NETWORK ADVISORY COMMITTEE
(6 members)

ASU
UNCA
WCU
} 1 Public Ser.
1 Tech. Ser.

TASK FORCE	TASK FORCE	TASK FORCE
Cataloging	Reference	Circulation
ASU 2	ASU 2	ASU 2
UNCA 2	UNCA 2	UNCA 2
WCU 2	WCU 2	WCU 2
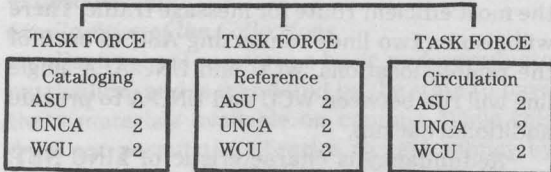
Figure 3

The network advisory committee is composed of a public and technical services representative from each library, appointed by the director of each library. The network advisory committee deals with operational and technical issues, and is advisory on all matters to the executive board. The chair of the network advisory committee attends meetings of the executive board.

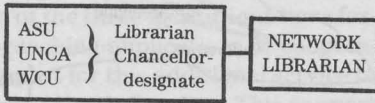A network librarian, hired by and reporting to the executive board, is responsible for operational aspects of the central computer, in addition to supplementing training and maintaining communication about the network with the staffs of the libraries.

Areas of specialized or technical interest are monitored by task forces, which are authorized by the executive board. These task forces report to the network advisory committee, and consist of even institutional representation, usually two delegates from each library. The task forces function as long as they are required. There are currently three task forces authorized: cataloging, circulation, reference.

Conclusion

This is the end of the beginning of the Western North Carolina Library Network. Its origin has been described, the reasons why it came to be outlined. Its structure, purpose and plans have also been explained.

No one would be so rash as to pronounce this network a complete, unqualified success, especially when it has only just begun. The sense of accomplishment that goes with seeing that job well begun and the sense of pride in watching the library staffs become accustomed to the idea of being a part of something larger than the library, has been gratifying. They have seen the time and energy devoted to planning and to maintaining communication pay off. Without communication, wide open, the good with the bad, a project like this could not have reached the first agreement, let alone manage to write a proposal for a system. If the axiom "well begun is half done" holds true, the Western North Carolina Library Network is halfway there. ▮

Book Week

November 17-23

Decision Points in Small-Scale Automation

Don Beagle

Automation has traditionally been seen as the province of large libraries. Only recently have advances in mini and super-mini computers brought the potential benefits of automation within reach of small to medium-sized libraries. Software companies are increasingly attentive to this market segment and it seems likely that many smaller libraries will automate within the next ten years.

Networking is another "large library concept" now finding its way onto the agenda of smaller libraries, partly through the efforts of such agencies as the North Carolina State Library and its North Carolina Information Network. Large scale networks are sometimes compared to highway systems carrying traffic between cities. But highways rarely take people to their actual final destination. This vital task is left to rural roads and municipal street systems. The individual library's automated system thus corresponds to a municipal street grid where most of the library's "information traffic" will flow.

This article will describe some of the decisions facing the manager of a small public library during the course of automation, and will explore how those decisions may affect eventual interaction of that automated system with external networks. My examples will best represent choices made in Lee County, particularly the decision to run library software on an off-site central computer already serving other departments of local government. This is not the standard scenario for library automation, which I take to be the turnkey hardware/software package. But the large library with an on-site central processing unit (CPU) will probably extend automated operations to its branches, and large branches accessing main library computers may face problems similar to those of smaller central libraries using off-site equipment. In addition, the use of an off-site central computer creates a small-scale network potentially expandable to other libraries within a local jurisdiction, and I shall discuss the possibility of networking the Lee County Library and the

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Central Carolina Technical Colleage LRC. My local examples are not meant as ideal models, for we have learned some things through trial and error. They simply form a convenient case history of goals, achievements, compromises, and mid-course corrections.

Why Automate?

Library managers must justify the decision to automate, and while specific arguments may vary, I would make some general observations. Justifications probably fall into two categories: problem-solving and service enhancement. By itself, the problem-solving approach may unnecessarily limit the potential benefits of automation. The most obvious risk is that one will simply turn snarled paper transactions into snarled electronic ones. Beyond this, the need to solve a current problem may narrow the manager's perspectives when considering the range of options available. Automation can help eliminate an overdues backlog or streamline circulation procedure, but it can do other things as well, and some options will allow greater flexibility down the road than others. This especially applies to small libraries with correspondingly small budgets. One hears of large libraries moving to their second or third automated system, which is another way of saying that money can re-open options for decision-making. The manager of a small library would do well not to think of initial decisions as being easily reversible or correctable. Finally, an orientation toward problem-solving may lead one to the conclusion that problems must reach crisis proportions before such a drastic step is taken. Automation as a last resort, in an operational crisis, might create more problems than it would solve.

Of course, the service enhancement approach offers some risks as well. There is rapid and continual innovation in the whole field of information processing. Today's finest system may seem overpriced and underequipped tomorrow. But to be too concerned may lead to what might be termed the surfer's syndrome: he who waits for the perfect wave can spend life treading water.

Our specific justifications included both solutions and enhancements. We started with the need for better access to, and control over, the book catalog. Our two small branches had never enjoyed their own catalogs, limiting their value to students. Our main catalog had never been coded to indicate branch holdings, causing extra steps in every book search and uncertainty about the whereabouts of missing volumes. These and related problems could have been dealt with manually, but automation offered solutions along with significant enhancements. Many libraries, for example, report that book selection based upon better analysis of borrowing patterns can lead to large circulation increases. Fine, but detailed feedback about book use is hard to obtain when staff already pressed for time must manually sort and count book cards and pieces of paper. Orrin B. Dow, Director of the White Plains Public Library, recently described automated circulation systems as providing "... definitive book-use data for the ultimate in responsive collection management."[1]

Figure I.

19 Jun 86	Lee County Library System	10:48 AM
	CATLOGING MODULE	

Call number table: DDC

#	Begin Call	#Group Description	Count
49	720	Architecture	81
50	730	Plastic Arts/Sculptu	113
51	740	Drawing, Decorative Art	604
52	750	Painting & Paintings	189
53	760	Graphic Arts/Prints	25
54	770	Photography & Photogra	65
55	780	Music	292
56	790	Recreational & Perform	1096
57	800	Literature	251
58	810	American Literature in	1126
59	820	English Literatures	455
60	840	French	33

—more—

#. New group, Delete (#), Quit, Up, <cr>:

A screen print showing relative collection size by Dewey #.

A glimmer of this promise is already discernible, even though we have only finished converting our adult non-fiction collection. Figure one is a print-out page showing titles held by Dewey number, giving us for the first time a statistical picture of collection strengths and weaknesses. A better view will emerge when automated circulation begins and we can compare circulation by Dewey number with respective collection size. Similar breakdowns will be available on patrons, including figures for library use by census tract.

Better book selection based on better analysis may increase circulation, which ordinarily translates into even more cards and slips of paper. Automation, of course, offers dramatic improvements here, with circulation and cataloging modules sharing a common data base of MARC records tracking the book collection and registration records describing the patron population. Such arguments may seem self-evident to librarians, but must be stated simply and effectively in the justification process. After some communication lapses, I found an effective analogy between libraries, supermarkets and banks. Like a supermarket, a library faces problems of inventory control. Just as a supermarket automates using bar code labels on goods, a library bar codes its books. But where the supermarket "forgets" an item after customer purchase, the library must continue to track it with a patron account, comparable to a customer's account in a bank. And just as a bank gives you a machine-readable card to access your account through an automatic teller, a library gives you such a card to access your library account.

How to Automate?

Our first opportunity to automate in Lee County actually came in 1984, when the county had available ports on its computer, a Microdata Reality. (A port is a piece of equipment which allows remote terminals to communicate with the central processing unit, or CPU.) I was placed on the county's data processing advisory committee, which consists of department heads whose employees used the system. I visited with the State Library's Operations Consultant, and long discussions followed. The committee was prepared to recommend a computer upgrade to the Board of Commissioners due to lagging response time. Some involved in the process viewed library participation as an opportunity to justify a major upgrade. Others expressed concern that since the system was already deficient, library participation would "eat up" any memory and response time improvements that an upgrade would provide. Attempts to document the likely effects of library use were difficult because library software for the Pick operating system was literally brand new and relatively untested. (Pick is a relational data base operating system designed for compact storage and flexible handling of large chunks of data.[2]) After viewing the limitations of installed hardware and lack of available software, the idea of library participation was tabled. But the experience had several positive results. My fellow department heads and the DP manager came away with a better understanding of a library's automation requirements. And I came away with a better understanding of how depart-

ments providing different services can effectively share a CPU. Central to that sharing is the inter-departmental computer committee, which in Lee County is now larger and more important than ever.

While the committee did win an upgrade to the more powerful Microdata Sequel, the question of library use remained tabled while alternative options were explored. The major alternatives included: 1. run library software on the county computer; 2. buy a turnkey package with a library CPU; or 3. install a micro-based system tied in with a service bureau.

A fair number of smaller libraries have already purchased service bureau equipment. A library microcomputer temporarily stores circulation records and uploads them each night into a remote CPU owned by the bureau. The bureau processes the records, and may even handle overdues mailing. Advantages apparently include low initial cost, transfer of some clerical work elsewhere, and a fairly painless conversion of records into machine readable form. Presumably a bureau could also provide public access catalog searching by way of Computer Output Microform (COM) or Compact Disc-Read Only Memory (CD-ROM). Disadvantages would include high on-going payments to the bureau, loss of immediate local control over certain clerical tasks, and perhaps limitations on checkout points, since checkouts are performed by smart, expensive microcomputers rather than by dumb, cheap terminals. Finally, any searching via CD-ROM cannot provide the real-time status of an item in question. Library materials are constantly in transit; the most popular ones are those most likely to be checked out at any given time, and also are the ones most likely to be searched by any given patron. Only a system which integrates public access and circulation can tell the searcher whether the item at that moment is on the shelf, checked out, at a branch, overdue, at the bindery, on reserve, on order, in the story hour, in the outreach program, and so forth. With a service bureau, this information is batch-processed and stored hundreds of miles away. Since maximum catalog access and control was our main justification, we elected not to consider a service bureau.

The question of an off-site versus an on-site CPU was the main issue for us, and apparently for others as well, because some local governments urge libraries to access central computers without careful consideration of the libraries' real needs. The obvious advantage of accessing an installed CPU lies in saving the purchase price, as well as on-going expenses such as hardware maintenance, insurance, and support staff. There is almost no cost advantage to an on-site CPU when adequate data processing is available elsewhere. But "adequate" is the vital adjective. Many, probably most, local government CPU's lack sufficient disk space, memory, and ports to accommodate even small libraries. Those which could accommodate on paper will suffer degradation of response time to all departments. Since this affects employee productivity it must be considered a cost. Local officials should take extraordinary care before inviting a library on-line; they will almost surely pay an indirect price in response time or a direct price for upgraded equipment to handle the load. Some central upgrades might cost as much as a smaller library CPU purchased under a favorable turnkey contract. But again, the governing authority may offset upgrade costs in the long run by limiting itself to one hardware maintenance contract, one insurance payment, and one office of operating personnel. It may also be able to negotiate large-scale purchases of peripheral equipment and installation fees as more users are added.

Some conventional wisdom about off-site CPU's needs rethinking. One frequently hears worries about departmental priorities: if something breaks down, won't the tax office get priority over the library? I would suggest that if the CPU goes down, it goes down for both the tax office and the library. It would be difficult to fix selectively a computer. If the CPU you share with the tax office does go down, the problem will probably receive rapid attention by local officials. The more likely question of priority would be that a library having trouble with its *own* CPU might not get the speediest possible help from local data processing personnel working on separate tax office support.

Library managers must justify the decision to automate ...

Response time problems could be more difficult to resolve. A slow shared computer would inconvenience both the library and tax office, and if public complaints resulted, action would need to be taken. The obvious corrective would be an upgrade. But one can imagine a financially strapped Board of Commissioners asking one or more departments to go off-line during peak periods, and the tax office would not be a sacrificial lamb. Again, then, careful preparation is important. Lee County is currently upgrading for the second time in four years, partly to accommodate

use by the library. Each upgrade has involved the top-of-the-line Microdata available at that time. The County, under the leadership of its Manager and Board of Commissioners, has deliberately embarked upon a course of maximum use of data processing facilities and seems prepared to follow up on its investment. Finally, I would comment that response time is a relative concept. A computer must slow to a virtual crawl before it processes a circulation transaction more slowly than having a patron sign book cards while staff manually check registration files for overdue books. And no one should suppose that an on-site CPU is proof against response time problems; there are more than a few sad stories in the library literature proving otherwise.

One potential cost advantage of a shared CPU not often mentioned is that the library may be able to utilize software purchased for and by other departments. The procedure for logging off library software and onto some other module is typically one of keying in four or five commands and passwords at any terminal. The Lee County Recreation Department is considering an expensive package for meeting room bookings which could also be used by the library. Word processing and spreadsheet software purchased for other departments is available to library staff and can pull data out of the library accounts for such purposes as form letters and budget reports. Electronic mail among departments is a reality. The Lee County Elections Office is on-line and since library staff must register voters, we will consider training in this. The County Planner maintains a file of updated street and mailing addresses shared by several departments; library access could mean better updating of our registration files for overdues.

Security

Networking departments with shared software on a central CPU raises questions of security. What access to library accounts, if any, shall other county personnel have through their terminals? How can this access be restricted? When, if ever, should the library accept or divulge any data on county residents for or from its patron file? In public access searching, how are patrons prevented from entering overdues files, or for that matter, tax office software?

The DYNIX Automated Library System uses several levels of security which make it acceptable for shared CPU operations. The first and most powerful level is port access clearance. Any user with a terminal communicates with the CPU through a port. Each port is numbered, and port access to any module is blocked unless specifically cleared by the system administrator. Public access terminals are cleared for the on-line catalog module only. Any attempt to access the circulation module (which includes overdues accounts) from such a terminal has virtually the same result as pulling the terminal's plug. We have decided to allow other county departments access only to the on-line catalog if specific requests are made.

We started with the need for better access to, and control over, the book catalog.

If an outside user does find a terminal cleared for port access into circulation, that user must still log on through a system password followed by a personal ID number and password. Passwords and ID numbers for separate modules can be assigned separately. A volunteer with personal clearance into the cataloging module can still not enter the circulation module, even if using a terminal with port access to circulation. In addition, each staff member is assigned a security level one through five, with a sixth reserved for the system administrator. Once into a module, each staff member can access only those function menus appropriate to his or her security level. Within the menus, certain sensitive functions like global authority file changes require confirming passwords. If the system administrator does not agree with the layering of functional access under these levels, access can be customized for each password. No doubt the challenge for vendors is to incorporate such security features without making the whole system cumbersome to use. It seems that DYNIX and others have succeeded well enough that administrators need not be too concerned about interdepartmental security with a shared CPU. Of course, data sharing over computer networks should be subject to at least the same ethical standards applied to the sharing of other types of information involving both individuals' right to privacy and the public's right to know.

Beyond the interdepartmental level, however, a shared CPU does present some security problems with respect to software maintenance. DYNIX offers 24-hour software support from its headquarters in Provo, Utah. The vendor's technician uses a remote terminal and modem on the regular telephone network to access a dial-up modem hooked to the CPU. But to keep a dial-up modem active on an open telephone line 24 hours

per day would mean that any person with a micro-computer and modem who learned that telephone number could access the county computer and try to enter any department's software. The regular security measures described above are probably ample for public access terminals within staff view and for other departmental staff working under normal supervision. But hackers enjoying nightly unsupervised entry to a system through a dial-up modem might defeat any security measures. For this reason, our county asks DYNIX staff to signal a request for modem hookup. During regular business hours this presents no real problem, but our circulation software will be up and running on evenings and weekends when DP staff are off-duty. One solution might be for library staff to go to the DP office and hook up the modem when emergency software support is needed. Obviously, such concerns are less serious with an on-site CPU.

Software Options

The decision to access a county computer immediately restricts the choice of software vendor, since software packages are designed for specific operating systems. In June of 1985, with the county upgrade in place and at least two vendors offering Pick library software, I spent the ALA Summer Conference in the exhibition area, comparing systems with two questions in mind. First, would the restriction to Pick deprive us of any significant features offered by vendors using other operating systems? And if not, which Pick software seemed best for our needs?

A detailed comparison of software packages is beyond the scope of this article; both DYNIX and McDonnell-Douglas offered sophisticated systems fully competitive with any non-Pick software, in my opinion. (A third vendor, Advanced Library Concepts, has since entered the field.[3]) The decision in favor of DYNIX was based on a number of considerations, including visits to other DYNIX installations. (Accessing the county CPU eliminated the need for a formal bid procedure since software is considered a service and since our initial peripheral equipment totaled less than bid regulations required.)

Installation planning proved to be the most challenging aspect of the project, in that it presented us with a multitude of decisions which had to be made up front, but which would shape the course of the project for its duration. Since we were learning as we went along, it meant that some of the most important decisions had to be made at the point where we seemingly knew the least. The decisions included:

1. Should the project be phased in or implemented at once? It is possible to begin circulation immediately, and ask staff to input brief records for books and patrons during checkout and check-in. This has the advantage of getting the most popular items and the most active patrons into the system first, immediately easing some circulation paperwork. But it delays each circulation transaction and puts greater pressure on staff to master two software modules at once. It also would have meant patron orientation and new library cards immediately, which threatened to overwhelm our limited resources. We elected to spend a year with the cataloging/conversion module, allowing staff (some of whom had never touched a terminal keyboard) to feel more comfortable before circulation training began.

This also allowed us to stretch our yearly budget by purchasing the software over time. The DYNIX package includes modules for cataloging, circulation, and public access; they also offered a conversion module which actually was a limited training version of cataloging. Purchasing the conversion module in effect increased the price of the cataloging module, but this was offset by the fact that software maintenance is not charged during the conversion process.

2. Should we bring the main library on-line first and add branches later? Ordinarily we would have preferred to bring the main library on first, but branch catalog access was so central to our justifications that we felt obliged to include them from the outset. It is a less than ideal use of equipment because the small branch collections will be converted far in advance of the main library, and their equipment will essentially sit idle until the main library conversion is complete. On the other hand, the branches have proven to be excellent for trial and error test runs of certain procedures; their small collections mean that few records need revision when we correct errors or simply change our minds about form of entry. As we have proceeded through the non-fiction collections in shelf-list order, problems peculiar to each class (especially collective biographies) have been resolved at the branches well before their appearance at the main library. We now plan to implement circulation first at the Broadway Branch, where we hope to encounter and resolve any glitches with circulation procedure (especially holds and overdues) in a relatively slow, low-volume situation.

In addition to these broad decisions, we faced many specific questions as we worked through the DYNIX Pre-Installation Planning Guide. Software variables such as city codes, patron loan

types, item loan types, collection codes and tables, screen formats, and stop word lists are best resolved prior to installation. But again, the choices are challenging because they will affect both system performance and future policy. Item and patron codes and types, for example, will determine the content and format of statistical reports. Stop word lists contain those extremely common words (articles, pronouns, and so forth) which could "overload" system searching if included in key word indexing. Item and patron priority levels will determine restrictions in borrowing privileges; by assigning, for example, a juvenile card a 40 and a videocassette player a 50, one encodes into the system a page from the library's rule book. Many variables can be revised by the user, of course, but the initial installation virtually demands a wide-ranging review of circulation policy.

proved particularly effective, sometimes called 'critical path planning,' is taught in the County Administration Course at the Institute of Government in Chapel Hill. At its most basic, critical path planning requires only pencil and paper and is essentially a glorified flow chart. I used a microcomputer version called MacProject. Developed for the Macintosh, it is a powerful but simple planning and budgeting guide. One enters a series of tasks to be accomplished on a task entry table. Each task can be assigned a duration and a deadline. When the tasks are put in boxes on the flow chart, the computer calculates the total schedule. Lines between the boxes specify which tasks are dependent upon others, and which can be handled separately [see Figure two]. Boxes and lines can be added, deleted, or rearranged, and the computer recalculates the whole schedule accordingly. Another advantage of the software
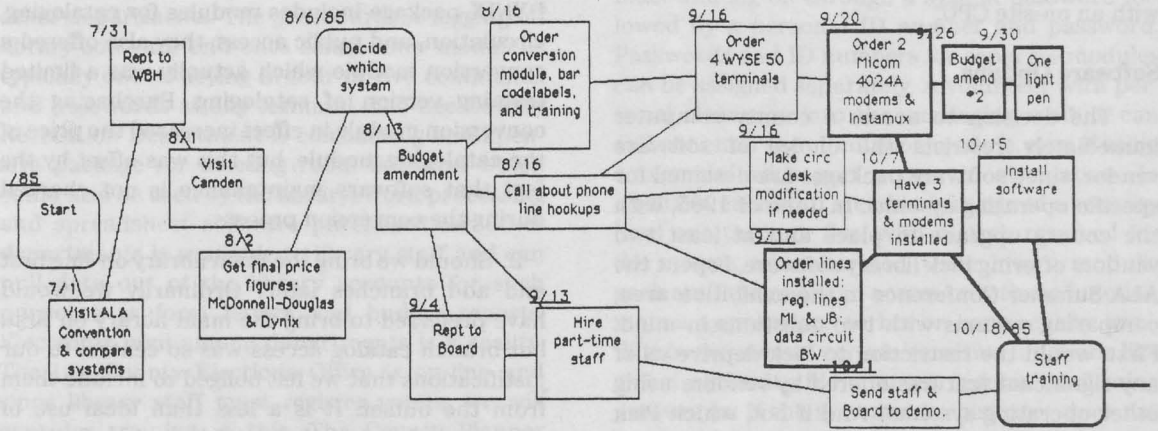
Figure II. A portion of the project plan laid out with MacProject, and meant to be continually reviewed and revised.

