

Public Access Microcomputer Services in Public Libraries

By David M. Davis, Norma Lambson, & Stephen L. Whitney

DETERMINED TO ASSESS its position as the information center of the community and to design new services for diverse community groups, the San Bernardino Public Library in southern California began an evaluation of the informational needs of its citizens in the late 1970s. Under the guidance of the Board of Trustees, a door-to-door survey of three hundred households was authorized in 1978. Much useful information was revealed and conclusions drawn from the data that impacted dramatically on library planning in a number of areas. But one major conclusion was plain enough: the library would have to do more in order to respond to the information needs of its citizens. Both users and nonusers had made it clear that while the present range of library services was desirable, it was also inadequate.

Although the library's survey did not specifically deal with microcomputers, by 1981 advances in computer technology had created a new opportunity. It became possible to provide increased access to information by integrating microcomputers into the overall public service program of the library.

The application of such technology was to evolve in five distinct areas:

- 1) An in-house public access microcomputer laboratory would be created in conjunction with local city and county school districts. It would consist of the most up-to-date hardware and use educational, informational, and recre-

ational software available to everyone in the community with specific emphasis on the needs of students and teachers;

- 2) On-going education classes would be conducted by library staff to acquaint citizens unfamiliar with the latest advances in computer technology, the program to be dubbed "Micro-Magic";

- 3) A "Micro-Search" information access program consisting of DIALOG and LOGIN would be initiated;

- 4) A 24-hour "communications link" would be created between the public library and the San Bernardino community, named "Micro-Link"; and

- 5) A career counseling microcomputer service, "Micro-Quest," would be developed to provide accurate, up-to-date, and badly needed job information for local citizens.

The microcomputer laboratory

The first steps of institutional cooperation that eventually led to the creation of the Maglyn W. Cosand Microcomputer Laboratory occurred in 1981. In that year, the city's public library and unified school district worked together on a project called Public Library Computerized Support for School Proficiency Testing Program. Funded by an LSCA grant, the purpose of the project was twofold. First, high school seniors who needed study and drill time outside of school hours would be able to use personal computers at the public library as a special resource in order to prepare for the state-mandated proficiency exam. Second, the public schools and the public library would work together unlimited by the constraints of their respective institutions and supplemented by each other's resources.

A select committee from the school district and one from the library met several times to determine what hardware and software to purchase, how to make students aware of this new opportunity, and to decide upon certain operational procedures. These developments followed: nine Apple II+ computers, three C.I-toh daisy wheel printers, and one ten-megabyte Corvus hard disk drive were purchased and placed in three different city library locations for students to use. There was no charge for the use of the computers, however, each student wishing to use the micros had to own a valid public library card. A library representative met with individual seniors in each of the city's public high schools to inform them of this unique opportunity, issuing library cards to interested students and demonstrating how to use the computer and software.

When the grant period ended in 1982, the computers remained in the libraries to be used by library patrons and students alike. The educational use remained paramount although not limited solely to preparation for the proficiency exam. Since the community response to the computers had been so enthusiastic, the city council authorized and financed the purchase of a computer installation, identical to those purchased with grant funds, for another branch library.

Computing on a large scale

As a next logical step, the new San Bernardino Public Norman F. Feldheym Central Library, in 1985, included a large-scale microcomputer laboratory. The Cosand Microcomputer Laboratory is currently both an outgrowth and a continuation of the

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The Maglyn W. Cosand Microcomputer Laboratory in the Norman F. Feldheim Library, San Bernardino, California

cooperative efforts between the public library and the public school systems. The lab is unique in terms of its funding and its usage, being jointly funded by two city institutions (the San Bernardino City Unified School District and the City of San Bernardino), one county institution (the Office of the San Bernardino County Superintendent of Schools), one state institution (the Inland Empire Region 13 Teacher and Education Computer Center), and one private citizen (Merle Cosand, M.D.).

