

Microcomputing In Library Education

Benjamin F. Speller, Jr.

and

George F. Bowie, III

The use of the microcomputer as a tool in conducting operational and service functions in school and public libraries is booming in North Carolina. Special libraries are making use of the microcomputer in a few cases with expected increases within the next two years. Academic libraries have relied upon medium and large configured computer systems because of current trends. These organizations should be expected to begin to use the small (micro) computer, as the modular approach to planning automated systems is encouraged by recognized experts in library automation.

Microcomputing activities in libraries lead naturally to the question—Are the library education programs in North Carolina using microcomputers as tools in support of their instructional, research and related activities? A survey of these programs revealed that five were making use of several different major microcomputer systems. These are Appalachian State University, East Carolina University, North Carolina Central University, the University of North Carolina at Chapel Hill, and the University of North Carolina at Greensboro.

Equipment and Use

The responding schools or departments listed the use of at least six different computer systems. The data presented in Table I revealed that 60 percent of the library education programs use APPLE II, 60 percent use Commodore PET, 60 percent use Radio Shack, Model I and 20 percent use Model II, and 20 percent use the S100 Bus series. None of the Commodore Pet microcomputers were owned by the library education programs that used them. Most of the library education programs owned more than one type of microcomputer system because of the need to demonstrate to students the similarities and differences among them.

The major applications that supported these programs' instructional and research activities can be categorized as follows: instruction, intelligent terminal, management, research and word processing. The data presented in Table II revealed that all, 100 percent, of the responding programs use the microcomputers for instruction, 80 percent use the microcomputers as intelligent terminals, 60 percent for management and research activities, and 40 percent made use of the microcomputers for word processing.

Some Specific Applications

At East Carolina demonstrations are given to familiarize beginning students with computers in the Foundations of Librarianship course. In the

TABLE 1
Microcomputer Systems

Equipment	School/Departmental Use N = 5
APPLE II	60%
*Commodore PET	60%
Radio Shack:	
Model I	60%
Model II	20%
S100 BUS	20%

*All were owned by another department or academic computer center

course, Automation of Library Processes, students receive an indepth orientation to the TRS-80, learn elementary BASIC, and write and run a program as one of the project requirements. Students enrolled in the Seminar in Library Automation course write and run a computer-assisted instruction program.

The School of Library Science at North Carolina Central uses microcomputer programs primarily for demonstrations, hands-on use by students and simulations. Two computer programs which have been developed in-house and have been used quite frequently are

MICRO SEARCH/SAVE. This computer program is written for the APPLE PASCAL System. The computer program is designed to assist users in accessing and managing bibliographic information from online data bases such as DIALOG or BRS. The need for this kind of application program has been demonstrated by Robert Hensens¹ and reinforced in an editorial by John Sandy.² The benefits of this computer program are (1) saves user time and (2) reduces online system costs. In addition to emulating a CRT terminal, the system provides for: (1) automatic dial-up and log-on, (2) downloading of search results to a diskette, (3) printing search results, and (4) automatically storing and sending commonly used search profiles.

MICRO PEAS (Pacific's Electronic Acquisitions System). This computer program is written in BASIC and has been modified for use on the APPLE II Plus microcomputer. The original program was purchased from Pacific University Library, Forest Grove, Oregon. The program consists of several modules: ordering, receiving, accounting and reporting. Descriptions of each module are presented as articles³ in two professional library journals.⁴

Several different kinds of programs are currently being used by the School of Library Science at the University of North Carolina at Chapel Hill. The program in most demand is a commercially produced word processing system called SuperScribe II. Both masters and doctoral students are producing their research papers and theses with this system. The faculty are using the system to prepare bibliographies, syllabi, and mailing lists. The 'electronic worksheet' program VisiCalc is being used in the research methods course.

Several locally written programs used by the School of Library Science at UNC-Chapel Hill include a file management program, a financial planning package, and several programs for transferring files from other computer systems to the APPLE.

Several master's research projects involve the use of the APPLE microcomputer. One, being performed in conjunction with the Environmental Protection Agency, involves translating a program which eliminates duplicate citations in online bibliographic retrievals. Another major research project being conducted by a faculty member and several students includes writing a computer program for interactive associative retrieval on several different databases.

The Department of Library Science/Educational Technology at The University of North Carolina at Greensboro uses a variety of microcomputer based applications. These include: word processing, union lists, union catalogs, newspaper indexing, rapid reference file, subject and name authority files and thesauri, information and referral services, library statistics, inventory, ordering and selective dissemination of information. Descriptions of these and other applications have been presented in an article, "Library Applications of Microcomputers," by Dr. Theodore C. Hines and others.⁵

TABLE 2
Microcomputer Applications

Application Categories	School Departmental Use N = 5
Instruction	100%
Intelligent terminal	80%
Management	60%
Research	60%
Word Processing	40%

Microcomputer Courses

Courses and related continuing education programs focusing on microcomputers that have been sponsored by library education programs during the last two years are

- ASU: Microcomputer Use (programming)
Microcomputer Software from Statistics
- ECU: Automation of Library Processes
- NCCU: Microcomputers in Libraries
- UNC-G: Microcomputers in Education
Microcomputers in the Library
Educational Applications of Microcomputers

The use of microcomputers appears to be an accepted tool in conducting instructional and research activities at the schools or departments of library and information science in North Carolina. The major applications currently being used were not originally or specifically intended for libraries or library education programs.

The Department of Library/Educational Technology at UNC-G appears to be clearly the "Front Runner" among the library education programs that use microcomputers.

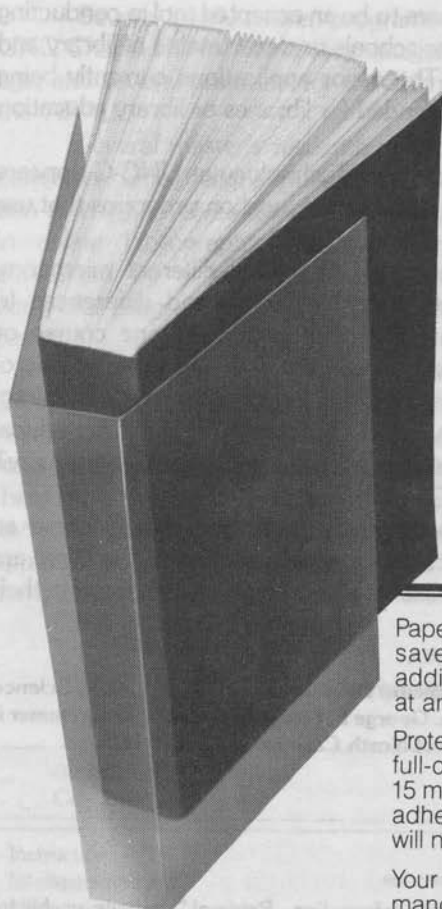
Most schools or departments own or use several different microcomputer systems in order to demonstrate their similarities and differences to students. Most schools or departments are offering at least one course or continuing education program that deals specifically with the topic of microcomputers. In the near future, there will probably be more coverage of microcomputer related topics in the traditional course offerings of the library education programs. More special courses and continuing education programs will probably appear on the Schedule of Classes, also.

In summary, the use of microcomputers in libraries has become an accepted technological trend and library educators in North Carolina are addressing minimally the issues and applications resulting from this trend in their instructional and research activities.

Benjamin F. Speller, Jr. is Professor and Assistant Dean at the School of Library Science, North Carolina Central University, Durham. George F. Bowie, III is Senior Programmer in Administrative Data Processing, University of North Carolina at Chapel Hill.

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