Hardware Planning

Unlike a turnkey package where one vendor can be expected to handle all arrangements, our contract with DYNIX is strictly for software, and responsibility for hardware selection and installation (which had to be completed prior to software installation) lay with us. This was complicated further by the fact that the DP office had dealt with one vendor for the CPU and with various other vendors for peripheral equipment. Add to this the installation by the local phone company of dedicated lines between the three libraries and the county office building, and problems with electrical power and protection, and a better picture of the challenges we faced emerges.

We faced so many problems with coordinating the sequential installation of power, phone lines, and peripheral equipment, as well as scheduling payments for these, that some formal outline was needed to organize it all. A tool which

version is that each task can also be assigned a cost [and/or a revenue], and the computer will forecast the cash flow for the project over its future course. We have tried to enter our entire schedule as phased in over three fiscal years, and it has proven to be a valuable aid to planning and implementation.

The basic hardware installation works as follows: a library terminal is hooked to a modem which sends the signals over a phone line. In the DP office, a corresponding modem receives the signals and sends them into the CPU by way of a port. For installations requiring multiple users, the terminals send signals into a multiplexor or data concentrator, which packs the signals into a stream and sends them onto the modem; again, the DP office modem receives the stream whose signals are unpacked by a corresponding multiplexor. These signals then enter the CPU through a series of ports corresponding to the original
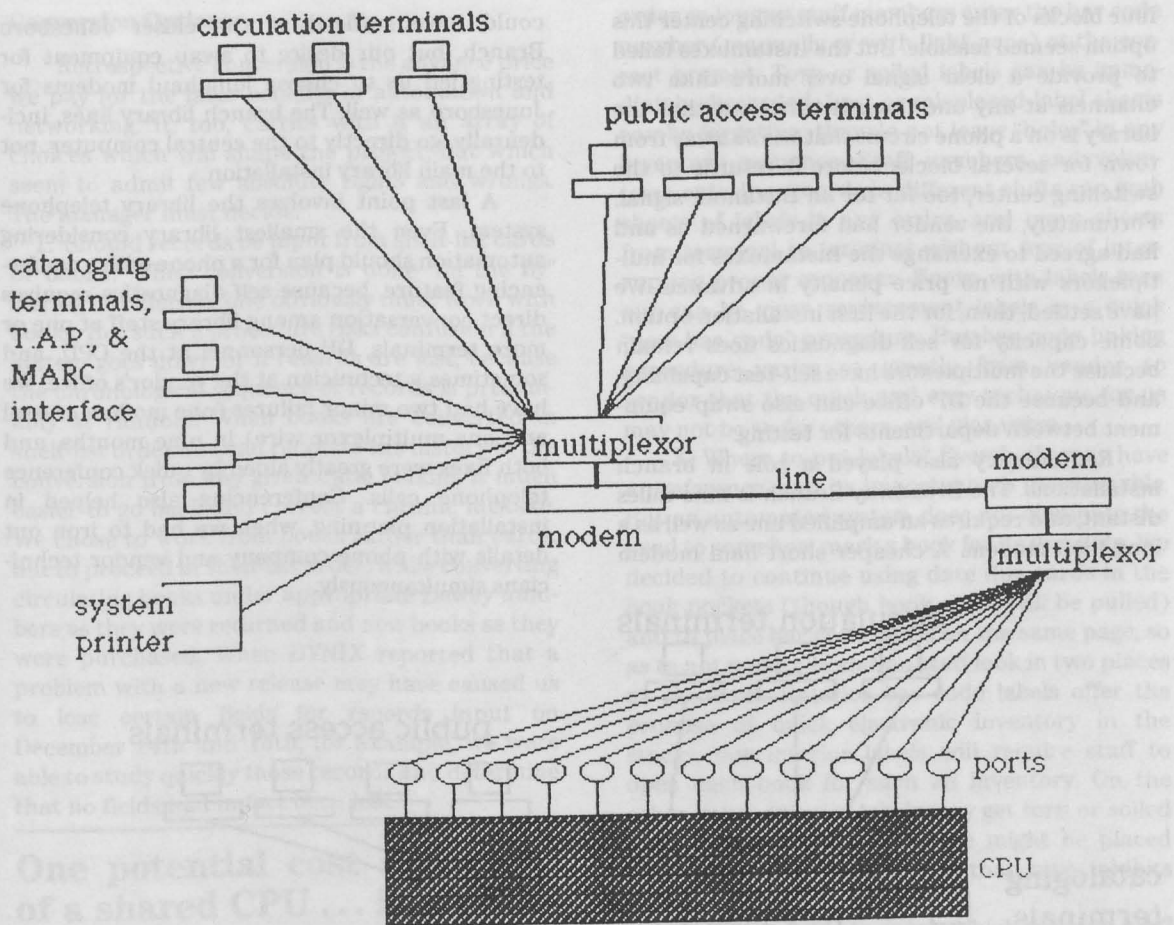
Figure III. Lee County Library's hardware installation layout.

number of terminals. (Our early estimate of port needs, made during the absence of a DP manager, was based on a mistaken assumption that because a multiplexor packs data for transmission over one line it would enter the CPU through one port. Far into our budgeting process we discovered that we would need not four ports but fourteen; an expensive discovery since a package of eight ports costs over five thousand dollars.)

Some of the decisions made during hardware installation planning involved staff and patron convenience, redundancy in case of failure, and capacity for future expansion. Figures four and five show the two main hardware options we considered, which I would like to discuss in some detail.

Figure three shows twelve peripherals wired to twelve-channel multiplexors whose signals travel over one phone line. Such an installation has five links: two modems, two multiplexors, and one telephone line. The failure of any link would bring down the chain. And a failure could be difficult to diagnose. We would have no backup

modems or multiplexors to swap, because it takes two of each to complete the chain.

Figure four shows twelve peripherals hooked to one pair of four channel Instamuxes on one phone line and one pair of eight channel Instamuxes on a second line. An Instamux is a new multiplexor/modem combination, and is so much less expensive that four Instamuxes would be cheaper than two multiplexors. A further advantage would be redundancy. There would be two chains with each having three links. The failure of one chain would leave a second providing essential services. And Instamuxes could be swapped between lines in case of a failure, allowing us to do quick self-diagnostics. (When self-diagnostics are not possible, a vendor technician may need to make one trip to learn the cause of a problem and a second trip to repair or replace equipment.)

We preferred the Instamux option and installed these first on one line. But Instamuxes have an important limitation; they cannot send signals over long distances. Since both the main library and the county office building are within

four blocks of the telephone switching center this option seemed feasible. But the Instamuxes failed to provide a clear signal over more than two channels at any one time. It turns out that the library is on a phone circuit that winds away from town for several blocks before it returns to the switching center, too far for an Instamux signal. Fortunately, the vendor had forewarned us and had agreed to exchange the Instamuxes for multiplexors with no price penalty in advance. We have settled, then, for the first installation option. Some capacity for self-diagnostics does remain because the multiplexors have self-test capability, and because the DP office can also swap equipment between departments for testing.

Redundancy also played a role in branch installations. The Broadway Branch is nine miles distant, and requires an amplified line as well as a long-haul modem. A cheaper short-haul modem could have sufficed at the closer Jonesboro Branch, but our desire to swap equipment for testing led us to choose long-haul modems for Jonesboro as well. The branch library lines, incidentally, go directly to the central computer, not to the main library installation.

A last point involves the library telephone system. Even the smallest library considering automation should plan for a phone with a conferencing feature, because self-diagnostics requires direct conversation among library staff at one or more terminals, DP personnel at the CPU, and sometimes a technician at the vendor's office. We have had two minor failures (one modem crystal and one multiplexor wire) in nine months, and both fixes were greatly aided by quick conference telephone calls. Conferencing also helped in installation planning, when we had to iron out details with phone company and vendor technicians simultaneously.
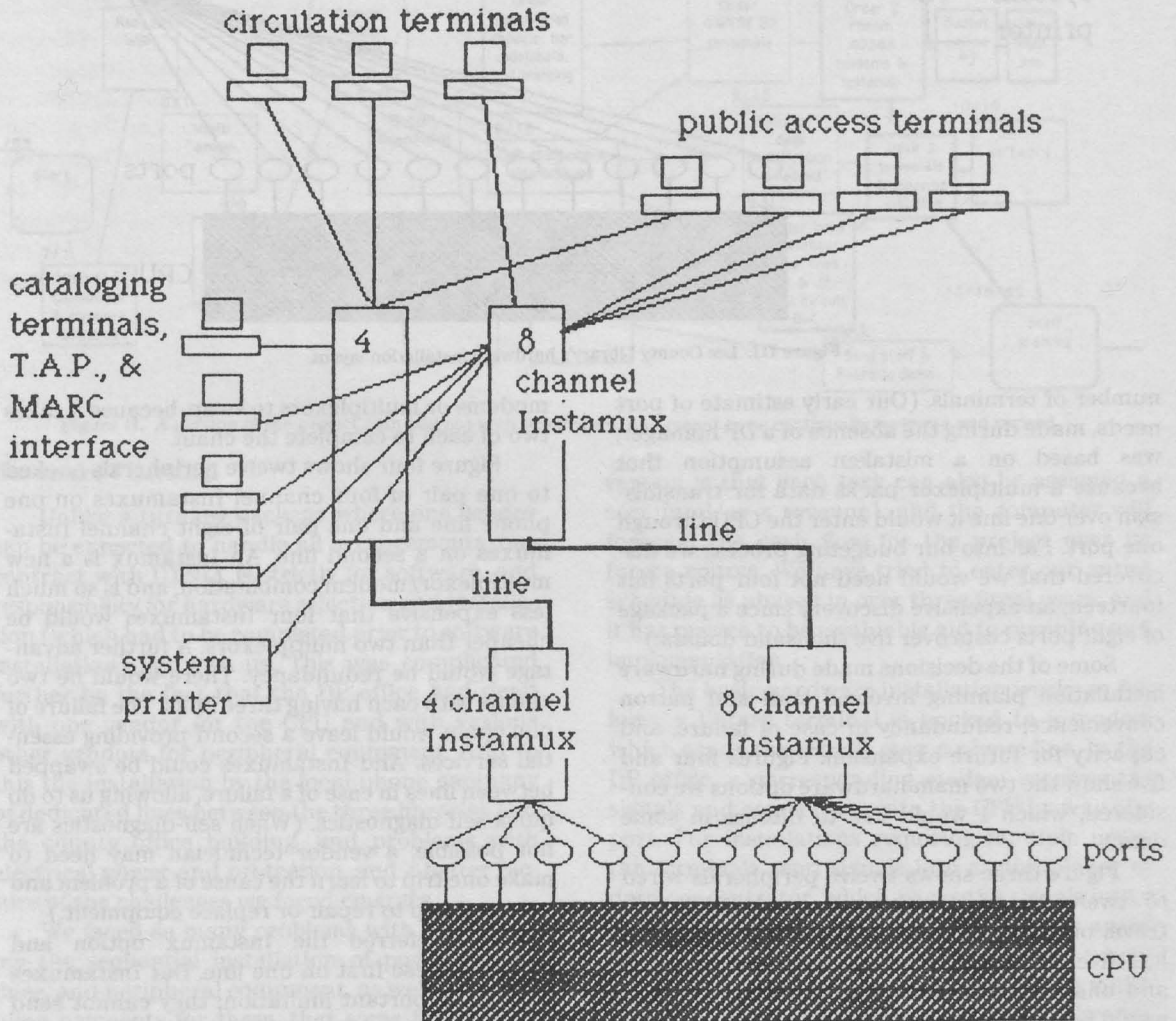

Figure IV. An alternative layout for greater redundancy. Instamux limitations made this unworkable.

Conversion Options

Retrospective conversion is the advance price we pay for the later benefits of automation and networking. It, too, carries with it an array of choices which will shape the project, but which seem to admit few absolute rights and wrongs. The manager must decide:

1. Should records be input from shelf-list cards or books? When conversion is done "on the fly" during circulation, one obviously must work with books. But such a procedure risks confusion if the system goes down or if records are lost, because the chronological sequence of records is presumably at random. When books are converted in shelf-list order one can recreate the history of the conversion from any given date, making it much easier to go back and correct a chronic mistake. We chose to work from books rather than cards, but to proceed in shelf-list order, while converting circulating books under appropriate Dewey numbers as they were returned and new books as they were purchased. When DYNIX reported that a problem with a new release may have caused us to lose certain fields for records input on December 14th and 15th, for example, we were able to study quickly those records and determine that no fields had in fact been lost.

One potential cost advantage of a shared CPU ... is that the library may be able to utilize software purchased for and by other departments.

A conversion done from shelf-list cards would also have included records for many books which had "walked out the door" over the years. Our "hands on books" procedure essentially turned our conversion into a shelf inventory. The hope is that the on-line catalog will thus be as close as possible a representation of what a patron could actually expect to find on our shelves as of 1986. Finally, a shelf-list card conversion does not eliminate the need to handle books, since bar code labels must be affixed.

2. Bar code labels: smart or dumb? Smart labels tagged to specific titles can be generated for collections already having machine-readable records, but these require staff to pull and verify titles for labeling. I am not qualified to comment upon a conversion with smart labels, but dumb labels (not tagged to specific titles prior to being placed on books) do have certain clear benefits. Any labels may be placed on any books in any

order so long as staff members enter the bar code number (manually or with light pens) at the correct prompt. Torn or soiled labels can be immediately discarded. Lost or misplaced label sheets can be forgotten; they do not leave "holes" in any inventory sequence. Staff members and volunteers entering records in different shifts can grab sheets of labels in any order, and move sheets from terminal to terminal without fear of interrupting proper sequence. Books with labels torn out can be given replacement labels in a quick "new bar code" procedure. But bar code linking procedure varies so greatly from vendor to vendor that the quick and easy technique for us may not be so for others, and vice versa.

3. Where to put labels? Everybody may have a preference, and its importance is questionable. But an automated system does not eliminate the need to somehow mark a book for its due date. We decided to continue using date due cards in the book pockets (though book cards will be pulled) and to place bar code labels on the same page, so as to not make circulation staff look in two places at checkout. Exterior bar code labels offer the promise of quick electronic inventory in the stacks; our interior labels will require staff to open each book for such an inventory. On the other hand, exterior labels may get torn or soiled more easily. Transparent tape might be placed over labels, but some report that tape inhibits code readings by light pens.

4. Which fields to enter, which fields to buy? We decided to streamline our work and enter the absolute minimum for each book: LCCN and title. This constitutes an abbreviated bibliographic record for the title which is then linked to a holdings record for the particular volume. The holdings record includes bar code, collection code (AF, ANF, and so on), item type (B for book, A-V for audiovisual, etc.), copy number, price, source, and location (M, B or J). We also asked DYNIX to customize our holdings records by adding fields for memorial and donor. These fields will be indexed so that, for example, we will be able to search all books donated by Dr. John R. Dotterer or given in memory of Douglas Wilkinson. (We have never accessioned books and probably would not enter accession numbers in any case; but contrary to what a speaker once stated at a conference in this state, it is perfectly possible to enter, index, and retrieve records by a local accession scheme.) Figure five shows the bibliographic record for the title *Fatal Vision*. This single bib record is linked in the system to nine different holdings records corresponding to the nine volumes currently held by the library. Figure

Figure V. A sample bibliographic record for a title. Most records include only LCCN and TITLE until MARC matching is complete.

six shows one such holdings record; each is keyed to the bar code number affixed to its volume.

For books without LCCNs we enter nearly complete bibliographic records; consequently these are set aside by front desk workers for later work by professional staff. Otherwise all work on the conversion thus far has been done at the front desk by regular circulation assistants. When the new upgrade is installed, additional terminals will be placed in back rooms and other staff members and volunteers will begin work.

When our conversion is complete, copies of the records will be downloaded to tape and will be mailed to a vendor for MARC record matching. The tape will be returned with complete records for whatever percentage (we hope at least 80%) have matched. Work will then commence on completing the unmatched records. This procedure seems to have worked well with the adult non-fiction collection, but for fiction we are considering having staff also add author entries. This complicates matters due to the on-line authority file check for each author, but will greatly facilitate use of the computer catalog until MARC records can be purchased.

6. What about customization? The initial installation seems a confusing time to consider customization. But if the vendor offers it, installation is the proper time because the vendor may include a deadline on free customization and because such refinements should be in place before too many records are entered. We asked not only for the memorial and donor fields described above, but also for contents indexing under keyword title searches. This means that

collections can be retrieved by the title of any story, poem, essay or play included in the books. Collective biographies can be retrieved by name of any person listed. While it certainly lengthens the conversion process, the results while searching the catalog are already impressive. Figure seven shows how a keyword search for AMADEUS has retrieved a book which includes selections from the play, but whose title does not include the search word. Contents indexing can also produce some searching oddities. A Boolean "or" search using the terms BLACK and NEGRO retrieved all the expected titles, as well as a book on Rembrandt which included a contents note about black and white illustrations!

7. How will new records be added? The tape downloading procedure described above can be repeated periodically to add new records to the system, but this presents special problems for a small library. Most vendors require a minimum number of records (usually 1,000) for such a tape-run. Since we purchase only some 3,500 titles per year our catalog could only be updated quarterly.

DYNIX markets OCLC and MARCIVE interfaces which use an IBM PC to copy records over phone lines and enter them into the cataloging module. We are looking at these as well as a new Bibliophile interface which does essentially the same thing with MARC records on optical disks.

Local Networking Options

The Lee County Library and the Central Carolina Technical College (CCTC) LRC have a

Figure VI. A sample holdings record for a volume. Records may be revised and updated using FM (file maintenance) commands.

```
25 Jun 86        Lee County Library System        09:02AM
                    Cataloging Module

Call # 808.82B                                 DYNIX #4937

   Title    The Best Plays of 1980-1981
   LCCN     20-21432
   Contents  1) A Lesson from Aloes
             2) 42nd Street
             3) Zooman and the Sign
             4) A Life
             5) Lunch Hour
             6) Amadeus
             7) Crimes of the Heart
             8) Translations
             9) The Floating Light Bulb
            10) Cloud 9
Enter: Amadeus
```

Figure VII. An example of keyword title searching retrieving a contents note.

long history of cooperation. The two issued a. combined book catalog for most of the 1970's. It was dropped due to increasing workload at both institutions. But automation is again bringing the possibility of a combined catalog to the point where managers at both libraries face some practical decisions.

Through fortunate circumstance, the CCTC computer (manufactured by PRIME) also runs the Pick operating system. CCTC administrators will soon have the option of running DYNIX software on their computer or on the central computer owned by Lee County.

It would be entirely possible to run both agencies discreetly on the same computer with the same software modules. Patron records could be maintained in one file, or two files could be partitioned. Similarly, the MARC database could be collective so that any search would retrieve titles in both institutions, or could be partitioned so that a search from one library would access the other's collection only with a secondary command. Patrons could enjoy one combined registration and could search either collection from any public access terminal. Borrowing privileges could automatically be suspended at both institutions pending resolution of overdues at either. Staff could exchange electronic messages. Because the Lee County Library software is already installed on the county computer, this option would require the LRC to access this same CPU with multiplexors and phone lines.

At first, it may seem strange that two libraries five miles apart, with a history of cooperation, would even consider running identical software on separate CPU's, but in fact there are sound arguments in favor of this option. It would allow the LRC to access other accounts in the college system including student records and budgeting.

An on-site system would eliminate the need for costly multiplexors, phone lines, and ports. It would relieve the problem of response time restrictions should CCTC wish to place remote terminals in neighboring counties for extension classes. Nor would this option preclude cooperation. Each library could still place a terminal in the other's facility for on-line searching. Or, combined on-line searching could be possible by periodically cross-loading MARC tapes. And each could honor the other's bar-coded patron cards, relieving patrons from having to carry two cards (the patron's registration accounts would be separately maintained on the two systems, but would be tagged to the same bar-code number on the library card.)

The questions surrounding such local networking are now near the top of our agenda as each library completes its retrospective conversion. The decisions facing us in the near future will shape library service in Lee County for many years to come.