In addition, the lab is unique in that it may be used by library patrons on an individual basis, by groups such as local computer clubs or Girl Scout troops working on badge requirements, and by the local school systems for teacher training. Some computers can be reserved for specific times or the entire lab can be reserved for training as in the case of teachers and/or their classes. Patrons may use the computers on a walk-in basis provided there are no previous reservations.

Thirty enhanced Apple IIe microcomputers are housed in a separate room of the Central Library. Each computer has an Apple color monitor that displays 80-column text

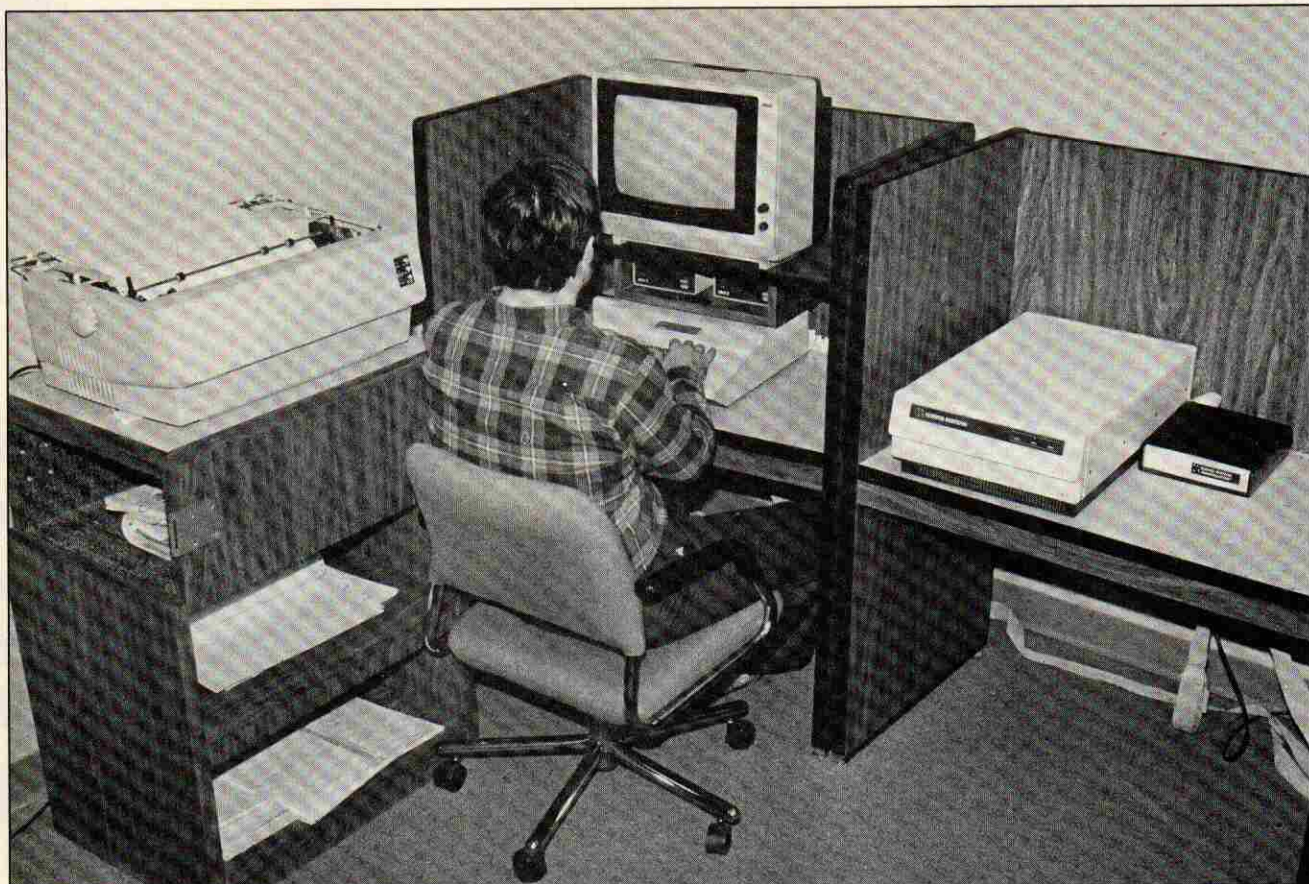
clearly with color and good graphics resolution plus two Uni-drives. Ten computers have a mouse, ten have a joystick, ten have a TouchWindow, and ten have a CPM card. The computers are networked to a 45-mega-byte Corvus hard disk drive. The lab is also equipped with a Corvus Mirror and Printer Server. There are three AppleWriter II dot matrix printers and one C.Itoh daisy wheel printer. There is one single-user CD-ROM station equipped with one Jonathan Card, one Jonathan CD Card, and one Phillips CD-ROM disk drive. An additional teaching aide is an Electro-home Data Projector with curved screen. The programming languages used in the lab are Basic, Logo, and Pascal.