Conclusion

At the outset I stated that automation has traditionally been the province of large libraries. Managers of smaller libraries may be excused for feeling like proverbial poor cousins. But this may be changing. In fact, the smaller library may well turn out to be the most exciting environment for the innovative efforts at automation. Unencumbered by the massive collections of research libraries whose sheer size place enormous demands on computer memory, storage, and response time, small public libraries may be better able to explore such features as keyword contents searching, electronic inventories, and book circulation at remote locations with portable bar code scanners. Better indexing of children's literature by illustrator or reading level, better access to fiction by genre or historical period, better access to local history and genealogical material by bar coding vertical files—all these are real, practical options for smaller libraries in the course of automation. As smaller libraries automate they will also network, and their patrons will enjoy increased access to resources across the state. The process of automation and networking now under way may transform public library services in North Carolina in ways we cannot foresee. ▨

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Going On-line at the Public Library: A Very Human Endeavor

Barbara L. Anderson and S. Joy White

The Forsyth County Public Library can now retrieve information and citations of pertinent sources from data banks in distant cities through computerized searching and a telecommunications network. We have extended our information services beyond the resources of the library's own collection to include well over two hundred on-line data bases that cover subjects ranging from business, environment, and demographic projections to AP and UPI wire service stories, education, psychology and export information. For now, we subscribe to the information retrieval services of two vendors, DIALOG and BRS. Our on-line service is free to our public.

Our library decided to go on-line first of all because of its premier information role in the community. Moreover, it is usually appropriate to try a new experiment, to take on a new adventure, at the library.

The Story

The county commissioners' approval of our on-line budget allowed us to proceed with the plan to offer on-line reference service to our community. The budget was necessarily drafted without knowing how much we would use on-line reference or which vendor or which data bases we would use most. It has turned out that in fiscal year 1985/86 DIALOG has billed us for just under $5000.

We did not anticipate the costs of training and support literature like the DIALOG *User's Guide*, the *BRS Reference Manual* and data base thesauri. Our administration was able to provide funds for these absolutely essential expenses.

Our next step was to select computer hardware and software. The computer that met our needs and yet was within our price range was the Apple IIe. At that time we had the glimmer of an idea we have had little time to investigate: perhaps at some future time we could perform searches at the main library and display our work at the branches, via their Apple microcomputers.

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Also arguing for the "Apple" decision was the success of Apples in our library's public-use microcomputer project. The computer could always be used ultimately in a public-use setting. The Apple does the job as an on-line terminal with "downloading" capability. The cost of the Apple IIe with two disk drives, monitor, printer, and modem, with system saver and all necessary cards, was about $2230.

Finding communications software compatible with the Apple IIe had its frustrations. It was difficult at the time, in 1983, to find librarians performing on-line searches with an Apple or to find much literature on using personal computers for searching. We found that the computer salespeople knew nothing about data base searching and could not advise us. Finally, we were advised that professionals at the University of South Carolina School of Library Science were using Apples for on-line searching. The School's librarian recommended ASCII Express Professional, which we purchased. The software handles all the details of accessing an on-line system, including dialing the telephone number and "logging on." The cost of the software was about $130.

The vendors, DIALOG and BRS, offer many of the same data bases. We had planned to use them equally and attended basic training sessions offered by both. As we began performing searches, we found ourselves using DIALOG almost exclusively because of its greater offering of business data bases. BRS is adding more business data bases, but DIALOG is still the best source of business information.

We decided to concentrate on DIALOG. We found the differences between the two vendors' rules for searching would force each staff member to concentrate on learning one system well before attempting to become skillful at searching two systems. As we began trying to use the data bases, each search was a separate challenge and very time-consuming. We felt very much the need for further training, beyond the basic DIALOG system seminar, and were able to attend a three-day workshop at the University of Pittsburgh School of Library and Information Science for intensive DIALOG system training. This session gave us pro-

ficiency and confidence in using the DIALOG language. Going on-line no longer intimidated us. This does not mean that we knew everything about DIALOG or could omit careful planning before accessing unfamiliar data bases. Far from it! But we had made the first big step toward successful on-line searching, gaining a feel for the system.

Training sessions offered by individual data base producers are often free. In general though, training involves considerable cost. Usually, travel is required. The cost for the DIALOG basic system seminar is $125 per person, for the BRS introductory session $95 per person, and for the University of Pittsburgh three-day training session $200 per person. The training is well worth the cost. Skilled searchers are not only more effective in finding the needed information but also more efficient in terms of time spent on-line, thus reducing on-line charges.

Our training continues here at FCPL as we try to keep current with vendor and data-base changes by reading as much of the vendor and data base updates as we can, by exploring new, unfamiliar data bases, and trying new search strategies on familiar data bases.

We have extended our information services beyond the resources of the library's own collection ...

We began publicizing the on-line reference service only after the librarians were comfortable searching DIALOG. Six months after the February 1984 University of Pittsburgh training session, we began publicity with a brochure mailed to businesses in Forsyth County. The Chamber of Commerce membership list served as the basis for the mailing list. (Our new computer with List Handler software was used to prepare the mailing labels. The very same computer that we use for on-line searching is used by several of our librarians for reference support functions.)

Press releases were issued to newsletters of local associations—e.g., the Chamber of Commerce, the Better Business Bureau, and the Retail Merchants' Association. Bookmarks were distributed to all branches and displayed at the Main Library. Future publicity plans include posters and an article in the business section of the *Winston-Salem Journal*.

Public response has been slow. A few callers have wanted massive searches or have had otherwise unreasonable expectations of what on-line searching can achieve. A few farsighted callers have asked if we could display information on their office or home monitors. Even now, two years after we began searching at FCPL, most searches are initiated by the librarian.

Policy

Now, when to search? How much to search? For whom to search? Our points of view and philosophy evolved as we began our work with the new service. We drafted broad guidelines that reflected rigidity on only one point: our on-line service was to be an extension of our reference service. The spirit of our mission was clear in guidelines that have served us well through a wide range of situations.

In terms of our operations, this means essentially that we consider on-line searching when the information needed is beyond our print resources. Also, we consider on-line searching when traditional forms of searching would be unlikely to yield a good answer or would involve an unacceptably great amount of time.

When a patron *requests* a computer search, we evaluate the request, consider all our library resources and perform a search if the librarian judges the request appropriate for data base searching.

We do receive requests for data base searching that are in fact inappropriate for on-line retrieval. Some are completely inappropriate in terms of the subject content of the data bases. Some are impossible to translate into the "key word" format required by the computer. Perhaps bibliographical citations would be completely useless for the particular patron or situation. Certainly on-line searching is not magic nor the solution to every problem. Some individuals have requested an amount of searching that is clearly above average, thus making their requests inappropriate in terms of the basic mission of our on-line service, which, after all, operates on a fixed annual allocation.

The instances of inappropriate requests have been relatively infrequent. We can handle these requests well because we have other library services to offer, and we can refer patrons to other libraries for paid searches. We always give library service, whether or not we give a computer search.

Our Use of the Service

The on-line service is part of our Reference Department. Experienced reference librarians bring to the on-line searching knowledge of the full range of our reference services and bring to

our traditional reference services knowledge of what computerized data bases have to offer.

Many libraries recognize the time and concentration required of a successful on-line effort by assigning to a librarian the full-time job of managing the service. In some libraries, on-line searching involves a separate department. These libraries make a strong point about the time commitment involved.

We believed at the outset and through our first two years of searching that making the on-line service part of the Reference Department was right for our library. If we gave up a little on the side of searching expertise, we gained terrifically on the side of quality reference choices. Certainly, we, as professionals who treasure the broadest possible work orientation, would not choose to be confined to only one area.

Most data bases offer information in the form of bibliographical citations. Occasionally, the abstracts are so full that the information need is met by the computer printout alone. It is usually the case, though, that the citations indicate enough about the full document that the patron can decide to pursue, with our advice, procuring the entire document. Sometimes it is available in our collection; sometimes we make an ILL request; if ILL does not seem promising or quick enough, the patron may choose to order the document directly from the data base producer for a fee. Other data bases offer their information in the form of directory listings, which we use quite frequently; and still others, which we have hardly used, offer statistical tables.

We believe our use of specific data bases, outside the special library setting, is fairly unique. Most librarians tell us they search *ERIC* and *PSYCHINFO* most. We suspect these would be favored in situations that meet many academic demands. We use business data bases, for *short* searches, often. *Dun and Bradstreet Market Identifiers* provides us a directory listing, including sales figures, that may be the only information other than an address that we can find on a company. Often the patron is overjoyed with the D & B directory listing. *Trade and Industry Index*, and the very current *Newsearch* give us descriptive news, beyond financial statistics. Again, it may very well be the case that this is the only information we can find for the patron. *Electronic Yellow Pages*, undergoing changes at the moment of this writing because of its recent acquisition by Dun & Bradstreet, gives us benefits equivalent to having yellow pages for every city and town in the U.S., and, of course, the information can be sorted in any way. The patron who wanted real estate firms

in several sparsely populated North Carolina counties that our exhaustive telephone book collection did not cover could be easily served. And the *Predicasts* data bases are excellent for keeping up with new company developments, especially products, technologies, and market information. *ABI Inform* gives full abstracts on business concepts and often very practical information, for instance, the benefits and disadvantages of a telephone Centrex system. Each of the data bases mentioned has a toll-free number. The staff at Predicasts, ABI Inform, Dun & Bradstreet, and Information Access, producer of *Trade and Industry Index* and *Newsearch*, give excellent telephone advice on search strategy. This support is invaluable.

... our on-line service was to be an extension of our reference service.

Also, to meet requests for practical technical information the on-line service gives us the benefit of massive technical libraries at our fingertips. We were surprised to find that we did not have to be technical geniuses to provide this kind of information. (And again the data base producers give priceless support.) One patron wanted all the particulars on extracting precious metals like gold and silver from scrap metal. The *Metadex* data base turned this into a very manageable request. A local businessman needed to study the economic advantages of variable speed motors in a manufacturing setting. The *Compendex* data base, an Engineering Society product, turned this into a request filled by the local public library.

Subjects we are hard pressed to find in print indexes are possible on-line because of the computer's ability to search for any word or combination of words in the bibliographical record, whether or not these words are official subject headings. A request for the most recent information on Hopi Indian recipes is easily filled with an on-line search.

The on-line ability to manipulate numerical data in all possible ways brings us quick answers to extremely difficult questions. We can easily find that there are 1,677 companies in North Carolina with sales of at least ten million dollars. Also, we can find that zip code area 27612 in Wake County has the highest quality of life score of any area in North Carolina.

A local attorney was looking for information, a few days after the fact, on a California Supreme Court reversal of a conviction. It was still too early

for the legal reporting to be available at the law libraries. *The day after* the news is reported in the respective media, the public library has access to the full text of the AP and UPI wire service stories, as well as the bibliographical citations to the *New York Times* or *Wall Street Journal* articles, and in a day or so more, we can provide bibliographical citations for the *Los Angeles Times, Washington Post,* and *Christian Science Monitor* articles. The on-line service gives us a degree of currency we could only achieve otherwise by daily reading of major articles in these newspapers. Although not as dramatically current as the news data bases, other on-line data bases are significantly more current than their print equivalents.

We have available to us on-line data bases like *ABI/Inform* that have no print equivalent. Also, Predicasts' *Regional Business News*, a new data base of locally written articles from regional newspapers and business magazines is available only on-line.

The *BIP* and *LC Marc* data bases give us tremendous bibliographical capabilities. If we are asked to find full-length books on starting a travel agency, or to produce a correct book title and author with only the benefit of a garbled title, we have information power.

The on-line service allows us to create special reference sources. The *Donnelly Demographics* full record on Forsyth County (or any geographic area down to the unincorporated place), a neat packaging of census data with 1985 estimates and 1990 projections, is a new source of demographic information. The *Disclosure* search for all the publicly-traded companies in our area, by stock exchange, is a valuable reference tool.

The on-line service brings us the benefit of print resources we could not afford to purchase for our collection. Our library has, through the years, purchased the *Moody's Manuals* instead of the *Standard & Poor's Corporation Records*. We now have on-line access to the *Corporation Records* and can, for a small fraction of the cost of purchasing the set, provide the *Corporation Records* data, when needed, for our patrons. For reference works that would be used only infrequently by patrons, on-line access can easily take the place of purchasing the print edition. In some libraries, having on-line access to the *Foundation Directory*, the *American Statistics Index*, or the *MLA Bibliography* would be more than sufficient.

We perform about fifty searches each month. We have chosen for this writing some of our interesting uses and some of the benefits of computerized searching. Next year's list of examples would probably be somewhat different. We are always learning new ways to use the on-line service.

There is the potential for abuse of the service. We are not completely comfortable with performing free on-line searches for consultants or information brokers who would be charging other parties for their services. Even in our regular reference service, this is not a situation that we enjoy—i.e., to provide information for someone else's paid information agent. However, it does seem to us that in the case of the on-line service, which so obviously costs dollars by the minute and involves a considerable amount of staff time, one needs to hesitate and assess. These requests may be completely out of bounds.

Time is a tremendous problem. The fact that we are on-line for just three minutes in a typical search is hardly expressive of the time commitment involved. Each search involves considerable preparation time. Deciding whether or not to go on-line, deciding on the proper data base, framing the request in the *"DIALOG"* language, often calling *DIALOG* or the data base producer for advice, explaining the results to the patron, and explaining options in securing entire documents, when appropriate, all add up to much more than three minutes. And, as we have said, time required to learn the basics is considerable. Ultimately, time, in the form of hours and days of manual searching, is what you save by computerized searching.

A problem accompanying any library's new on-line effort would be not knowing answers ahead of time. This applies to small details as well as the big picture. It was very difficult for us, ahead of the event, to make the right hardware choice, the right software choice, to guess at on-line costs per month. How could one know how much time it would take for librarians to learn, to be comfortable? How could one know what role the new service would assume in a library? Would on-line reference be part of the background that is taken for granted or a major show in itself? We believe this last problem is truly an opportunity. We would advise librarians considering on-line information retrieval to be open to whatever unique role the on-line capability takes on at their libraries.

Even now, ... most searches are initiated by the libraries.

Elements of our Success

The flexibility we have brought to our on-line decision making as well as to our use of precious time, now allocated among an even greater

number of jobs, has been extremely important to the success of the operation. We have been able to evaluate special circumstances and make decisions consistent with the spirit of the project. If a patron needs an expensive search, which would turn out to provide us with a new reference source for future inquiries, then we would probably decide to perform the search. We did not spell out at the outset the position on-line searching would have at our library. Not knowing what lay ahead of us, we wisely avoided hard and fast prescribing.

We *gradually* integrated on-line service into traditional reference service. The formal publicity effort has been slow. We found that we had to absorb a changed work environment, understand a new range of options, and make significant adjustments. While we did this absorbing and adjusting, we needed to convey to our public on a one-to-one basis, with enthusiasm, the purpose of something they hardly understood. The slow approach was the right appoach.

Our on-line service is free to our public. Surely, this is one of its most special qualities and, we believe, a large part of its success. This allows the reference librarians to try the on-line option whenever it seems an appropriate way to meet the public's need for information. On-line data base searching is just another way to find information at the local Public Library.

The fact that the Library absorbs the cost of the searches has made all of us in the Reference Department clear on the basic mission of the service. It is not the vehicle for amassing all possible references for someone's research paper. It is not a proper research tool to serve the same individual continually. It is a powerful tool in the public library's information service to the community.

Our judgment is a key factor in the use of the service; if patrons were paying, this would not be the case. It seems to us that our use of the on-line service is the most professional possible. The reference librarian, who may sometimes consult with other librarians in the department, with DIALOG, or with the data base producer, decides whether or not to perform an on-line search.

On-line service, for a very reasonable fee, is offered at other libraries in the Triad area. We know we are fortunate that this is part of our library environment. If someone needs to have printed out every citation for his dissertation topic, all the companies with sales over one million dollars in several states, or all foundation grants involving churches and youth, his need can be accommodated nearby. The relationship between the libraries in Forsyth County is friendly.

The other libraries are delighted to know they can advise inquirers to call us to discuss their information needs and the possibility of on-line searching and we are delighted that we can refer search requests which are inappropriate for the public library, to other libraries.

At our library, the on-line service enhances traditional reference services. Our regular reference work and our on-line work complement and strengthen each other. We would not choose to make the on-line service the major focus of the Reference Department nor permit it to diminish in any way our regular reference services and all related activities.

Now that we have made our initial investment in hardware, software, introductory training sessions, and learning time, we are earning dividends. Certainly, there are hidden dollar savings in print sources that now need not be considered for purchase. Our on-line information retrieval brings to our public an information capability that is not possible through traditional searching. The computer printout we present the patron usually represents huge time savings. Our on-line reference service brings to our patrons the benefits of massive collections of periodicals, reports, and documents that our library could not possibly house and index. Certainly, our position as our community's information specialists has been enhanced.
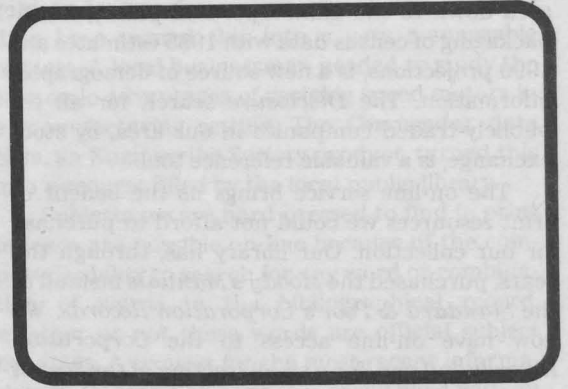
Terminal Happiness Computer Know-How

The North Carolina Information Network — A Vital Cog in Economic Development

Howard F. McGinn, Jr.

In 1978 Winston-Salem based Piedmont airlines faced a crucial decision. The Federal government had just begun the deregulation of the airline industry and Piedmont, then primarily a local carrier in the Carolinas and the Southeast, had to choose between competing with the larger, established carriers like Delta and Eastern, or maintaining its local routes and hoping for the best. Piedmont did both. It rapidly redesigned its entire route structure, expanded its fleet of planes and established "hubs" at Charlotte, Dayton, Ohio and Baltimore, Maryland. The net effect was that Piedmont was propelled to major carrier status (it is now planning flights from Charlotte to London); **and** the airline has enhanced service to the many small to medium sized cities that it had traditionally served in North Carolina. Piedmont, United, American, Eastern, Delta and other airlines bring prompt, regular service to a variety of North Carolina towns in addition to the "first tier" cities of Greensboro, Charlotte, and Raleigh. More importantly, Piedmont has provided improved service to Fayetteville, Asheville, Wilmington, Greenville, New Bern and to smaller North Carolina cities.

Piedmont Airlines recognized that it was able to carve out a market niche for itself in the highly competitive airline industry. Piedmont also recognized that a symbiotic relationship existed between the company and the North Carolina cities it served.

The local economy improved and the citizens had more money to spend on the services provided by Piedmont Airlines. There was, however, an important third party involved in this process — the North Carolina Department of Transportation's Division of Aviation. In a recent interview in the magazine, **We The People of North Carolina**, Willard G. Plentl, Jr., Director of the Division of Aviation, stated that "in order to successfully recruit business and industry, rural

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communities have to have reasonable access to a general aviation airport."[1]

For many years the banking industry in North Carolina operated within tight geographic and other regulatory constrictions. In the late 1970's, these regulations began to ease and a slow metamorphosis began to take place in the structure and services offered by the major banks in the state. Growth of financial services in North Carolina became closely entwined with financial services being offered in other Southeastern states. Major state banks like NCNB, Wachovia, First Union and Southern National began to acquire subsidiaries in Florida, South Carolina and other states. Charlotte has, as a result, continued its rapid development into one of the major financial centers in the country. This growth in financial services has benefited all of North Carolina. The financial infrastructure so necessary to local industrial, agricultural and small business development and operations has been strengthened.

Information Infrastructure

Information dissemination, like finance and transportation, is one of the underpinnings of economic development. But while state, federal and local governments have taken direct, often creative, steps to assure that transportation and financial services are available to private and corporate citizens, almost no planning or resultant action has been taken to create an information infrastructure in our communities. Common sense and the gurus of the future tell us that our economy is now well into an information age, yet we treat information in a helter-skelter manner that is designed to assure that valuable data is obtained and used in the most inefficient manner possible. Why?

Part of the reason for the lack of information policy is the American fear justified by the numerous movements toward censorship. Although we don't want somebody controlling our

access to information, we must not let this fear cloud our perception of the need for a rational, coherent policy of *information distribution*. It is just as vital to assure the efficient, free flow of information as it is to assure that free access to that information is made available.

Information distribution systems abound in the United States. Major television and radio networks regularly pipe information about all sorts of goods and services into our homes and automobiles. Specialized information networks exist to transmit news, financial, police, weather and credit data. Much of this information is general in nature — we all need and use it. Much of this data is institution-specific. It is owned by the institution and really wouldn't help us much in our daily lives. Much of this data we don't want. All of this data gathering and transmission is out of our control. Here is where an information distribution policy is needed. Information gathering and transmission is now limited to those able to pay. The reception of much of this information is limited to the more affluent individuals. How do we assure that all citizens have access to the information needed to conduct daily lives and develop communities? We look to our library systems and services.

Libraries, especially public libraries, are the necessary building blocks of the information infrastructure and have been here for many years distributing information and entertainment, helping solve the illiteracy problem, and educating users. But how active have librarians become in working with other professionals in their communities in industrial recruiting, in promoting economic development? The answer is not clearcut. The answer also needs to be formed in the context of the information needs of the local business community.

Writing in the *Iowa Library Quarterly* Daniel H. Carter notes that "of great interest to local manpower and economic interests are the data relating to the community trade balance and the gross community product."[2] Herbert S. White, Dean of the School of Library and Information Science at the University of Indiana, discussing a related topic in his "White Papers" column in *Library Journal*, puts this need in a library context. "It takes no genius to recognize that the emphasis of municipal and state government concern these days is on economic growth, sometimes seen as economic survival. Librarians and their public libraries are superbly qualified to contribute to this effort."[3] Library services are vital to economic growth. The acceptance of this fact by library and business communities is a problem.

Information and Economic Development

A close correlation exists between information availability and economic growth. There has not been much direct discussion of this point in the library literature, yet glimpses of the interrelationship appear in the general business literature. A *Wall Street Journal* story discussing British economic policy reported that "Britain's Mr. Baker said the program was of vital importance to Europe. Our future prosperity ... depends on the success of building up an information technology industry."[4] Discussing the impact of information technology on "developing countries", Vladimir Slamecka of the School of Information and Computer Science, Georgia Institute of Technology, writes "through automation, the industrialized countries which developed and first applied information technology, have registered substantial increases in manufacturing productivity."[5] Slamecka further notes that "in industrial societies the applications of information technology are driven by the market, not by its designers or vendors; it is the customer who evaluates the cost and utility of a product and either accepts it or rejects it."[6] In another article the *Wall Street Journal* states: "the explosion in data processing technology now has vastly enhanced the speed and volume of the flow of information and made it more accessible. And this in turn has drawn attention to its value. In many countries governments now regard information as something like wheat. It is something to export or import at a price; you can tax it, restrict its flow for reasons of national policy, subsidize it or paralyze it, erect barriers against it."[7]

Libraries, especially public libraries, are the necessary building blocks of the information infrastructure ...

Libraries and Information Distribution

How, then, can libraries take the lead in the establishment of an information distribution policy? How can we respond to the information needs of the business community as outlined by Carter and White? How do we allow the consumer to determine the development of information technology, yet make sure that the market place, in its rush to relevancy, doesn't ignore the potential future value of a particular source of information? How do we realize the full value of the investment we have been making in the development of information resources (libraries) for

decades? A starting place is a library network.

A quick return to the history of transportation in North Carolina is necessary. In 1921, North Carolina's Governor Cameron Morrison worked with the State Legislature in the passage of a $50 million bond issue to build roads in the state. Governor Morrison believed that his largely rural state's farmers and local businessmen needed the roads to gain access to regional and national markets. The roads were built, the markets became accessible and North Carolina's long climb toward its growing technological economy began. Through this process Governor Morrison became known as the "Good Roads Governor" and North Carolina came to be called the "Good Roads State".

The North Carolina Information Network is the "Good Roads" of the 1980's and 1990's. State government and private enterprise have been investing in the transportation and financial infrastructures needed to support economic development in the communities. Strangely enough, federal, state and local governments have also been investing in the creation of an information infrastructure in North Carolina for a long period of time, particularly over the past twenty years. This disjointed investment in information has been created to meet the needs of a specific library clientele. The advent of relatively inexpensive telecommunications and the present availability of powerful, inexpensive microcomputers has suddenly made it possible to link all of the "investment sites" so that information resources can be shared effectively and rapidly.

The North Carolina Information Network

The North Carolina Information Network, however, is taking this sharing one step farther. It is working with librarians and libraries of all types to develop programs that aggressively deliver, market if you will, information services and products to the various segments of the community. What are these programs, these products? Why is aggressive marketing necessary? What is the North Carolina Information Network and who will it aid in local economic development?

The North Carolina Information Network, an umbrella organization directed by the Division of State Library, works with all of the cooperative library-based information services in the state to coordinate services and fill in the gaps where services are needed or missing and, through LSCA and other funds, to enhance existing programs. Specifically the work includes these projects:

1. North Carolina Online Union Catalog. On May 21, 1986, the North Carolina Online Union Catalog came into operation. Housed at OCLC, the catalog consists of the records of all current OCLC full users in North Carolina and represents all types of libraries. The catalog also includes the holdings of the seven federal libraries in the state. The State Library has worked with OCLC in profiling all libraries in North Carolina not currently using OCLC and is encouraging these libraries to become dial-access "Selective Users" of the North Carolina Online Union Catalog and the OCLC Interlibrary Loan Subsystem. By the end of 1987 it is anticipated that over 500 libraries will be using the North Carolina Online Union Catalog. An extensive tapeloading program is also underway. The State Library is coordinating the loading of non-OCLC MARC records into OCLC. These records have been created by public, community college and academic libraries as part of local automation and retrospective conversion projects but have not yet been added to the OCLC data base.

2. North Carolina Union List of Serials. This data base will also be maintained at OCLC. Accessible online through the North Carolina Online Union Catalog, the Union List of Serials is scheduled to begin operation in early November, 1986. The initial program will be built on the Health Science Union List of Serials that is being created by twenty health science libraries in the state. A second union list of serials data base, the Western North Carolina Union List of Serials, will be added to this file. Procedures have been worked out for the long term addition of serials records and for the daily maintenance of the data base.

3. Business, Technical, and Educational Data Bases. The North Carolina Information Network will be working with commercial data base vendors to arrange favorable group contracts for the provision of services to all libraries in the state.

4. Electronic Mail/Bulletin Board Service. This program operates on two levels. The State Library will maintain a statewide electronic mail system, accessible to all librarians, that will create and maintain electronic bulletin boards which carry information for librarians and non-librarians. The Bulletin Boards will be open to the general public and will include job openings, calendars, financial information, state and federal legislative updates and the like. The electronic mail will serve a reference and a general communication function.

Since 1984 the State Library has been working with local library consortia in the creation of local electronic mail/bulletin board programs, and the local systems operating in Wilson County

and Cleveland County are described in this issue of *North Carolina Libraries*. Additional local systems will be installed over the next few years.

5. Document Delivery Services. This program operates on two levels. Pennsylvania, Oregon, New York and Massachusetts have been working in conjunction with national commercial package delivery firms to supply interlibrary loan delivery services to their states. The same arrangements are being discussed in North Carolina, and the State Library is working with manufacturers of telefacsimile equipment to arrange favorable rates for the purchase of this equipment by all types of libraries in the state. These units would be used for the rapid transmission of journal articles and other documents.

In general, the North Carolina Information Network will act as a cooperative agency and provide personnel, equipment, purchasing and overall professional services to libraries in North Carolina. Many of these services are, of course, geared to meeting the needs of librarians. The combination of services, the excellent collections in the state's libraries and the skilled librarians administering these libraries form the backbone of the system. The people, services and materials form the information infrastructure, the "good roads" needed by North Carolina to pursue economic development.

Library - Business Community Relationship.

The pursuit of economic development will require an all-out educational and marketing effort to the business community and state and local governments. Two crucial changes in perception are needed. Librarians will need to change attitudes toward the "marketing concept"; the business and government communities, in turn, will need to change attitudes toward the nature of library services. Herbert White has a good account of this situation. Speaking about librarians he says, "If we can't convince ourselves that marketing libraries is marketing for the public good, that individuals really need what we don't now provide for them, we certainly aren't going to be able to convince anyone else."[8] Speaking about the business-government community he states "librarians and their public libraries are superbly qualified to contribute to this (information providing) effort. That they don't make this contribution is due in large part to the fact that bankers, corporate leaders, chamber of commerce officers, and municipal officials don't know what information is lacking but attainable for their deliberations. They don't even know that they don't know, yet they are natural enough

clients, because they are information users who place a value on information. They just don't get it from libraries."[9]

Libraries and the business community, therefore, need to form a partnership if the information structure is to be formed, and the libraries will have to take the initiative in the formation of the partnership. As White notes, the business community historically has existed without a close relationship with the libraries. As a result, librarians need to become aggressive in the formation of these partnerships. W. Randall Wilson, Director of the Parlin-Ingersoll Library in Canton, Illinois, in a recent *Library Journal* article describes the initiative taken by his library in forming a partnership with the business community to promote industrial recruiting and economic development in that city.[10] Efforts like Mr. Wilson's will be needed over along period of time if the business community is to view the library as an important economic institution in the community. This perception does not exist now.

Personal Networking

In North Carolina the Information Network will be providing the necessary information services to serve the business community. Since personal as well as technological linkage is necessary for effective networking, steps need to be taken to merge the Information Network with the "Business Network". The merger should take place on a local and statewide basis, and some recommended actions to create a strong partnership with the business community on a local basis follow.

1. Present a United Front. In a county or community with libraries of several types (e.g. public, school, community college, special, etc.), develop business information services jointly among the libraries. To the business community, a library is a library. The labels applied to different types of libraries by the profession are irrelevant to nonlibrarians. If all segments of the community are to be served, libraries developed to serve these specific segments need to coordinate services to assure that patrons or businesses don't fall through the "information safety net." This coordination is networking on a local level and will require the formation of local consortia and resource sharing. Responsibility cannot be passed by one library to another in the community because of a claim of lack of funding, staff, interest, or a "lack of time — we're too busy now" attitude. Resource sharing that shows results will bring more dollars, resources and community recognition but will also bring more work.

2. Participate in Business Oriented Civic Organizations. The contacts formed through participation in civic organizations like Rotary, Kiwanis, Lions, and the Junior Chamber of Commerce and other organizations is essential if local networking is to succeed. Unfortunately these organizations do not welcome women. Until these practices change it will be difficult for female library directors to "crash" the "old boy" business groups. In the meantime, however, there are ways to become involved in the business life of the community. Local Chambers of Commerce provide the best avenue. The good ones do not discriminate; they welcome women on an equal basis. Main Street and downtown revitalization development efforts provide an excellent opportunity to participate in local business development efforts. Other organizations like small business centers, regional development organizations, and SCORE (if you are retired) provide opportunities to inject ideas and efforts into the community's business life. It is important, too, to participate aggressively in these organizations. In most cases these groups are searching for leaders and will support aggressive participation directed toward community development efforts.

3. Work with the Community College. In North Carolina the community colleges have developed an excellent reputation for participation in local industrial recruiting and economic development. The system was created, of course, with this purpose in mind, and the colleges have been very careful to nurture this role. Public libraries, in particular, should begin to foster this type of image. It is just as important for the director of the public library to be on the local industrial recruiting team as it is for the local community college president to participate in such activities. Develop a close relationship with the community college's library staff and the members of the college's small business center if one exists in the local institution.

4. Learn the Language of Business. Take basic business courses. Librarians constantly take continuing education courses. Most of the courses we take, though, are in the field of librarianship or in topics geared toward library administration. It is just as important to become familiar with the vocabulary and practices of the business community. Since there is no perceived benefit to the business community to become familiar with the vocabulary and practices of the library profession, the burden to cross cultures is on the librarian. This process of familiarization will carry a secondary benefit — it will help us in the management of our own institutions.

5. Become Consumer-Oriented. We do this to a great extent now. Our efforts, though, may be too constrained by the traditional areas of library service such as adult, young adult, and children. The University of North Carolina's Small Business and Technology Centers, the community college's small business centers and business departments in the private and public colleges will help in developing and implementing full scale marketing plans. Marketing of information and library services means more than the library's creation of bumper tickers and t-shirts with snappy sayings, more than the printing of posters showing celebrities holding a book, more than the hiring of mimes and clowns with balloons to promote a specific program. These advertising tools are fine when used in conjunction with an in-depth marketing plan devised to meet consumer information needs. When not geared to this purpose, they become frivolous gimmicks and demean the serious business of librarianship.

6. Befriend a Special Librarian. Special librarians, especially those who work for corporations, understand the needs of the business community. They know how to make information work so that it contributes to the bottom line of the corporation. Special librarians can help librarians working in other types of libraries contribute to the bottom line of the local business community. They are a good source of information about business-oriented data bases, reference materials, practices and culture.

The North Carolina Information Network is the "Good Roads" of the 1980's and 1990's.

There are steps that can be taken by the statewide Information Network to support local efforts in addition to the provision of access to basic data base services. Some of these steps are:

1. Work with Other State Agencies. The Network's provision of business information services needs to be made in conjunction with services offered by other state agencies like the Department of Commerce or the Department of Agriculture. These agencies, in turn, have departments that specialize in tourism, regional development or service to distinct groups in the small business community. In North Carolina the Department of Commerce has an industrial recruiting program that enjoys an excellent worldwide reputation. The Information Network should become an inte-

gral part of the economic development and over-all service offered by these agencies.

2. Work with Statewide Business Organizations. Data base services, marketing efforts and overall business information programs should be developed in conjunction with the efforts of statewide business organizations like the Chamber of Commerce and the North Carolina Citizens for Business and Industry. These important associations are crucial to our becoming an accepted member of the business community. They are politically powerful and can be of enormous help in assuring that the Information Network receives public and private financial support. They are also a prime source of program development. Because they represent major corporations as well as small businesses, their input in the development of a program of business information services is essential.

3. Conduct Regional Marketing Surveys. Because of the diverse geographic and economic nature of North Carolina, comprehensive regional market surveys need to be made to pinpoint, develop and provide information sources to meet the specific information needs of a particular region of the state. Several good regional library associations like the Metrolina Library Association or the Western North Carolina Library Association have already formed "natural" regional organizations to serve library needs in a specific area, and surveys can be conducted with the help of these associations.

4. Develop Business Expert & Consultation Services. Implementing business "expert" programs and consultation services will assist local communities and state administrators in establishing effective business information services. Assistance of this type has traditionally been provided successfully in other areas such as children's services. Business-librarian consultants can achieve the same results in the promotion of local business information services.

5. Coordinate Planning. Ensure that all statewide business information development efforts are made in conjunction with the development plans and policy of the Governor's Office and the state agencies dealing with business affairs. This step will assure that business information services will be gradually integrated with the work of the other agencies and aid in the ongoing acquisition of funding for the Information Network.

Conclusion

In summary, in order for a state, region or local community effectively to pursue economic and industrial development on a long term basis,

three important "infrastructures" are necessary: transportation, financial and information. North Carolina has well developed transportation and financial infrastructures. The state needs to develop an information infrastructure. The state and local communities have been investing in the development of library resources for a long period of time and, due to recent rapid developments in telecommunications and computer technology, the necessary building blocks of the infrastructure are already in place. The North Carolina Division of State Library, moreover, after many years of planning and study, has begun the implementation of the North Carolina Information Network. The Network will function as a co-op and provide access to basic services to libraries across the state. It will also help in the creation and development of local networks. The Information Network, though, has to become an integral part of the Business Network. Personal and technological networking on a local and statewide basis are vital for the permanent creation and deployment of business information services. Librarians must take the initiative to reach out in new ways to the business community to assure the merger of the Information and Business Networks on a local and statewide basis. The final success of the construction of the Information Network, while crucial to state development goals, can be of great value to the library community. Herbert White, invoking the name of Peter Drucker, sums it well: "Peter Drucker, with his Churchillian gift for short and memorable phrases, said it all a long time ago. Managers (and of course librarians who control resources are managers) only get credit for two things, innovation and marketing, because successful continuation of the status quo is assumed and earns no credit. Even more to the point, it is boring. In politics, 'boring' is a synonym for 'fatal.'"[11]

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Bibliographic Data Bases from the Network Point of View — In Kathmandu!

Marjorie W. Lindsey

"Seminar On Bibliographic Data Base" read the headline in the *Rising Nepal*[1] that caught my eye. The article went on to announce a five-day regional seminar on the "bibliographic data base from the net-work point of view ... to be held here (in Kathmandu) under the joint auspices of (the) National Computer Centre, Nepal, and UNESCO Regional Office of Science and Technology for South and Central Asia from November 18 to 22 (1985). About 30 persons from 11 countries of South and Central Asia including Nepal will attend ... (as well as) representatives of libraries, archive centres, communication media, computer experts and international agencies based in Nepal."

This was something I especially wanted to attend! Typically, the article did not give a contact person, telephone, or even indicate where in Kathmandu the seminar would be held. I asked a friend, a librarian and British Volunteer (similar to our Peace Corps Volunteers) who was developing a union catalog for the Forestry Department of Nepal, to find out if we could both attend as observers, and where and what time the seminar would open. He found that we would be welcome as observers and that we should be at the National Computer Centre inside the government compound promptly at 10:00 am November 18.

When I arrived I was greeted cordially and invited to remove my shoes and join the seminar's other participants for a tour of the Centre's computer facilities, preceding registration. We were shown the computer room, disk storage room, training rooms, and rooms where data are checked, coded and entered.[2] Data are received in many forms, mostly handwritten with various levels of legibility, all of which must be checked as carefully as possible before entering. At the time of our visit they were printing out a list of eligible voters in one of the 75 districts of Nepal. We also saw their power supply system which controls the

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electricity supply from the city, has a 30 minute battery backup system and a 375 KVA diesel generator.[3] The rest of the Centre includes classrooms, meeting rooms, offices and a cafeteria for the staff.

At the end of the tour we donned our shoes and proceeded to our meeting room where each participant, including observers, was given a registration tag, which also served as a pass into the government compound, and a handsome hand woven book bag with paper, pencil, the agenda, and some of the papers to be presented. Each participant sat at assigned places marked by name signs placed on tables arranged in a circle around the room; chairs for observers were set behind those of the participants so everyone could see and hear who was speaking.

The director of the National Computer Centre, Mr. Devi Prasad Chapagain, opened the seminar, welcomed all of us, and then introduced the participants and resource people. First was Dr. Aram Akopov, Programme Specialist in Engineering Sciences with the UNESCO Regional Office for Science and Technology for South and Central Asia, based in New Delhi, India, and chief sponsor of the seminar. Next were the resource persons: Mr. Alan Hopkinson, Information System Manager, The Institute of Development Studies at the University of Sussex, UK; Mr. Lim Chee Hong, Mamarant University, Penang, Malaysia; and Mrs. B. Wilcox, Australian Bibliographic Network, National Library of Australia, Canberra, Australia. Other participants included representatives from Afganistan, Bangladesh, India, Iran, Pakistan, the Republic of Maldives, and Sri Lanka, as well as Nepal. Concurrent with the regional seminar was a national seminar for a number of Nepalese librarians, lecturers, and government officials, who were introduced. Next came the "faculty" for the regional and national seminars. Nepalese librarians and computer specialists whom we came to know well through their papers and formal and informal discussions, and last, we observers were recognized and asked to introduce ourselves.

Following an elaborate Nepalese luncheon buffet we moved to the garden for the opening ceremonies which featured keynote speaker Dr. Mohan Man Sainju, Vice-Chairman of the National Planning Commission of Nepal, who received his doctorate in political science from UNC-Chapel Hill. Dr. Sainju observed that "the developing countries that missed the opportunities of the industrial revolution of yesterday should not miss the revolution of informatics which is taking place today." He also noted that Nepal's seventh five-year plan, beginning this fiscal year, contains a national computer development policy for the first time.

Our first session featured a paper entitled *Library Scene in Nepal*[4] by Mr. Kamal Mani Dixit, Librarian of the Madan Puraskar library of about 12,000 books and 2,400 periodicals in the Nepali language. Beginning with early stone inscriptions of the 5th-8th centuries AD, Mr. Dixit described the historical development of temple and private libraries. Beginning in the 1950's, under the Ministry of Education, there was a surge of public library development across the country, but it was short-lived, beset by financial and political constraints. Presently libraries must be registered as associations, undergoing careful scrutiny of any police and political records of the sponsors. "Only after the Home Minister's approval can an association be registered in Nepal . . . it is an uphill task indeed for an ordinary man or a group to open a library anywhere in the Kingdom." Mr. Dixit went on to describe the Tribuvan University Central Library of 186,000 volumes and the sixty-six campus libraries scattered over the country; the few libraries in middle and secondary schools; government departmental libraries; and some of the special collections in Nepal. None are automated but the academic libraries are probably in a position to begin. He also noted the very popular foreign mission libraries in Kathmandu whose reading rooms are heavily used. Mr. Dixit's key comment, and one later taken up by the seminar as a whole, was that "there is not one authority in the Government who is really in charge of libraries."

Session II opened with brief reviews of the library scene in each of the other participant countries. Mr. Farouq, Member, State Committee for Culture in Afganistan, was absent, so we began with Mr. Muhammad Anwarul Haq, Chief, Documentation, Library & Publication Division, Bangladesh Bureau of Educational Information and Statistics of the Ministry of Education, Dhaka, Bangladesh. Besides the efforts of his department to automate, other national libraries such as the National Medical Library and the Central Public Library are considering automation. They hope for a common format, but at present his agency is trying to develop an original format to meet their special needs, using Roman not Bengali alphabets. He noted the value of the MARC format, especially in producing and exchanging national bibliographies, but cited the shortage of trained manpower in system engineering and programming as a handicap to automation in Bangladesh. He also noted that there is no central organization to develop a common format.