The software collection is available for in-library use only and emphasizes the three major subject areas of education, simulation, and computer application. Some educational software is directly course related, such as *Physics Programs 1-6* by J.S. Software, *CatLab* by Conduit, and *Galaxy Math* by Random House. Other software is more general and may incorporate two or more subject areas (*Coast to Coast America* by C.B.S. Software, *Music Con-*

struction Set by Electronic Arts, etc.). *Evelyn Woods Dynamic Reader* by TimeWorks and *Armed Services Vocational Aptitude Battery* by Chuck Marler are another type of software broadly classified as self-improvement. The second subject area emphasized is simulation programs. Among these are *Flight Simulator* and *Saturn Lander* by SubLOGIC and *David Winfield's BATTER UP* by Avant-Garde.

Computer applications include integrated software programs such as *AppleWorks*, a variety of word processing programs of various complexities for children and adults, electronic spreadsheets, and database management. Programming utilities from SouthWestern Data Systems as well as Beagle Bros. are also in the collection.

While all computer services are free of charge, users are asked to observe six rules: an up-to-date public library card is required; first-time users must attend one library-sponsored class entitled "Introduction to the Cosand Computer Lab"; software and its documentation may be used in the lab only; copying of copyrighted programs is not allowed; arcade games may not be played in the



James Driskill, library computer staff, at the hardware that supports MICROLINK, the library's electronic bulletin board

lab; and reservations are recommended to assure computer time.

Aside from its historical significance in terms of public library/school cooperation, the project has had a dramatically positive impact on the library. It has created an entirely new body of library users and supporters and has spurred a number of private gifts. Unlike any other library program, microcomputers seem to have a third-generation ripple effect—people tell people who tell other people about this service and the news spreads like wildfire!

Micro-Magic

Micro-Magic is the program of educational classes conducted by the staff to acquaint citizens of all ages with computer technology. In addition to the introductory classes required of users who wish to use the laboratory, a unique series of preschool-age computer workshops has been a big success.

The workshops, called "Little Bits," are designed for ages three to five and give children hands-on experience with the Apple IIe. These workshops require little or no reading skills and consist of three or four ses-

sions held on a quarterly basis both at the Feldheim Library and at each San Bernardino branch. *Juggles' Rainbow* by The Learning Company, *Make a Match* by Springboard, and *StickyBear ABC* and *StickyBear Opposites* published by Xerox are some of the programs used in the Little Bits workshops.

Most of the concepts taught during Little Bits are similar to those stressed in the introductory classes for older children and adults. Each session is designed to be a hands-on experience for the children. Each workshop includes a game or activity designed to increase the child's perception of computers as something common and enjoyable. The parts of the computer are identified and their functions are explained in order to help each child understand the basic operation.

Throughout the workshops response and feedback from the children are encouraged. Computer terminology is used in a natural manner. The children are encouraged to identify what they see on the keyboard and to grasp the relationship between their typing and what they see on the monitor. Very early in the work-

shops, children learn how to handle a disk correctly and how to use the disk drive. They also learn how to turn the computer and the monitor on and off. At the end of each session, a picture or handout relating to the computer is given to each child to take home to color and share with their family. (*PrintShop* by Broderbund is most helpful in creating the handouts.) Future classes will experiment with LOGO, a language that is easy for children to understand.