Mr. N.K. Pandey, Systems Analyst, National Informatics Centre, Electronics Commission, New Delhi; Dr. S.S. Iyer, Scientist Incharge, National Information Centre for Drugs & Pharmaceuticals, Central Drug Research Institute, Lucknow; and Dr. T.A.V. Murthy, Head, Library Service, Indian Agriculture Research Institute, Pusa Campus, New Delhi, spoke on the library scene in India. They noted that there are public libraries in the major towns, most with limited services; there is a steady growth of special libraries, such as the National Library of Medicine and the National Information System for Science and Technology Library; and that there are some library schools. They are trying to develop software that can be shared among India's libraries regardless of the kind of computers they have. They too noted that the development of libraries is closely allied to legislation.

Presently libraries must be registered as associations, undergoing careful scrutiny of any police and political records of the sponsors.

Mr. S. Hussain Razavi, Systems Analyst, Member of the High Council of Informatics, Teheran, Iran, noted two developments in Iran concerning data bases: 1) The Academy of Linguistics is developing a system for all languages and alphabets, and 2) research activity is underway for a common software. He noted further that Iran does not have a central national library; rather, the university library is the most important library.

Mr. Mohamed Imad, Technician, Computer Centre, Ministry of Planning and Development of the Republic of Maldives called attention to the communications problems of 183,000 people scattered over their multi-island country. He said they have no national library, only one public library, and only one private library in the country. There are few publications in their native lan-

guage, and they lack skilled manpower. Foreign embassies help meet information needs with their libraries. The Ministry of Planning and Development is undertaking the collection of statistics, such as the census, for the country, and a computer centre has been established.

Mr. M.A.R. Khan, Systems Analyst, Pakistan Computer Bureau, Islamabad, Pakistan indicated that a national library as such does not exist in Pakistan, but they have two nationally ranked libraries. A natural history museum library has just begun, for research only; scientific and technical libraries are located mostly in universities. The Punjab Public Library, the starting point of the library movement in Asia, and now part of Pakistan, has 500,000 books and old manuscripts, the latter being microfilmed. Computerization has not yet begun in Pakistan's libraries, but they are considering beginning with the National Assembly Library. Mr. Khan emphasized that education and literacy are key elements in the development of libraries, noting that of Pakistan's 90 million people, 85% are in villages, with only 10% literate.

Ms. Indra De Silva, Librarian-Documentalist, Natural Resources, Energy and Science Authority of Sri Lanka, Colombo, presented a paper on the various bibliographic data bases in Sri Lanka. The Parliament has designated the Computer and Information Technology Council as the overall body in computer organization in Sri Lanka to advise the government in formulating, co-ordinating and implementing policy, functioning directly under the President. The Sri Lanka Scientific and Technical Information Centre functions as the national focal point of scientific and technical information, has a network of about 100 scientific and technical libraries, and is the only organization in Sri Lanka which uses computer techniques for bibliographic data processing. Three data bases have been created: 1) Union Catalogue of Scientific and Technical Books, 2) Union List of Scientific and Technical Periodicals, and 3) Sri Lanka Science Index. Ms. De Silva described the process of developing first a manual union catalog, and later moving to automation with all the problems of establishing standards acceptable to all participating libraries, finally choosing AACR 2, the Dewey Decimal and Universal Decimal Classifications, and the OECD (Office of European Cooperation and Development) Macro-Thesaurus. Catalog support services are offered to participating libraries. Her description of developing the Union List of Scientific and Technical Periodicals, with information coming from participating libraries in all sorts of manual formats, with various levels of completeness, was a strong reminder of the experience of North Caro-

lina's Western ZOC! The Science Index includes published and unpublished scientific and technical documents relating to Sri Lanka, scientific and technical periodicals published in Sri Lanka, and a collection of scientific and technical articles published in local newspapers. They have a Wang 2200 MVP computer, have developed their own software, and have formulated a transliteration scheme to overcome the inability of the computer to use diacritical marks. They are fast running out of storage space!

... actually nowhere in the world is there absolute agreement on a thesaurus ...

Over the remaining sessions several informative papers were presented provoking much comment. Mr. Saket Bihari Thakur, Documentation Officer of the Centre for Nepal and Asian Studies described AGRIS, the international information system for agricultural sciences and technology under the Food and Agriculture Organization of the United Nations, with 90 member countries. He also described DEVSIS, an experimental Development Sciences Information System program of the International Development Research Centre in Ottawa, Canada, which has received experimental input from several countries including Pakistan, India, Bangladesh, Indonesia, and the Philippines from southeast Asia. Mr. Thakur then noted several major issues in the formation of a regional bibliographical data base and network: 1) lack of common bibliographic format and subject heading list; 2) financial constraints; 3) inadequate trained manpower; and 4) need for study to prepare a "status paper on each participating country, for an expert consultation".

During the discussion Mr. Hopkinson noted that actually nowhere in the world is there absolute agreement on a thesaurus; Mr. Iyer suggested that each country can modify for its own use a standard thesaurus already available, and cited MESH as an example. Mr. Hopkinson also pointed out that terminology is not as firm in the social sciences as in pure science, and suggested using a general thesaurus with key word in title search techniques.

Mr. Krishna Mani Bhandary of the Tribhuvan University Central Library elaborated on the libraries in Nepal, particularly the university system and several research libraries, noting again the lack of public libraries and the poor quality of the few school libraries. He pointed out the advantages of sharing national bibliographies,

and the necessity of networking in the modern world. But he was realistic in pointing out that for Nepal the prerequisite is to convert records to machine readable form. In closing, he said: "There is a great and immediate need for formulating library policies at the National level. This may require a high expert committee."

During the discussion it was pointed out that no librarians are involved in drafting and submitting library policies for Nepal, and that this seminar could make a strong recommendation in that regard. Mr. Thakur pointed out that Bangladesh and Pakistan also lack library legislation regarding a national depository of government publications, whereupon Mr. Iyer noted that India has six such laws! Mr. Iyer further suggested that Nepal should develop a strong library association, noting that more can be achieved through such an organized effort. Mr. Murphy pointed out that to further enhance the clout of librarians, there must be an opportunity for librarians to upgrade their skills and be exposed to new technologies.

Mr. G.A. Pradhan, Systems Analyst, National Computer Centre, Kathmandu, Nepal, then presented a paper outlining his design for "library circulation and a bibliography system". While the paper was useful in showing graphically what a system might look like, it soon became apparent that he had not consulted any librarian at all. Several persons pointed out that it would be more cost-effective to modify packages already available and proven than to design a circulation system from scratch, and that a standardized package would be needed to network.

Mr. Prabhat Krishna Kansakar, Computer Engineer, National Computer Centre, Kathmandu, presented a technical paper discussing various computer communication networks, such as local and wide area networks, and describing functions of various hardware needed, protocols and switching methods, flow control, and network security. He took note of various communication channels available via telephone, satellite, and microwave, concluding that satellite might be best for the region using INSAT, the Indian satellite located over the Indian Ocean.

Mrs. Wilcox, noting that library cooperation has always been strong in Australia among all types of libraries, gave a detailed description of the Australian Bibliographic Network, "an automated national bibliographic service based on a cooperative on-line shared cataloguing facility" using WLN software on IBM compatible equipment. She further noted that the WLN software was a proven system with a high standard of records, could be used with their computer equipment, and was used in New Zealand and Singapore as well as in other countries, making it a logical system for them to choose. WLN is developing a new version, and when available Australia will need to reconcile their system with the new one. When WLN develops a module for on-line interlibrary loan, Australia plans to implement it as well. The network began in 1981 with 8 participants, and now has 109 participants on-line, with 3.5 million holding statements, an average of 3 per title. Mrs. Wilcox commented that although their national library is a legal depository for government publications, they do not get them all automatically and have to "go after" many. She observed that the South Asian region needed the ability to interface in order to share national bibliographies — to use the same formats and protocols in order to share tapes even if lacking a telecommunications network.

Mr. Hopkinson discussed the need for standards, and described in detail the UNESCO Common Communication Format. He noted the several kinds of standards available and indicated that a library system should choose one and then stick to it, before automating. With regard to formats, he suggested that if a country does not have a national MARC, they adopt UNIMARC, an international MARC. He noted the importance of the ISBN and ISSN for countries to establish and use. He describing filing rules, indicating that one has to tell the computer what alphabetic and chronological order mean. For the future he saw open systems communications, universally agreed upon rules for developing authority files, and conversion programs between formats.

Mr. Lim described the MALMARC (Malaysian MARC) system developed in 1978 with UNESCO funding, and headquartered in Panang. There are seven participants currently, five of which are state libraries, and one additional participant outside Malaysia, namely Singapore. Member libraries combined have 1.2 million books and periodicals. They have developed data bases for each institution, including audio-visual materials. They use the university computer center for computer resources, but library personnel to run the system. Software is from the British Library, a well-tested package. Library of Congress and UKMARC tapes are used. Fees are based on the number of full records and amount to about $1.20 per full record. They have two types of members, founding and subscribing. They use common standards such as AACR2, LC classification, LC subject headings, and NLM and MESH where appropriate. Their network is a bi-directional star-shaped structure. They use an IBM computer with remote terminals connected to the center

through modems and telephone lines. Approximately 65,000 records are processed per year, and 130,000 volumes added per year. Approximately 75% are found on LC MARC tapes, 55% on UK tapes, and 30% created locally for local materials. At present they do not provide an on-line catalog system for the whole country, but they are looking into this. Mr. Lim hopes the National Library will take the overall responsibility for the network, which resides presently in the university. He called attention to the need for proper design and planning, and the training and updating of personnel for successful system implementation. He noted that there are enough tested packages available now that it is not worth doing them on your own. He then observed that if done in-house, computer people will have to be trained as librarians; but the corollary is also true, that librarians need at least basic training to be computer literate. Mr. Lim closed emphasizing that the willingness to cooperate is the main ingredient for success in networking.

"There is not one authority in the Government who is really in charge of libraries."

Next we toured three libraries in Nepal: 1) the National Agricultural Documentation Centre of the Agricultural Projects Services Centre under the Ministry of Agriculture, which has 4,200 catalogued documents, 5,000 cataloged books, and 200 journals and serials, and serves as the AGRIS input center and liaison office for Nepal. We also observed the Apple computers being used in the Agricultural Projects Services Centre, under the guidance of an American Peace Corps Volunteer. 2) the National Archives of Nepal where we saw ancient records carved in stone or engraved on copper sheets, and manuscripts handwritten on palm leaves, all carefully wrapped in cotton fabric for protection. The rest of the collection houses edicts of the King of Nepal and other official papers from the Palace. Printed government publications are housed in the university library, not in the National Archives. 3) the Tribhuvan University Central Library, the most outstanding collection in Nepal, cataloged according to standards, and providing full services to faculty, students, government, and researchers, under the directorship of Mrs. Shanti Mishra, who has her MLS from the United States.

The last session of the seminar provoked vigorous discussion of recommendations from the "expert meeting", held the afternoon before with the resource persons and selected participants.

The first recommendation was that "statutory provision for the establishment and management of libraries and information centres and their services should be made in countries in the region which do not yet have them. Statutory provisions should also be made for the legal deposit of publications." Another was that "UNESCO provide a consultant/consultants to study the situation in each country, to investigate and make proposals that will satisfy the needs, with respect to standards to enable each country eventually to participate in a regional bibliographic network. The task is to be accomplished before the end of 1986." Further recommendations addressed the need for financial and technical assistance in training; urged each country to identify a national "focal point" for establishing procedures, standards, and training needed to prepare for a regional network; and requested "UNESCO and respective national governments and educational institutions of member countries to investigate with the International Telecommunications Union the possibility of lower tariffs for the use of telecommunication facilities for the transfer of information within the scope of network activity."

These countries have a long way to go to achieve a regional network, but a seminar such as this one can raise awareness of the problems and the possibilities; can broaden the understanding of automation, of the value of standards, and of the uses of different kinds of data bases; can develop dialog among statisticians and computer and library professionals in the region; and can stimulate enthusiasm to continue trying for national legislation, responsibility and support as well as the cooperation and support of professionals within each country.

References

1. *The Rising Nepal* is the English language edition of the government newspaper of Nepal.
2. Full information describing computer facilities and services can be found in the pamphlet *National Computer Centre, at the service of the nation*, National Computer Centre, Singha Durbar, Kathmandu (Nepal), June 1985.
3. *Ibid.*, p. 6.
4. Unpublished papers presented at the seminar are as follows:
   Bhandary, Krishna Mani. *Library system in Nepal.*
   De Silva, I.R. *Bibliographic databases — Sri Lanka.*
   Dixit, Kamal Mani. *Library scene in Nepal.*
   Haq, Muhammed Anwarul. *Country paper of Bangladesh on educational information: needs and issues of a database in Bangladesh.*
   Kansakar, Prabhat K. *Introduction to computer communication networks.*
   Pradhan, Gem A. *Database designs for library circulation and bibligraphy system.*
   Thakur, S.B. *Mechanization of library/information services; bibliographic control for information networking — a regional perspective.*

Rural Teenagers Are Reading!

A Study of the Leisure Reading Patterns of Rural Ninth Grade Students

Carroll Harrell, Annette Privette, and Constance Mellon

There is evidence among librarians of increasing interest in services to young adults: lists of recommended materials, books on young adult services, state standards for public and school libraries, and research studies on relevant aspects of adolescence are appearing more and more frequently in the literature of librarianship. A major concern consistently reflected in these writings is whether our teenagers, raised on television, carrying their music with them in boom boxes or walkmans, and wrapped up in the complexities of adolescence, will ever become reading adults. To examine the facts behind this concern, a study was designed to explore the leisure reading patterns of young adults. Since our area of concern is eastern North Carolina, a predominantly rural area, we were particularly interested in rural teenagers, whose leisure reading patterns, we suspected, differed greatly from those of urban teenagers. Due to the distance between home and libraries (public and school), reading material would be less readily available for the rural teen-

ager; however, there might be more leisure time to be filled since the amusements and other distractions of a large city would be missing.

The Setting

Our study was conducted in two rural high schools well-matched in all aspects but one: proximity to a large city. While one school is located in a sparsely populated coastal area, the other is less than thirty-five miles from one of the state's larger cities. The high schools are centrally located to the areas they serve and include grades nine through twelve. The populations of both schools are similar with over 90% of the student enrollment classified as rural. Ethnic distribution is approximately equal, black and white, with no other groups represented. Between one-third and one-half of the families have incomes at or below the poverty level with most of them in agricultural occupations and with little formal education beyond high school.

Students at both schools are grouped for certain classes and courses of study. Five groups are used: Academically Gifted, College Preparatory, General, Chapter I, and Special Education. Academically Gifted students are identified by state guidelines, which include intelligence and standardized achievement test scores and grade point average. College Preparatory students, those planning to attend college, and General students, those with no further academic plans, are determined by student choice. Special Education students, also determined by state guidelines, are those with limitations which may include physical, mental, or behavioral. Chapter I students are determined differently at the two high schools. One defines them by reading scores below the fiftieth percentile on the California Achievement Test while the other identifies them using three criteria: C.A.T. scores below the forty-fifth percentile; teacher recommendation, and performance in school.

The Study

Data Collection

A five-page, 28-item, questionnaire was devised, focusing on factors related to reading by

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choice: whether or not teenagers read in their leisure time; if they do read, what and where they read and how they obtain their reading material; if they do not read, why not. The questionnaire is a modified checklist with space provided for comments and includes several open-ended questions. Ninth grade students were selected for preliminary study, since they fall into the category described by G. Robert Carlsen in *Books and the Teenage Reader* as "middle adolescence." Questionnaires were duplicated in five colors for easy identification of the five groups described above and were administered to 20 English classes, 10 at each school, by their classroom teachers. A total of 362 questionnaires were collected, with group distribution as shown in Table I.

TABLE I. Breakdown of Respondents by Group.

Profile of Respondents
(N = 362)

Gifted	College Prep	General	Chapter I	Special Ed
22 (6%)	156 (43%)	72 (20%)	76 (21%)	32 (9%)

Data were analyzed to determine what percentage of respondents, both overall and by groups, claimed to read or not to read in their spare time. For non-readers, reasons given for not reading were examined. For readers, factors were analyzed relating to types of reading material chosen for leisure reading, where reading material was obtained, what types of reading materials teenagers purchased, and where and when teenagers read for pleasure.

Data Analysis

A surprising 296 of our 362 respondents (82%) answered "yes" to the question, "Do you ever read in your spare time." By sex, 72% of the males surveyed and 92% of the females surveyed chose reading as a leisure activity. Analysis by group was even more surprising. It was anticipated that the Gifted and College Preparatory groups would have a high percentage of spare time readers, and they did: 100% of the Gifted group and 82% of the College Preparatory group responded "yes." However, 70% or more of the General and Chapter I respondents also indicated that they read in their spare time. (Table II shows a breakdown by group.)

TABLE II. By-Group Responses, "Do You Ever Read In Your Spare Time?"

| | College | | | |
	Gifted	Prep	General	Chap. I	Sp. Ed.
Total % "Yes"	100%	90%	77%	75%	59%
% Females "Yes"	100%	95%	86%	86%	79%
% Males "Yes"	100%	82%	72%	70%	45%

Less than 20% of the total respondents claimed they did not read in their spare time. As might be anticipated, none of the Gifted, and only 10% of the College Preparatory students were included in this group. Twenty-five per cent or less of the General and Chapter I students indicated no leisure reading activity, as opposed to forty per cent of the Special Education students. A breakdown by sex indicated that twice as many males as females in each group claimed that they did not read in their spare time. The two most frequent responses checked by non-readers for not reading (over fifty per cent) were working after school and hating to read. In addition, 75% of the General students who claimed not to read in their spare time checked the response, "reading is too hard." Other reasons given for not reading included, "too much on my mind," "too much to do," and "bothers my eyes."

On questions relating to materials chosen for leisure reading, a difference was observed between the responses of males and females. For males, the top three categories of reading materials across groups were magazines (72%), sports/sports biographies (68%), and comic books (54%). It is interesting to note that only 29% of the female respondents read comic books. For females, the top three categories were romance (90%), mystery (73%), and magazines (73%). Specific magazines favored by boys included *Hot Rod, Field and Stream*, and *Sports Illustrated*. Girls favored *Teen, Seventeen, Jet, Ebony*, and *Young Miss*. Twenty-two per cent of each group, male and female, claimed to read non-fiction with boys specifying books on sports, hunting, and war while girls chose biographies. (For a specific breakdown of preferred materials across groups, see Tables III & IV.)

TABLE III. Preferred Reading Material of Girls by Group

| | | College | | | |
	Gifted	Prep	General	Chap. I	Sp. Ed.
Romance	95%	90%	92%	100%	55%
Mystery	84%	76%	83%	58%	36%
Magazines	84%	74%	83%	58%	46%
Science Fiction	42%	32%	17%	11%	0%

TABLE IV. Preferred Reading Material of Boys by Group

| | | College | | | |
	Gifted	Prep	General	Chap. I	Sp. Ed.
Magazines	67%	70%	67%	66%	89%
Sports/Sp. Bio.	33%	52%	48%	100%	100%
Comic Books	33%	54%	45%	55%	78%
Science Fiction	100%	63%	51%	26%	22%

An interesting contrast in choice of leisure material is provided by science fiction. While forty

per cent or more of students in the Gifted, College Preparatory, and General groups claim to read science fiction, 20% or less of the Chapter I and Special Education students selected it. Among those who read science fiction, twice as many are males as opposed to females.

The primary source of reading material is the school library. Almost 90% of the students, male and female, checked the school library in response to the question, "Where do you get the things you read?" Girls borrow books from friends (71%) more readily than do boys (48%), while boys appear to read the magazines in their homes (71%) somewhat more often than do girls (63%). More girls than boys use the public library (66% as opposed to 41%). An equal percentage (68%) of males and females read the books in their homes and over half of them buy books at grocery, drug, and discount stores. The major contrast across groups appears to be in the use of the public library. Eighty-two per cent of the Gifted and 59% of the College Preparatory students use the public library while less than half of the remaining groups do. (For a breakdown of library use across groups, see Table V.)

TABLE V. Libraries As Sources of Leisure Reading Materials

Group	School Library	Public Library
Gifted	82%	82%
College Prep	79%	59%
General	75%	46%
Chapter I	100%	47%
Special Education	100%	40%

In opposition to the image of the teenager as a non-reader is the fact that 83% of both male and female respondents who read in their leisure time spend their own money on reading material. Seventy-four per cent of the boys buy magazines, their top choice for purchased reading materials, while nearly seventy per cent of the girls surveyed buy both paperbacks and magazines. Across groups, the Gifted buy the most paperback books (77%) and the fewest comics (5%). The greatest percentage of comics (37%) is purchased by the General students, while Special Education students buy the most newspapers. (For a by-group breakdown, see Table VI). Most of the respondents who spent their own money on reading material indicated that their purchases were of the types listed above. A few respondents, however, indicated that they also spent money on hardcover and on book club books.

The final factors of interest to this study were where and when leisure reading occurred. Across categories, most leisure reading occurred in the home (78% of the males and 94% of the females), usually taking place in the bedroom or living room. Slightly more than half the respondents, both males and females, indicated that they also read for pleasure during school. Approximately half of the girls and a fourth of the boys also read on the school bus. Males read mostly on weeknights (89%) while females frequently read both weeknights (97%) and weekends (84%). Summer vacations were less popular leisure reading times for boys (36%); however, girls continue to read for pleasure during the summer (85%).

TABLE VI. By-Group Percentage of Types of Reading Materials Purchased

	Gifted	College Prep	General	Chap. I	Sp. Ed.
Magazines	50%	79%	77%	61%	45%
Paperback Books	77%	59%	47%	40%	20%
Comic Books	5%	21%	37%	33%	25%
Newspapers	5%	11%	14%	23%	15%

Implications for Practice

Three findings from this study are particularly significant to the practice of young adult librarianship.

First, the most surprising, and most hopeful, finding of our study is that teenagers are reading in their leisure time! Moreover, the high percentage of those who enjoy reading is not limited to the college bound; even among the Chapter I students, those identified by low reading scores, 75% chose reading as a leisure activity. However, comments and responses to open-ended questions indicate that teenagers consider "reading" and "reading for pleasure" to be distinctly different activities. "Reading" is equated with homework while "reading for pleasure" is described as "the things I choose myself."

The second finding relates to the materials teenagers choose for leisure reading. Popular magazines are the favorite type of reading, with paperback books a close second. Many teenagers enjoy reading magazines and paperback books enough to spend their own money on them. The types of books preferred include romance, mystery, and sports/sports biographies. Here, too, in the choice of reading material, a similarity across groups can be found. The gifted and college-bound girls are just as enthusiastic about romantic stories as their peers. And, while fewer Chapter I and Special Education students mentioned magazines than did students in other groups, they are still preferred as leisure reading material by approximately half the respondents in these groups. While the groups divide on

science fiction, it is popular with over half the boys in both the college-bound and general groups and with a third or more of the college-bound girls.

The third significant finding is that almost all the young adults in our study borrow leisure reading materials from their school libraries. Once again, this finding is across groups with more than three-fourths of the college-bound and general respondents and all of the Chapter I and Special Education respondents mentioning the school library as a source of their leisure reading materials.

When we combine the findings about preferred leisure reading materials with the fact that the majority of rural youth obtain the things they read from the school library, implications for selection and circulation are clear. If school librarians want to encourage reading as a leisure activity, they must include in their collections these materials of choice. Popular magazines that can be circulated, including, but not necessarily limited to, the ones specified in our study, should be considered an appropriate use of acquisition funds. Paperbound books, including the series romances deplored by most book selection guides, but beloved by teenage girls, should be included in the collection. Ephemeral materials that encourage leisure reading, while insufficient in themselves to form a school library collection, should receive precedence over hardbound copies of "good young adult literature" that collect dust on the shelves.

A related finding of this study is the fact that young adults tend to purchase magazines and paperback books or to read the ones available in their homes rather than borrow materials from the public library. While this may be due in part to the distance rural youth live from their public libraries, the availability of preferred leisure reading materials in the libraries' collections should be considered. It is interesting to note that only a little over half of the college-bound and less than half of those not planning to attend college found their leisure reading materials in the public library. Even so, these statistics are above the national statistics for public library use and argue the examination of policies and materials to encourage the use of public libraries by rural youth.

Much of value can be gleaned from this study of teenage leisure reading patterns for the practice of both school and public librarianship. Frequently, librarians operate from a philosophy which dictates that a library collection should consist of only the "best" books; the "best" books being those so defined by the selection guides and reviewing sources of the profession. The idea behind this philosophy is that exposure to "fine literature" will serve to educate and to improve the patrons a library serves. Unfortunately, however, to paraphrase an old adage: "You can lead a patron to a book, but you can't make him read." Instead, the patron seeks more satisfactory reading materials elsewhere or, worst of all, just doesn't bother to read. If librarians want a population of reading adults, they must provide what young adults consider to be enjoyable reading. And if we slip some "good" young adult authors (in paperback, of course) in among the series romances, or shelve *The New Yorker Magazine* along with *Seventeen* and *Sports Illustrated*, who's the wiser?

A New Headquarters Public Library for Cumberland County

Jerry Thrasher
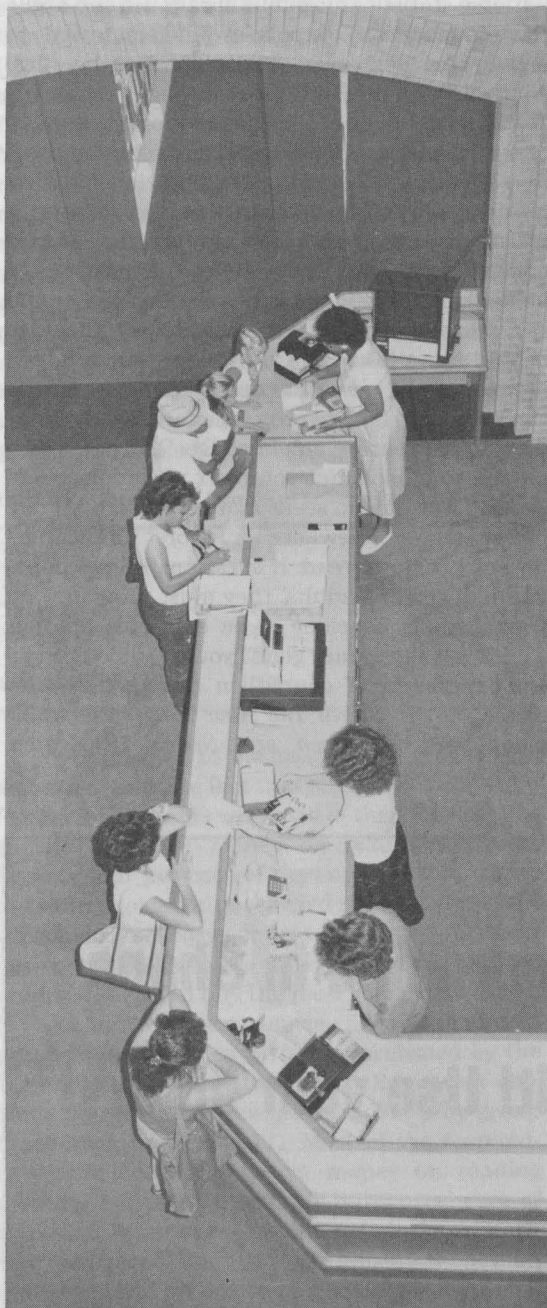
Jerry Thrasher is the director of the Cumberland County Public Library and Information Center, Fayetteville, NC.

On a beautiful sunny Sunday afternoon on June 1, 1986, the Cumberland County Public Library & Information Center opened its new 80,000 square foot headquarters library in Fayetteville, North Carolina. Over a thousand people were present while local dignitaries gave brief remarks on the importance of this new facility to the community. At 3:30 p.m. the ribbon was cut as hundreds of colored balloons rose in front of the three floor structure. The long awaited Headquarters Library was a reality!

Local architectural firm MacMillan and Mac-Millan designed an open and flexible facility on a challenging two acre site that overlooks the downtown waterway named Cross Creek. A total of 82 parking spaces were squeezed onto the site adjacent to the library. Over a hundred additional parking spaces are available across the street in a city-owned parking area.

Library construction consultant Aaron Cohen of New York worked with the library staff and architect to help develop an effective and efficient design on each level of the facility. Interior design consultants Michaels Associates of Alexandria, Virginia did a fabulous job with the limited furnishings budget. Furniture bids were awarded for Aetnastak shelving, Library Bureau tables and carrels, and Madison lounge furniture.

Landscape designer Richard Bell of Raleigh created a realistic yet beautiful concept for maintaining existing trees along the creek bank in conjunction with new shrubbery, plants and trees. Barry Holton of the Center for Urban Affairs and Community Services at North Carolina State University reviewed our communication needs, developed specifications and completed in-depth evaluation of our bids. Executone/Coastal Carolina of New Bern provided our Mitel SX 200 PBX system of 48 instruments.

The new facility concentrates public services on the main and top floors. Staff and expansion areas are located in the lower level of the facility. The main public entrance to the library is on the middle floor. Due to the sloping site to the rear of the building, the lower level has an excellent view of the creek and the extensive landscaping.

On entering the public entrance one will find

a large multipurpose meeting room just off the lobby that will seat 215 persons comfortably. This room has a stage, projection booth, remote control projection screen over the stage, microphone and video cable outlets. Fayetteville Cablevision provided cable outlets free of charge for the multipurpose room, the three public conference rooms, the children's storytime room, and the executive conference room. The multipurpose room also includes a kitchenette with refrigerator, stove, sink and microwave oven. The lobby of the new Headquarters Library also contains public rest rooms, water fountain and bulletin board.

One discovers that the major emphasis of this level is information services. On entering the library proper, one can immediately see the information services desk. This desk and the other public service desks were manufactured by Unique Furnishings Limited of Pinellas Park, Florida. This desk can seat up to four reference librarians, who handle all the walk-in and telephone inquiries to the library.

Immediately behind the service desk are the reference collection, index tables, study tables and carrels and COM readers that hold the library's microfilm catalog. Nearby is the library's periodical collection. Ample lounge seating overlooks Cross Creek through many spacious windows strategically placed next to the periodical collection. Bound periodicals are shelved adjacent to the photocopiers behind the public elevator.

The microform area, which is only a few steps away, contains four new microfilm reader/printers and three new microfiche reader/printers. This area houses the library's newspapers, magazine holdings and microform. The adult non-fiction collection is located on the main floor with many COM readers located throughout the stack area.

For the convenience of library users who are most interested in current best sellers and recently published books, a new book area was set up just inside the entrance on display shelving. Popular hardback and paperback books, both fiction and non-fiction, are displayed there. The circulation desk is located a few feet away, where all materials are loaned and returned, except for audiovisual materials and equipment.
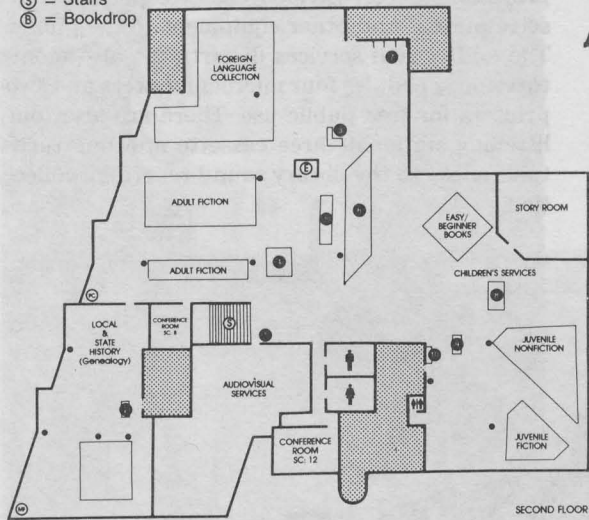
On the second level, which can be reached by the public elevator or the large stairwell, is the audiovisual services desk. Here patrons can borrow 16mm films, filmstrips, slide programs and video cassettes in VHS and BETA formats. This department does a booming business in lending projectors, screens, video cassette players, cassette players and other equipment to the public. The audiovisual services department also monitors and schedules four microcomputers and two printers for free public use. There are also four listening stations (three cassette and one turntable) next to the library sound recording collection.

Behind a series of arches, you will find the children's services area. This area features a large Story Hour Room that will seat a maximum of 70 children. A special puppet stage, as well as track lighting for special displays grace the Story Hour Room. Not to be overlooked is the separate children's microcomputer with several learning software programs. Comfortable parent seating is available near the children's magazines and recording collection. Parents can also find the library's adult fiction collection on this top level. A large paperback collection is just off the elevator.

At the rear of the top level is the North Carolina Foreign Language Center. This collection of over 30,000 volumes represents some 125 languages and serves the entire state through interlibrary loans and deposit collections. This collection serves the needs of people learning English as a second language, as well as English speaking persons learning another language.

MAIN FLOOR

1 = Circulation Desk (Check-In, Check-Out) 483-8600
2 = Reference & Information 483-7727
3 = Business Reference Materials
4 = Vertical Files
5 = Encyclopedias and Telephone Directories
6 = Magazine Indexes
7 = Bound Section — Magazine Back Issues
8 = Current Magazines and Newspapers
9 = New Books
▨ = Library Staff Only
Ⓒ = Coin-operated Photocopier(s)
Ⓔ = Elevator
Ⓜ = Microform Reader(s)
● = COM Catalog of Library Materials
♟ = Public Restrooms
Ⓢ = Stairs
Ⓑ = Bookdrop

SECOND FLOOR

1 = Audiovisual Service Desk
2 = Local & State History Service Desk 483-3745
3 = North Carolina Foreign Language Center Service Desk 483-5022
4 = Public Computers
5 = Listening Booths
6 = Recordings
7 = Public Typewriters
8 = Children's Service Desk 483-7365
9 = Juvenile Recordings
10 = Children's Public Computer
▨ = Library Staff Only
Ⓒ = Coin-operated Photocopier(s)
Ⓔ = Elevator
Ⓜ = Microform Reader(s)
● = COM Catalog of Library Materials
♟ = Public Restrooms
♟ = Children's Restroom
Ⓢ = Stairs
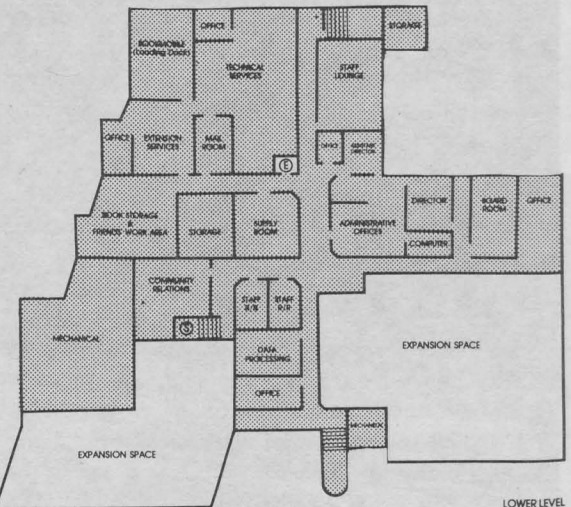
LOWER LEVEL
Administrative Offices 483-1580
    Director
    Assistant Director
    Business Office
    Community Relations
Bookmobile Services 483-0543
Data Processing
Extension Services
Technical Services
    Ⓔ = Elevator
    Ⓢ = Stairs

MAIN FLOOR

SECOND FLOOR

LOWER LEVEL

Last but not least on the top floor is the Local and State History Room. The library maintains an indepth collection of books, magazines, newspapers and genealogical materials pertaining to Fayetteville, Cumberland County and the state of North Carolina. Back issues of local newspapers on microfilm are located here. A staff-created index to the two local major newspapers since 1979 is also on file.

The lower level of the library holds the "behind the scenes" operations of the entire library system. Here one will find the administrative offices, technical services, community relations, extension offices, book storage, equipment storage, supplies and staff lounge.

The library system has just signed a contract with CLSI of West Newton, Massachusetts, for a complete on-line automation system. A special computer room was designed to handle up to 60 terminals within the new library alone. The new system will be installed this fall with automated circulation operational in 1987. The library's six branches will be added to the LIBS 100 system, as will the bookmobile. The on-line catalog (PACII) will be set up shortly thereafter, along with acquisitions, serials and film booking.

Another important feature of this building is that it was really built to last for many years. Over 9,500 square feet of expansion space is available in the lower level for public services or administrative use in the years ahead. This extra space was possible because the overall bids for construction of the library were under $41 a square foot.

A special security door control system monitors all exterior doors. If an exterior door is opened, a visual and auditory signal is given at the circulation desk security console. The library's security guard can be directed to the appropriate door to investigate. There is also an interior motion detection system that is activated at closing. If an intruder breaks into the library, an alarm will be activated in the City-County Enforcement Center.

This $4.7 million structure has been needed for over twenty years. Before the completion of this new library, headquarters library services were divided into three separate buildings. The Anderson Street Library housed the information services staff, the reference collection, the adult non-fiction collection, current and back issues of periodicals, the Local & State History Room, technical services and the offices of the assistant director and headquarters librarian.

A few blocks away the library's adult fiction, children's and audiovisual collections were located in the old post office that was renamed the Frances Brooks Stein Memorial Library. Bookmobile services, administrative office, storage for supplies and equipment and the office of the director were squeezed into this 1907 facility.

The third part of the headquarters library included the Gillespie Street Library, which was seven blocks distant from the other libraries. The North Carolina Foreign Language Center was located here. This library also included a small collection of adult and juvenile materials, a public meeting room, and the office of the head and assistant head of extension services.

The community attempted to correct this horrendous division of services with bond referendums in 1968 and again in 1982. Both failed. However, the defeated 1982 bond referendum provided the impetus for a new financial package. The Board of County Commissioners challenged the community to raise $700,000 in private funds, along with $497,000 in federal funds, $350,000 from the City of Fayetteville, and $250,000 from the Cumberland Community Foundation. If library supporters were able to accomplish that, the commissioners would pledge up to $3 million for the new headquarters library.

During the summer of 1983, the fund-raising campaign surpassed its goal and raised $1.2 million in donations and pledges, in addition to the federal, city and foundation sums. The additional funds made it possible for the library to purchase the automated library computer system.

Ground breaking for the new Headquarters Library was held on September 12, 1984. Twenty and one-half months later, the collections, equipment and staff from the Anderson Street Library, the Frances Brooks Stein Memorial Library, and the Gillespie Street Library were relocated.

We anticipated that our circulation of materials would grow at 50% in the new facility. We were elated to discover after only one month of service that our book circulation had jumped 80% over the same month the year before!

Future enhancements include a permanent collection of North Carolina art to be unveiled in September. This collection was developed with private funds and selected by the library's Art Selection Committee. In late fall 1986, an outdoor sculpture will be unveiled at the entrance to the library. This abstract piece of white Georgia marble by Horace Farlowe will be the first modern public sculpture in Fayetteville and Cumberland County.

This community has struggled for many years to construct this library; they endured and now their dream is a reality. ⧗

An Intellectual Freedom Alert

Advisory Statement of the Intellectual Freedom Committee
of the American Library Association
on Report of the Attorney General's Commission on Pornography

August 15, 1986

Article 2 of the Library Bill of Rights states:

Libraries should provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval.

Librarians have cause for concern over the potential chilling effect of the Commission on Pornography's Report on the free flow of information and ideas. On July 24, 1985, Beverly P. Lynch, then President of the American Library Association, testified before the Commission. Her statement declared that

The First Amendment to the U.S. Constitution states in part that "Congress shall make no law ... abridging the freedom of speech or of the press."

This dictate exemplifies the philosophical framework underlying our form of government — a constitutional republic — a government by the people — and requires that citizens be able to take part in the formation of public opinion by engaging in vigorous and wide-ranging debate on all issues and concerns. This includes a minority of people whose message is found offensive by the majority. In order to do this, the people must have unrestricted access to information and ideas and images, and at the same time, the right to hold beliefs and to express opinions and ideas on all subjects. Offensiveness cannot — by its very nature of subjectivity — be the standard by which literature or images should be available.

President Lynch concluded with a statement urging the Commission not to recommend new restrictions on access to materials of any kind and she urged that some existing restrictions be eliminated. The Commission's dismissal of ALA's concerns, in favor of a report which called for limitations on what people of all ages may read, is cavalier and specious. In view of the frequent individual and group attacks on libraries for making available materials, with and without illustrations and in many formats, no comfort can be taken from the Commission's characterizations of libraries' concerns as a "phantom danger" nor can any assurance be found in the Commission's protection of "the printed word". Most libraries are publicly supported and are especially vulnerable to pressures from officials and governing bodies reacting to public feelings about "controversial" works.

The conduct of the Commission's hearing and its use of research findings and methodology supporting the Report were flawed. The Commission authorized no original scientific research and appears to have misrepresented some of the social science data considered in the preparation of the Report. In their separate statement, Commissioners Becker and Levine observe:

The idea that eleven individuals studying in their spare time could complete a comprehensive report on so complex a matter in so constricted a time frame is simply unrealistic. No self-respecting investigator would accept conclusions based on such a study, and unfortunately the document produced reflects these inadequacies (Final Report, pp. 197-198).

In the Commission's hearings there was a clear absence of significant debate as evidenced by capricious acceptance of some testimony, rejection of countervailing testimony, biased cross-examination of witnesses, and the admitted lack of thorough discussion of final recommendations, except those on child pornography.

An inordinate number of anti-pornography witnesses was heard. The Commission accepted anecdotal testimony of individual witnesses as fact and generalized from it with little probing. Most of the visual materials selected and reviewed by the Commission were skewed to the "very violent and extremely degrading". The assertion that the Commission considered a "wide range of vantage points" is simply inaccurate. The most pervasive flaw in the report is the undemonstrated causal link of sexually explicit materials with sexual crime. Because two phenomena may be correlated, one cannot infer that one causes the other.

The most pernicious aspect of the Report, in the opinion of the ALA Intellectual Freedom Committee, is its potential for heightening an already threatening procensorship climate in the United States.

The Commission itself recognizes that "the fears that many arguably valuable but sexually frank works of fiction and non-fiction will be stifled not by governmental action but by social pressure is real" and that, "at times, this protest activity will go too far, to the detriment of all of us." This outcome is in fact encouraged by the recommendations associated with Chapter 8 of the Report on "The Role of Private Action."