Micro-Search

The library's Micro-Search is composed of DIALOG and LOGIN, nationally recognized database services that allow almost instantaneous access to detailed and extensive information. In addition, LOGIN provides an electronic mail service. Capitalizing upon a MicroComputer Literacy Grant administered by the California State Library and People's Computer Company with matching funds from the City of San Bernardino Redevelopment Agency and the Economic Development Council, the library was able to secure an Apple computer and NEC dot matrix printer to devote entirely to database

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searching. The library user who is interested in database information is charged a fee based upon the connect cost with the appropriate database and for each printed record. The actual search is performed by library staff. Such database services provide the advantage of up-to-the-minute data availability.

The San Bernardino city legislative body and department heads have been frequent and consistent users of LOGIN. This has resulted in continued financial support, not only for Micro-Search but for associated library services as well.

Micro-Link

Micro-Link is the unique reference service that links the public library to individual homes throughout the San Bernardino community. Since the program was instituted in December 1983, over 13,000 calls have been received. Any home microcomputer with a 300 baud communications device can access Micro-Link. The average caller will find a variety of information available: local community events; selected programs in the library collection that may be run on the user's computer; programs that the user may download; an upload option to receive programs; selected bulletin board numbers to call; job announcements; a local history column; information on the library's videocassette and digital compact disc collection; and a message base for leaving and receiving electronic mail.

What distinguishes Micro-Link is that it keeps the library in business 24-hours a day, seven days a week. People can call up at all hours to request information. The information librarians leave the answers to these requests on the message base under the caller's name.

Users have called using every brand of micro from the TI 99 to the Compaq. Micro-Link has received calls from such varied points as Catalina Island, Washington, Missouri, New York, Florida, Virginia, Alaska, and Canada.

Micro-Quest

Micro-Quest, a career planning and employment information service, has been an integral part of the library microcomputer services since 1982. It was made available to the library as a grant from Eureka Corporation, the California Career Information System. The program was particularly attractive to the library



Students from the Mother Goose Nursery School in a Little Bits class at the Inghram Branch Library

because of several large plant closures in the community. Workers were forced to seek alternative careers that might use their existing job skills and experiences and, in more extreme cases, some workers were forced into acquiring new job skills and finding new employment.

Micro-Quest is a disk and fiche service. On disk is a set of 21 questions that challenge the individual to identify his or her own capabilities, skills, and certain other job-related preferences. The program matches the user's input with appropriate jobs in the job bank. On microfiche it provides accurate, up-to-date data relating to approximately 450 occupations. It includes descriptions of typical duties, education and training requirements, and the names of firms that might be potential employers as well as their geographic location. The microfiche portion of the service also provides educational information on regional occupational programs, trade and technical schools, and public and private colleges.

Although Micro-Quest was initially a two-year demonstration project in order to test its viability in a public library setting, it has been extended because public and private employment agencies as well as local rehabilitation counselors have repeatedly referred their clients to the program as an adjunct to their regular counseling procedures.

Future plans

Microcomputer services at the

San Bernardino Public Library have been a great success in terms of increased library usage, the quantity and size of corporate and public grants, and as a symbol of cooperative achievement between the public library and the public schools. But the library is not looking back upon its success, nor is it standing still to catch its breath.

Several new projects are under consideration. The library anticipates that users will be able to search the catalog online via their computer and modem once the catalog is completely computerized. Furthermore, users will be able to leave reservations online for selected materials. An additional possibility is the conversion of the single-user CD-ROM station to a multiuser station. Because of their high-density storage capabilities, entire databases can be stored on a disk eliminating online connection charges. Finally, incorporating the new generation CD-I technology developed by Phillips and Sony into the library environment would be a major accomplishment. CD-I combines full-motion visuals, color still-frame images, graphics, text, and audio that can vary from mono for speech applications to hi-fi stereo.

The San Bernardino Public Library continuously evaluates new technological developments in order to find new and better ways of providing information. By using technology to meet the needs of its citizens, the library will remain the information center of the community.