The general tenor of the Report is that associated with a "call to arms." For example, in its suggestions for citizens and community action, the Commission states "citizens groups may wish to focus on materials which are not legally obscene and which are constitutionally protected from government regulation." This Report advises citizens that "to remain quiet" is to approve such materials; it fails to recognize that lack of protest may just as easily indicate tolerance for different points of view, as protected by the First Amendment.

In its commentary on the Report, the American Civil Liberties Union states: "There is no question that picketing, marching, demonstrating and even boycotting are all solidly 'within the free speech traditions of this country,' ... It is one thing to urge that persons not read a particular magazine or see a particular movie; it is another when the goal is solely to make it difficult or impossible for those who do not accept the message of the protestor to obtain that material."

The American Library Association has long advocated the need to rally community support in defense of intellectual freedom before censorship attacks occur. This Report, itself an attack and a provocation to further attacks, makes it urgent to bring together all of those forces and individuals in the community who support the First Amendment to the Constitution, since much that the Commission advocates is not consistent with that Amendment or even with current obscenity laws.

In general, while the Commission encourages people "to object to the objectionable" and "to tolerate the tolerable," the inherent message of the First Amendment is tolerance for the objectiona-ble. Since library collections can be expected to include materials which some persons will find objectionable, an understanding of the meaning and purpose of the First Amendment is crucial to the defense of those collections.

We recommend renewed acquaintance with the Intellectual Freedom Committee document, *Dealing With Concerns About Library Resources.* We urge librarians to take appropriate action to ensure that:

● written, approved policies and procedures are in place to handle challenges to materials and services;

● governing bodies, library staff, trustees, Friends, other community groups and the media are informed and knowledgeable about the issues.

We also recommend that state library associations and state library agencies take similar action to ensure that:

● policies and procedures are in place and updated

● state Intellectual Freedom and Legislation Committees are informed and prepared for a possible onslaught of regressive legislation

● coalitions are built within the library community and with other support groups

● a vigorous public information program is pursued.

We urge librarians, indeed all people, to read the Report, to recognize its deficiencies, and to consult other commentaries cited below.

The Attorney General's Commission on Pornography: FInal Report can be purchased from the U.S. Government Printing Office and its bookstores for $35.00 or consulted at libraries which are designated depositories for U.S. government documents. An excellent summary and critique of the Report is available for $5.00 from the American Civil Liberties Union, 122 Maryland Avenue, N.E., Washington, D.C. 20002. For background, see also issues of the Newsletter on Intellectual Freedom (May, July, Septembear, 1985 and March, September, 1986) published by the Office for Intellectual Freedom of the American Library Association, 50 East Huron Street, Chicago, Illinois 60611. Subscription: $25.00; single copies of each issue @ $5.00.

Book Week, November 17-23.

New North Carolina Books

Alice R. Cotten, Compiler

Ann Deagon. *The Pentekontaetia (The Great Fifty Years).* Huntington, L.I.: Watermark Press, 1985. [15] pp. $6.00 (handmade paper cover); $25.00 (special edition).

Contemporary literature abounds in headlines and quotations from the media. As electronic journalism has challenged print, news messages have proliferated and become as much a part of life as clocks and daily routines. Events reported from near and far crowd into personal recollections, and writers call on that common memory bank to set time and place, to establish mood and motif. It is a method used often but seldom well because it looks much easier than it is. Ann Deagon, an experienced writer of poetry and fiction, did not turn to the newspaper as a quick fix for scene setting when she wrote this piece. Whatever her method of selecting excerpts, those she uses give the impression that she had been saving them since they first appeared.

In *The Pentekontaetia (The Great Fifty Years),* she quotes from stories ranging around the globe and over boundaries of race and class, but they all share a single date—January 19, which is Ms. Deagon's birthday. She begins with January 19, 1980, when she turned fifty. Each succeeding article is dated five years earlier than its predecessor, and the last is for January 19, 1930, when she first breathed "the edged sword of air." To each excerpt she appends a brief personal recollection that is vivid, poignant, and without evident link to the quotation. Together they strike a chord. Themes from the newspaper pieces echo earlier personal experiences and the personal gives life to the journalistic. The result is densely worked, and her birthday memorials reward rereading, from fiftieth to birth and back again, with the discovery of thematic and structural relationships that elude a first examination. But the second time they yield a sense of vicarious hindsight.

Along with this contemporary journalistic technique, Ms. Deagon employs a traditional tool for tapping the depth of western cultural memory, and that is classical metaphor. She has used it often in her earlier work and for her, a classics

teacher at Guilford College, it must be as personal as it is cultural. This time, she chooses a Greek title but adds an ironic parenthetical definition. With similar twists, she gives us Venus recovering from a hysterectomy and Atlas making the headlines, not for bearing the world on his shoulders but for embodying the power to destroy it as our first ICBM.

Evidence of lifelong concern for the human condition emerges from Ms. Deagon's choice of articles dealing with individual crimes, community problems, social and racial conflict, national policy, and international upheaval. For example, the first item pulls many of these together in a 1980 account of black clergymen travelling to Iran in the hope of using spriritual strength to solve the national and international hostage crisis. Juxtaposed to that is her own recollection of recovering in the hospital from a hysterectomy. In the personal piece, the themes of illness, love, humane action, understanding, and realization appear again and again. Twenty-five years into the past she was giving birth when the newspaper printed a prison-escape story including a Catholic priest's view of the convicts' desperate grasp for freedom. Back twenty-five years more and the personal vignette is her own birth. This, she reveals, was on the same day that a convicted murderer was sentenced to death for killing his estranged wife to whom he claimed he was seeking return.

Echoes and variations are not confined to the eleven prose pairs. The book design itself reinforces her meaning: for the news items, a heavier typeface printed in gray ink contrasts with the personal recollections printed with lighter-weight type and in red ink. The designer and publisher, Coco Gordon, selected *The Pentekontaetia* for one of her Watermark Press Breakthrough Awards. Working thoughtfully with Ann Deagon's composition, she gave it a form indicative of her own creative techniques. Her handmade paper wraps (this reviewer did not see the "special edition" binding) blend her vitality with the author's humane austerity. The result engages the reader's senses insistently but without sensationalism. This is not the first of Ann Deagon's books to be

issued by a publisher especially noted for book design. An earlier example was *There Is No Balm in Birmingham*, published by David R. Godine.

In sum, the book is a work of autobiography using journalistic methods transcended by the feeling and imagination characteristic of poetry. It would be a fine addition to a large literature collection, to a North Carolina literature collection, or to a collection of small press books. Where creative writing is taught, this book could be used to illustrate the skillful adaptation of journalistic fragments.

Tucker Respess, University of North Carolina at Chapel Hill.

Ronald H. Bayes, ed. *North Carolina's 400 Years: Signs Along the Way. An Anthology of Poems by North Carolina Poets to Celebrate America's 400th Anniversary.* Introduction by A. R. Ammons. Durham: The Acorn Press, 1986. 83pp. $12.95 cloth (ISBN 0-89386-019-0); $9.95 paper (ISBN 0-89386-024-4). Add $1.00 per copy for postage. Order from the North Carolina Poetry Society, Rt. 4, Box 247, Chapel Hill, NC 27514.

This anthology brings together a selection of poems about North Carolina by North Carolina poets. The purpose of the book is to offer a sampling of works about some of the special aspects, events, places, and people that have distinguished the state's past and characterize its present. Workshops sponsored by the North Carolina Poetry Society were held across the state to celebrate North Carolina's 400th anniversary. Contributions of poetry were solicited from the workshop attendees; this volume represents the choices of a variety of readers and editors.

Sam Ragan opens the collection: "How do we tell their story?/ That was the question before us?" The participants have taken as their themes subjects as diverse as the state itself: a revival tent, a hog butchering, an Indian in the trees at Saxapahaw, curing tobacco, the flight at Kitty Hawk, Blackbeard, a slave grandmother, and the colonists at Roanoke are examples of the lively stories told in a variety of poetic forms. Readers will recognize with pleasure familiar details and appreciate the pictures and emotions poetic language can conjure up. The quality of the writing is uneven, but all of the poems are accessible and demonstrate craftsmanship and control.

The volume is edited by Ron Bayes, founding editor of the St. Andrews Press, assisted by Marsha Warren. These editors, poets themselves, deserve praise for their scrupulous presentation of the material. A. R. Ammons, a North Carolina native son and a well-known contemporary poet, introduces the collection with a thoughtful essay asking "How does a regular person become a poet?" Besides the interesting bibliographical notes on the contributors, one of the best features of the book is its handsome illustrations; members of the Lumbee Art Guild contributed works, many of which depict Indian artifacts. These drawings enhance a shapely book, carefully designed and put together.

Michael McFee said recently in a piece remembering the poet John Ciardi, "He had readers in the real world." This book should find a receptive audience among North Carolinians in the "real world." School libraries and public libraries especially should acquire this book and promote it as a worthy cause and a pleasure to read.

Coyla Barry, Burroughs Wellcome Company, Research Triangle Park.

Roger H. Crook. *Our Heritage and Our Hope: A History of Pullen Memorial Baptist Church (1884-1984).* Raleigh: History Committee, Pullen Memorial Baptist Church, 1985. 252 pp. $10.00 plus $1.25 postage and handling. ISBN-0-9614485-0-4.

The life of a church is much like the life of a person, filled with critical events; affected both positively and negatively by external influences and forces; and marked by periods of growth and pain, self-giving and self-examination, peace and comfort. Roger Crook has succeeded in capturing the life of a very vital and important church in his history of Pullen Memorial Baptist Church.

The book begins "with an epilogue, a word 'spoken upon' what has gone before." In this way, Dr. Crook places the history of Pullen firmly within the foundations of Baptist faith and tradition. His concern with proper historical method does not end there, however. Each chapter deals with a specific period of time, and begins with a brief recounting of the major political, social, economic, and religious events and movements taking place during the given period. Other pertinent historical information from the world at large is sprinkled throughout each chapter, giving the reader a good understanding of the spirit of the times and Pullen's place within that spirit.

Dr. Crook also gives the reader a great amount of information about what was going on within Pullen during each period. He tells of the various pastors and other church staff who have helped make Pullen the special community of faith it is. However, unlike some local church his-

torians, he does not stop there. He also deals extensively with the lay people of the church, all of whom have had just as definite an effect on Pullen as its professional staff.

Pullen has not seen many times of peace and comfort during its life. In fact, controversy has been more a way of life for this church than for most. Freedom of the pulpit has been of the greatest importance for both the church and its ministers. While many aspects of the history of Pullen could evoke subjective judgments from the most detached historian, Dr. Crook maintains an objective and level account of the lives and events that have gone into the making of the history of Pullen.

Appropriately, the book ends with a prologue, an "anticipatory statement." "Pullen's one-hundred year history is an anticipation of things to come. The enduring ideals, the fixed commitments, and the confident hope which have characterized the church demand a continuing embodiment in a believing, worshipping, and working fellowship. That is the Pullen of the future because it has been the Pullen of the past."

Roger Crook is the Head of the Department of Religion and Philosophy of Meredith College in Raleigh. He has written several books in the areas of religion and the religious life. He faced the obstacle faced by anyone who endeavors to write the history of a local church—the scarcity of written information. His research, however, appears to have been as thorough as possible. It would be difficult to imagine a fairer or more complete account of a church's history. Dr. Crook has been an active member at Pullen for twenty-five years, indicating that the writing of this book was probably a labor of love. More photographs, particularly of the stained glass windows and the hand-made paraments which grace the sanctuary, would be a welcome addition. The photographs that are included are well done. For the reader interested in statistical records, there is included an appendix containing a statistical table. This book would be a good choice for any academic or public library that attempts to collect significant works in the area of religion.

Joseph C. Tuttle, North Carolina State University.

Other Publications of Interest

In 19th century North Carolina, gristmills were abundant; today few remain. In *Exploring the Old Mills of North Carolina,* author Grimsley T. Hobbs and illustrator Kate Russell Forbes describe thirty-nine of these remaining mills. A map of the state is included, on which each mill is plotted. An informative introduction explains how mills work and tells a bit about their history. This book is a good choice for any library with a North Carolina travel section. ($8.95 from Provincial Press, Box 2311, Chapel Hill, NC 27514. ISBN 0-936179-07-4.)

The North Carolina Museum of Art had a remarkable exhibit from January 18 - August 13, 1986: "Heavenly Visions: The Art of Minnie Evans." Evans was born in North Carolina in 1892 and began painting in 1935. Her work is often described as "visionary" and was inspired by religious conviction, nature, dreams, and exotic visions. Mitchell D. Kahan, Curator of American and Contemporary Art, prepared a fifty-one page book to accompany the exhibition. The text is both informative and gracefully written. The color reproductions add to the reader's appreciation of Evan's art; the black and white reproductions are not as representative of the work of this artist who used color so well. The paperbound volume, which shares the title of the exhibit, is available for $8.00 from the University of North Carolina Press. ISBN 0-88259-951-8.

Libraries that collect books on fishing will want to get a new volume from John F. Blair, Publisher, in Winston-Salem titled *Coastal Fishing in the Carolinas, From Surf, Pier, and Jetty* by Robert J. Goldstein. The author discusses equipment, kinds and size of fish one can expect to catch, and all of the forty-four piers in the Carolinas. A useful appendix lists sources of tackle, addresses of fishing clubs, and sources of additional information. There is even a short section illustrating and describing fishing knots. An index is included. $10.95 paper. ISBN 0-89587-050-9.

Genealogical Publishing Company recently issued *Marriages of Rutherford County, North Carolina, 1779-1868* by Brent H. Holcomb. The volume contains abstracts of all marriage bonds issued in Rutherford County for the dates indicated. The data are arranged alphabetically by the groom's name. Each entry includes the name of the bride, date of the bond, name of bondsman, and, after 1850, the date of the marriage. $20.00 plus $1.25 postage and handling. (1001 N. Calvert St., Baltimore, MD 21202) ISBN 0-8063-1144-4.

NCLA Minutes

North Carolina Library Association
Minutes of the Executive Board
April 18, 1986

The Executive Board of the North Carolina Library Association met on April 18, 1986 at 7:00 p.m. in the Sternberger Room of the James Addison Jones Libary/Sternberger Cultural Center of Greensboro College in Greensboro, North Carolina. Executive board members present were President Pauline F. Myrick, Patsy Hansel, Dorothy Campbell, Nancy Fogarty, Fred Roper, Frances Bradburn, Arial Stephens and Benjamin Speller, Jr. Chairpersons and other representatives of committees, sections and round tables present were Eunice Drum, Bill Bridgman, Mertys Bell, Frank Sinclair, Rebecca Taylor, Elizabeth Smith, Janet Rowland, Waltrene Canada, Jean Amelang, April Wreath, J. A. Killian, Helen Tugwell, Mary McAfee and Donna Bentley. Also present were Jane Williams, Acting State Librarian and Howard McGinn, Coordinator of Network Development of the Division of State Library.

President Myrick called the meeting to order. She recognized Susan Squires, Director of Library Services at Greensboro College, who welcomed the group.

The president stated that the order of the agenda would be changed to expedite reporting by persons who needed to leave early. She called for the report of the Networking Committee.

Reporting for the Networking Committee, Howard McGinn announced that June 2 has been set as the startup date for the North Carolina Online Catalog consisting of 120,000 holding records in addition to those in OCLC. By late November or early December, the North Carolina Union List of Serials will be ready for use. McGinn recommended that the Executive Board consider making use of the electronic mail/bulletin board system which is being developed. He explained that it will be possible to establish an NCLA Executive Board electronic mail system so that each member may send and receive messages by way of a PC modem and printer, provided the proposal for the system is cleared through the Purchase and Contract Office in Raleigh.

It was determined by a show of hands that most board members present have access to the needed equipment. President Myrick requested that McGinn present in writing a description of available networking services with indication of approximate costs. McGinn promised to provide this information.

Arial Stephens reminded the group that *Tar Heel Libraries* regularly updates the rapid progress being made in networking.

Jane Williams reported that the State Library Commission has been gathering information regarding the possible effect of the changes in the obscenity laws on libraries, but a conclusion as to whether or not libraries should attempt to gain exemption from the law has not been reached. She stated that Gene Lanier, chair of the NCLA Intellectual Freedom Committee, has given assistance to the Commission in this effort.

The minutes of the meeting of January 24, 1986 were considered. A correction was made in the acronym OCLC as recorded on page 9, paragraph 2, changing the final character to "C". Attention was focused on a statement presented in the report on networking and subsequently recorded verbatim in the minutes on page 9, paragraph 2 as follows: "Permission must be gained to reprofile library holdings so the North Carolina Database can be created." It was suggested that the word "reprofile" be replaced by "use." The President asked the secretary to make the suggested change in the minutes. The minutes were then approved as altered.

Treasurer Nancy Fogarty distributed the Treasurer's Report, January 1, 1986 - March 31, 1986 showing these parts: Exhibit A, Cash balance of $6,219.36 with notation of the deposit of checks totaling $80,869.19 in a Cash Investment Account on January 24, 1986; Exhibit B, Cash disbursements in the amount of $9,930.46; and Exhibit C, Balances of sections and *North Carolina Libraries*. Fogarty explained that funds of sections held in separate accounts are reflected in the NCLA Treasurer's report after they have been transferred to the Association's account. She distributed a newssheet providing information on bulk mailing procedures, section printout charges and estimated mailing service charges and commented on the statements. It was noted that this information updates some details in the Guidebook. The database is now in operation in Greensboro and the bulk mailing permit, No. 38, has been obtained. Membership printouts have been produced and may be picked up by chairpersons of sections. The names of persons who have not responded by May to renewal notices sent during January and April will be dropped from the roster and these persons will not be sent publications. Fewer than half of those due to renew have done so at this point.

Continuing, Fogarty told the board that under the present contract the database service does not require a maintenance charge, but a minimum charge has been established for orders. She explained that batching will not keep charges for orders of small sections to the level of actual cost. She moved that the Association pay the difference between the actual cost and the minimum charge for producing labels or printouts from the database as these labels or printouts are requested by sections of NCLA. The motion was seconded by Rebecca Taylor and passed.

Chair of the 1987 Conference Planning Committee Patsy Hansel distributed copies of the Committee's roster and reported on plans for the conference. Plans include placement center service under the direction of Kieth Wright. Hansel moved that Bill Roberts, as local arrangements chair for the 1987 Conference, be designated by NCLA to sign any contracts with the convention center, hotels, etc., necessary for the conference. The motion was seconded by Benjamin Speller and passed.

The next meeting of the Conference Planning Committee is scheduled for July 24, 1986 at 10:30 at the Cumberland County Public Library in Fayetteville.

Arial Stephens, the 1985 Conference Manager, passed out a financial statement showing a balance of $29,228.96. He pointed out that this income exceeds that of the previous biennial conference by more than $10,000. Such income is used to help carry the Association from one conference to the next one. The group applauded Stephens for his service.

Frances Bradburn, Editor of *North Carolina Libraries*, reported that the Summer 1986 issue will be a miscellaneous one. She encouraged board members to submit articles for the

"potpourri." Themes and guest editors for other 1986 issues are Networking, Howard McGinn, Fall 1986, and Education in Librarianship, Benjamin Speller, Jr., Winter 1986. Tentatively scheduled issues for 1987 are Status of Women and Minorities in Librarianship, Spring 1987; School Librarianship, Summer 1987; Intellectual Freedom, Fall 1987; and the Conference issue, Winter 1987.

Bill Bridgman, chair of Governmental Relations Committee, reported that twenty-five North Carolinians participated in National Library Legislative Day in Washington on Tuesday, April 8, 1986. He expressed satisfaction that the message they carried was well received.

ALA Councilor Fred Roper urged board members to attend the 1986 Annual Conference of ALA. He then informed them that he must submit his resignation because he is planning to move to South Carolina. Roper stated that he plans to attend the NCLA Executive Board meeting of July and make a report on the ALA Conference.

President Myrick called for the report of the Nominating Committee. Chair Mertys Bell reported that at the request of the President the Nominating Committee had given consideration to finding someone to serve NCLA as ALA Councilor after Fred Roper's resignation becomes effective. She then informed the board of the Committee's decision to recommend Kieth Wright. She reminded them that Wright was a candidate for the office during the last election and that a statement of his credentials was published in *North Carolina Libraries*, Winter 1984. On behalf of the Nominating Committee, Bell moved that Kieth Wright be appointed to serve as NCLA's ALA Councilor from July 4, 1986 through December 1989 (following the resignation of Dr. Fred Roper). The motion was seconded by Benjamin Speller and passed.

Reporting for NCLA's Southeastern Library Association Representative Rebecca Ballentine, Benjamin Speller stated that James Dorsey is the new appointed editor of *The Southeastern Librarian*, Dorsey is the Director of Emmanual County Junior College at Swainsboro, Georgia. Ballentine is in the process of distributing membership application forms to chairs of round tables and sections for further distribution to their committees. The SELA Headquarters staff will send to members a summary of activities for the biennial conference scheduled for October 15-19, 1986 at the downtown Marriott Hotel in Atlanta. On October 14 a preconference titled "Communication Style in Management" will be sponsored jointly by SELA and the state chapters of the Special Libraries Association in the southeast. Details will be provided in *Tar Heel Libraries* and *The Southeastern Librarian*.

Rebecca Taylor, chair of the Children's Services Section, reported that attention has been directed toward communicating with new children's librarians and library school classes; the release of another issue of the *Chapbook;* work on the Section's history, the planning of the Notable Showcase for the NCASL Work Conference; and the adoption of the sale of stationery as a fund-raising project. The next CSS board meeting is scheduled to be held on September 5, 1986 in Mebane.

College and University Section Chair Elizabeth Smith reported that forty-six librarians and campus development officers attended "Fund-Raising for College and University Libraries," the Section's first program of the biennium held on March 21 at Meredith College. Planning for a program on online catalogs for Spring 1987 is scheduled to begin soon.

President Myrick welcomed Frank Sinclair, vice-chair of the Community and Junior College Libraries Section and said he will be representing the Section while Mary Avery is on educational leave. Sinclair stated that the Section's program "Marketing the Library," sponsored as a two-part session during the 13th Annual Learning Resources Conference in Greensboro on March 19, 1986, was well received according to results of the evaluation. Susan Janney represented the Section during Library Legislative Day activities in Washington. Dot Elledge, Membership Committee chair, is preparing a brochure. Sinclair said he was informed by Richard Wells, Section Editor of *North Carolina Libraries*, that the spring issue of the journal, devoted to community and junior college libraries, is ready for distribution.

President Myrick recognized the Documents Section's Chair Janet Rowland and vice-chair/chair-elect Waltrene Canada. Rowland announced that on May 9, 1986 at North Carolina A. & T. State University, the Section will sponsor a workshop on North Carolina documents and the proposed depository system of North Carolina. The NCLA Executive Board will be asked to consider endorsing the proposal when the final draft is presented to the Board during the meeting of July 25, 1986. Results of a survey conducted by Amanda Chambers show that 32 libraries are interested in becoming full depositories and 112 libraries are interested in becoming selective depositories.

In the absence of Stephanie Issette, chair, the report of the Junior Members Round Table was given by Donna Bentley.

Helen Tugwell, chair of the North Carolina Association of School Librarians reported that plans are being developed for the 1986 Biennial Work Conference scheduled to be held in Winston-Salem on October 23-24. The chosen theme is "Our Image Is Showing." Richard Peck will speak during a breakfast session on Friday, October 24. Also being planned are concurrent sessions, the popular media fair, exhibits and a pre-conference for library media supervisors.

School Library Media Day Program with the theme "Get a Head Start at the Library" was conducted on April 11, 1986 to encourage a statewide read-in. Other activities sponsored recently include programs featuring visiting authors, storytelling, balloon launchings, open house activities and media fairs. The section was represented during Library Legislative Day activities in Washington by Helen Tugwell and Carol Southerland. Glenn Wall and Helen Tugwell have consented to attend the AASL Affiliate Assembly sessions during the 1986 ALA Conference.

The report of the North Carolina Public Library Trustees Association was given by J. A. Killian, chair. He stated that two representatives of the section participated in National Library Legislative Day activities in Washington. Plans have been completed for the Trustees/Directors Conference scheduled for May 29-30, 1986 in Winston-Salem.

In the absence of Public Library Section Chair Nancy Massey and at the request of President Myrick, Dorothy Campbell read highlights from a report submitted by Massey. At a meeting of the Planning Council held on February 6 in Hillsborough, each of the eleven committees received its charge. Some of the projects being considered by various committees are: implementation of a research grant program by the Development Committee, the planning of a publication on performance appraisal procedures by the Personnel Committee, the planning of a workshop to be conducted on May 2, 1986 by the Young Adult Committee, and preparation of a manual for public libraries on local history collection development by the Genealogy/Local History Committee. The Council's schedule for meetings is as follows: May 15 at the Leath Memorial Library in Rockingham, August 14 at the Southside Branch Library in Winston-Salem, and October 30 at the Cumberland County Public Library in Fayetteville.

Jean Amelang, chair of the Reference and Adult Services Section, reported that plans for the biennium were discussed during the Executive Committee's meeting of March 14 at North Carolina Central University. Details of a public program to be sponsored this year will be considered during a meeting scheduled to be held on May 2. The third issue of *The Reference Desk* will be published in May 1986.

April Wreath, Chair of the Resources and Technical Services Section, informed the board that the Section's Executive Committee met on January 30 at UNC-G and on March 20 in South-

ern Pines. She announced that Harry Tuchmeyer of the New Hanover County Public Library is the vice-chair/chair elect. NCLA T-shirts, made available for sale during the 1985 Biennial Conference, are still being advertised. Money spent for the shirts is being returned slowly as the remaining items are sold. Wreath reported also that a 1986 RTSS mini-conference with the theme "Coping with Change: Strategies for Survival" has been scheduled for October 23-24 at the Sheraton Hotel in Southern Pines; the RTSS Ad Hoc Committee on Bylaws is studying recommendations for changes; and encouraging more employees of libraries other than those of college and university libraries to join RTSS is a concern that will be pursued during the coming year. Beatrice Kovacs has been appointed to the Membership Committee. The next meeting of the section's executive committee is scheduled for June 2 at Duke University in Durham.

The report of the Round Table for Ethnic Minority Concerns was given by Patsy Hansel in the absence of chair Sylvia Sprinkle-Hamlin. A spring workshop with the theme "Working Relationships" is to be conducted by Dr. Ernie Tompkins on May 2, 1986 at the Forsyth County Public Library in Winston-Salem. Partially funded by SCLA, Title III, the workshop is to be co-sponsored with the NCCU School of Library and Information Science/Continuing Education and Library Staff Development Program. The round table is planning to publish a newsletter and to sponsor a job fair.

Mary McAfee, chair of the Round Table on the Status of Women in Librarianship, reported that the round table is planning to sponsor a workshop on lobbying in June or July 1986 during which Barry Hager will be the main speaker. A program to be presented during the 1986 NCASL Work Conference is also being planned. RTSWL T-shirts, emblazoned with the *Ms.Management* logo, are being advertised in *North Carolina Libraries*. McAfee urged everyone to make purchases.
purchases.

President Myrick thanked everyone for reporting and commended them for their work.

President Myrick displayed the resolution adopted by the NCLA Executive Board on January 24, 1986, now signed by her and framed. She asked Past Treasurer Eunice Drum to come forward. She then presented the resolution to Drum on behalf of the Association. Drum was again praised for her service to NCLA. She expressed appreciation for the recognition.

President requested that names of deceased members be sent to her or to Patsy Hansel for inclusion on a list being compiled for a 1987 Biennial Conference memorial program. She urged everyone to attend the NCLA Spring Workshop the next day and reminded all that the next meeting of the NCLA Executive Board will be held on July 25, 1986 at the Pinecrest Inn in Southern Pines.

There being no further business, the meeting was adjourned.

Dorothy W. Campbell, Secretary

North Carolina Library Association
Minutes of the Executive Board
January 24, 1986

The Executive Board of the North Carolina Library Association met on January 24, 1986 in the Common Room of the Christina and Seby Jones·Chapel at Meredith College in Raleigh, North Carolina. Members present were: President Pauline Myrick, Dorothy Campbell, Nancy Fogarty, Leland Park, Fred W. Roper, Rebecca Ballentine, Frances Bradburn, Arial A. Stephens, and Benjamin F. Speller, Jr. of the Executive Board; Elizabeth Garner, Eunice Drum, Louise Boone, William G. Bridgman, Patrick Valentine, Mary Alice Wicker, Carol Lewis, Rebecca Taylor, Elizabeth Smith, Janet Miller Rowland, Mary Avery, Nancy Massey, Jean Amelang, April Wreath, J. A. Killian, Helen Tugwell,

Mary McAfee, Sylvia Sprinkle-Hamlin, and Laura Osegueda, Committee Members; and Jane Williams, Howard McGinn, William H. Roberts, III, C. Milton Rice, and Janet Freeman, guests.

President Myrick called the meeting to order. She recognized Janet Freeman, C. Campbell Library, Meredith College, who in turn welcomed everyone.

Mrs. Myrick stated that we would appreciate an offer of a place for the 1987 spring workshop where accommodations for fourteen committees and housing are available. It was agreed that 10:30 is a good time to start morning Executive Board meetings.

It was decided that the minutes of the meeting of October 1, 1985 would not be read, but will be sent out by mail. The minutes of the meeting of October 4 were approved with these corrections: a. on page 2, paragraph 5, "Sharon Kimbrough" was corrected to read "Sharon Kimble." b. Page 4, paragraph 2, no. 2 was corrected to read as follows: "Reports made orally are to be submitted in writing to the secretary in the form of five copies to aid recording and distribution to the President, First Vice President/President Elect, the editor of *North Carolina Libraries* and the editor of *Tarheel Libraries.*"

The policy regarding the submission of written reports was discussed. The need for five copies of reports was reemphasized. The secretary will excerpt basic information for inclusion in the minutes which will be published in *North Carolina Libraries*. It was noted that in addition to these quarterly reports, biennial reports are submitted and are published in *North Carolina Libraries*.

The President distributed information packets and urged everyone to use the contents to update 1986-1987 Executive Board Guidebook. It was noted that the new address of the Association is NCLA Communications, P. O. Box 4266, Greensboro, N. C. 27404.

Nancy Fogarty, Treasurer, reported that renewal notices will go out next week. After this mailing, she will proceed with a plan to move the database to Greensboro unless there is objection. She stated that a bulk rate mailing permit will be secured in Greensboro and a decision must be reached as to whether the one in Raleigh will be maintained.

The need for mailing service in both cities was discussed and the relatively low cost of an additional permit was noted. A motion was made by Rebecca Taylor that the mailing service in Raleigh be maintained and that that the NCLA Treasurer open an additional mailing permit in Greensboro. The motion was seconded by Mary McAfee and passed.

Eunice Drum, whose term as treasurer expired on December 31, 1985, distributed copies of the treasurer's report for the calendar year 1985 and commented on the parts: Exhibit A, receipts and transfers; Exhibit B, cash disbursements; Exhibit C, general and special funds; and Schedule I, balances for sections and the budget for *North Carolina Libraries*.

She explained that the budget biennium does not coincide with the conference biennium. The only conference money handled by the treasurer is that for exhibits and that information has been given to the conference manager. A complete report on the 1985 Conference will be made at the Spring workshop. Provision has been made to transfer some funds to the new account in Greensboro.

The Board was reminded of the schedule for meetings in April, July and October. Mrs. Myrick asked that persons who do not plan to attend meetings notify her. Inquiry will not be made, but an accurate count of the number expected is needed. Room reservations in Greensboro and Pinehurst must be made by the individuals who want them. Hotel information was made available.

It was agreed that time will be built in for lunch on your own when we meet in Winston-Salem on October 22.

Frances Bradburn announced that the conference issue of *North Carolina Libraries* will be mailed in February. Themes

chosen for future issues are Community and Junior College for Spring 1986 and Networking for Fall 1986.

Mrs. Myrick announced that the analysis of data from the 1986 Conference evaluation forms has been completed. The full report is available and may be secured from her.

Arial Stephens, the 1985 Conference Manager, reported that the total income was $61,000, half of which has been paid out on conference expenses. He explained that this is part of NCLA's operating budget.

Then, speaking in reference to the search for a site for the 1989 biennial conference in the absence of Johnny Shaver, Stephens told the board that Shaver has been talking, but is having difficulty getting the popular time slot — Wednesday through Friday. However, Charlotte is tentatively booked for October 24-27, 1989. If we go to Raleigh, dates will have to be changed to the first of the week or to the weekend. He posed the question: Do we want to go back to Raleigh in 1989 or to Charlotte? After much discussion it was decided by majority vote that the Conference of 1989 will be held in Charlotte and that the effort will be made to go to Raleigh in 1991.

It was announced that the local arrangements chair for the 1987 Conference is Bill Roberts. Plans for the conference are underway.

Photographs taken at the 1985 Conference were on display in the room. Some of them will be sent to the NCLA Archives at the State Library. Duplicates were made available to members present.

In the absence of Mertys Bell, Chair of the special Nominating Committee, Benjamin Speller informed the board of the Committee's unanimous decision to recommend that Rose A. Simon be appointed to the office of Second Vice President. He then moved the adoption of the recommendation. The motion was seconded by Helen Tugwell and passed. Simon is to be notifed of the appointment and sent a packet of information.

The Governmental Relations Committee's report was given by Louise Boone (Chair, 1984-86) and Bill Bridgman (Chair, 1986-88). Miss Boone urged everyone to send to Bridgman by March 31, information concerning the impact of federal funds and federal legislation on their particular spheres of operation. This information will be placed in packets to be distributed to members of Congress on April 8, National Library Legislative Day. She suggested that all sections put representation at National Library Legislative Day in their budgets. Bridgman distributed folders containing information about the effort and explained the significance of each item. He stressed the point that North Carolina representatives and senators must be urged to co-sponsor the White House Conference on Library and Information Science legislation. Persons who want to be counted as part of the North Carolina delegation should notify Bridgman by March 8.

The meeting was adjourned for lunch at 12:00. It was reconvened at 1:15 p.m.

The President called for other committee reports, starting with the Media Committee.

Carol Lewis, the 1984-86 chair of the Media Committee, reported that the Committee met on October 4 during the 1985 Biennial Conference. Other participants were invited and fifteen guests attended the meeting. Copies of *Media Matters on Copyright* were distributed as a courtesy. The idea of sponsoring a winter media conference possibly in 1987 is to be explored.

Patrick Valentine informed the board that the Library Resources Committee has sold 313 copies of *Disaster Preparedness: A Guide* for a total of $1,253.64. Another advertising campaign is planned for the eighty copies left.

President Myrick extended a special welcome to William H. Roberts, Jane Williams and C. Milton Rice and encouraged them to make statements. Roberts, President of the North Carolina Library Directors Association, commented on the association's

activities, emphasizing its award programs and its interest in state aid to public libraries. Jane Williams, Acting State Librarian, told the board that the State Library Commission met during the past week. Five NCLA board members were present. A search committee has been established to aid the selection of a State Librarian. April 30 is the deadline for applications. C. Milton Rice, President of Friends of North Carolina Public Libraries, thanked the board for his invitation and expressed hope that the two organizations will engage in cooperative ventures.

The Children's Services Section's Chair, Rebecca Taylor, reported that at a retreat held at Fort Fisher on November 16-17, plans were made for 1987. An effort will be made to increase communication among conference planning committees of various youth serving groups in order to avoid conflicts in schedules and duplication in programs. Two special committees created recently are the Standards Committee and CSS History Committee. Some notepads left at the last fund-raising project are available for purchase.

Elizabeth Smith, chair of the College and University Section, reported that the section has received a Special Extra Programming Funds grant from the Association of College and Research Libraries to sponsor the program "Fund-Raising for College and University Libraries." The program will be held on March 21, 1986 in the Cate Center at Meredith College. Copies of the program were distributed. Smith revealed that the section has applied for another grant which it hopes will enable it to sponsor a program on online catalogs. Other organizations interested in considering co-sponsorship of such programs are asked to contact the College and University Section.

Mary Avery reported for the Community and Junior College Section. Material for the special issue of *North Carolina Libraries* on community and junior college libraries and a membership brochure are being prepared. The section is planning to sponsor a speaker for the Learning Resources Association Conference scheduled to be held in March.

Janet Rowland reported that the Documents Sections' plans include sponsorship of a May workshop on state documents and an October workshop on computers and documents collections. A task force of the State Depository System Committee is involved in surveying libraries to determine needs and interests in becoming depositories. Bill drafting is also underway. The publication schedule for *The Docket* has been changed to February, May, August and November.

In the absence of Stephanie Issette, Laura Osegueda gave the report for the Junior Members Roundtable. The membership reached thirty-four by November 1, 1985. At its meeting of December 13, 1985 held in Wilson, the group discussed plans for a JMRT workshop and ideas for fund-raising projects.

Chair of the North Carolina Association of School Librarians, Helen Tugwell, informed the group that School Library Media Day will be observed on April 11. The SLMD Committee is asking everyone, including state officials, to participate in a "Read-In" at 2:00 p.m. This celebration of reading is being carried out in keeping with the ALA theme "Get A Head Start at the Library." The 1986 Biennial Work Conference will be held on October 22-24, at the Hyatt-Benton Convention Center in Winston-Salem, when the program will include a preconference for library media supervisors and the presentation of Richard Peck as the keynote speaker. Tugwell announced that Miss Eunice Query has made an additional contribution of one thousand dollars for the Appalachian Scholarship Fund.

J. A. Killian, chair of the Trustee Section, announced that the 1986 Trustee-Directors Conference will be held on May 29-30 in Winston-Salem at the Hilton. The section is now fully staffed.

Nancy Massey, the Public Libraries Section's chair, reported that eleven committees have been formed. The planning council, the section's executive board, will meet on February 16 in Hillsborough.

Jean Amelang, chair of the Reference and Adult Services Section, greeted the board and stated that it is anticipated that the section's executive board will meet next month.

April Wreath, chair of the Resources and Technical Services Section, announced that a meeting has been scheduled for January 30 at UNC-Greensboro. A replacement for the office of vice-chair elect must be found. Joline Ezzell was asked to attend the meeting of the Technical Services Division Council of Regional Groups held during ALA Midwinter.

The report of the Roundtable for Ethnic Minority Concerns was given by Chair Sylvia Sprinkle-Hamlin. Two goal-setting meetings have been held. Major projects to be undertaken by the Roundtable will be the development of resources for public libraries serving ethnic minorities and the forming of a task force to make inquiry concerning the present state and treatment of the Mollie Huston Lee Collection of the Richard B. Harrison Branch, Wake County Library System.

Mary McAfee, chair of the Roundtable on the Status of Women in Librarianship, reported highlights of the executive board's meeting on December 16, 1985. Plans for a workshop on lobbying and the forthcoming issue of *Ms. Management*, the roundtable's newsletter, were discussed.

Fred Roper, ALA Representative, presented highlights of the recent meeting of the council. The Lacy Report, a report to ALA of the Commission on Freedom and Equality of Access to Information, has been received by Council and is to be made available for review. It will be discussed during the 1986 Annual Conference. The ALA membership year has been changed to twelve consecutive months following receipt of dues payment.

Resolutions were presented concerning Legislative Day, the need for a comprehensive financial plan, and the need for improvement of member services such as group life insurance, dental, auto purchase, pension and retirement plans. A full report of the ALA USDE Accreditation Project developed to bring other associations into process of accrediting library schools will be made during the 1986 annual conference.

Finally, Roper reported that Lester Asheim was included in "On the Shoulder of Giants," the ALA President's Program presented to honor a number of people who have made contributions to the profession.

Southeastern Library Association Representative Rebecca Ballentine announced that the total number of North Carolina memberships in SELA is ninety-five. She reminded the board members that the fee is on a sliding scale from six to fifteen dollars, depending on salary. Each section is to be allowed a thousand dollars for program planning and implementation for the biennial conference scheduled to be held in Atlanta on October 15-19, 1986 at the downtown Marriott Hotel. Janet Freeman, chair of the Southern Books Competition, has announced that nominating forms will be in the mail soon.

Bill Roberts, member of the SELA conference site committee, informed the board that SELA will meet in Norfolk in 1988 and in Nashville in 1990.

Arial Stephens, NCLA representative on the North Carolina Library Networking Steering Committee, revealed that a joint meeting of the previous and new committees was held on October 29, 1985. Goals and objectives discussed were refined during a meeting of the new committee held on January 7, 1986.

Howard McGinn reported that the work of the Networking Committee has reached the implementation stage. Permission has been secured from the State Library Commission to proceed with the network and OCLC has promised that the database will be in operation by May or early June. A selective user category is a feature which makes it possible for libraries that do not subscribe to cataloging service to use the interlibrary subsystem. Permission must be gained to use library holdings so the North Carolina Database can be created. A union list of serials is being planned and a company to serve as a vendor is being sought. McGinn expressed his willingness to talk to regional associations about their needs. As editor of *Tar Heel Libraries*, McGinn announced that the publication is now available in an electronic version which has a calendar and is updated every two weeks. Space ads are available. He noted that the cost of printing has increased since it is being done outside the State Library.

The president called for new business.

Nancy Massey submitted a proposed resolution expressing appreciation for the service of Eunice Drum, treasurer, 1983-85. The resolution as corrected and adopted by the board is as follows:

Resolution

WHEREAS, the position of Treasurer of the North Carolina Library Association is one of great responsibility and trust; and

WHEREAS, the effort and work involved require exceptional amounts of personal time and energy; and

WHEREAS, Eunice Paige Drum has performed all the duties of Treasurer with efficiency, dedication, and incredible good cheer;

THEREFORE, BE IT RESOLVED that the Executive Board of the North Carolina Library Association does publicly commend and applaud Eunice Paige Drum for her fine work as Treasurer for the Association for the 1983-1985 biennium and declare that this resolution be spread upon the minutes of this Association.

Adopted January 24, 1986

President Myrick thanked everyone for their presence and participation.

There being no further business the meeting was adjourned.

Dorothy Campbell, Secretary

Book Week
November 17-23