

# Proceedings of the 5th Annual Computers in Libraries Conference



# **Computers in Libraries '90**

Proceedings of  
The 5th Annual  
Computers in Libraries Conference

Edited by  
Nancy Melin Nelson  
Conference Chair

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## **Preface**

**The papers collected in this volume represent presentations at the fifth annual Computers in Libraries conference. The variety and extent of programming, special events, and opportunities for networking with fellow librarians and information systems managers, is an achievement of the highest level in library conference history.**

**The conference theme, "Mainstreets, Landmarks, and Cross Roads: Mapping Library Technology," was selected to take special note of the several ways in which technology has shaped the business of developing and maintaining library collections as well as the ways in which librarians provide access services for patrons. In particular, CIL '90 programming was designed to emphasize the total library environment, including public, school, medical, law, academic, corporate, special, and networking issues. Sessions reflect a combination of the needs and concerns of library practitioners of all types.**

**These Executive Summaries are arranged alphabetically according to speaker. When a summary was authored by more than one person, a listing is made in the contents under each author's name. The table of contents lists only the papers published here. The index, however, lists all conference speakers and their session topics and notes which papers are not included here.**

**Nancy Melin Nelson  
Conference Chair  
March 1990**

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## IN HOUSE INTEGRATED ONLINE SYSTEM

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and  
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This paper discusses the creation of a complete online library system developed by the librarians of Sparrow Hospital and Lansing General Hospital, Lansing, Michigan on Nutshell Plus.

Nutshell Plus is a relational database software package for the IBM and compatible microcomputers. Before the adoption of Nutshell Plus for use at Sparrow Hospital and Lansing General Hospital, Library staff had been using Dbase III for acquisitions control and had only implemented automated control of bibliographic searching and word processing. Because the staff felt that Dbase III was somewhat difficult and time consuming to use and reformat, it was decided to adopt a more "user friendly" and flexible program for use with library applications.

Nutshell Plus allows for creation of output layouts in any format desired with very little effort; it allows for the reformatting of fields easily without losing data; and the menu for the program functions shows on the screen at all times. Nutshell Plus also allows for exporting records in ASCII format so the data can be used with other programs if desired.

In January, 1987 Nutshell (the original version) was implemented to control acquisitions. Layouts were created to track purchase orders and print new book lists.

The program allows for locating a record by any field or combination of fields, truncates words automatically and will find searched words in any order that they appear. As books are cataloged the data is updated to show the call number, subjects, etc. Additional layouts were formatted to print a list of outstanding book orders, and to print labels for book card, book pocket, and spine. Layouts were also created in the database to print complete catalog card sets.

The retroconversion strategy used by Lansing General Hospital was to enter all new books directly into the database as they are ordered, add older books as they circulate, and use volunteer time to enter the remaining books from the shelflist. Total time to input the data for 1700 records came to approximately 136 hours.

A database of library users was created which was attached to the book file to create online circulation. The relational

capabilities of Nutshell Plus made this possible. Using its macro features, a menu system was devised to print overdue notices automatically.

Lansing General Hospital also created an audiovisuals database by importing records from Multimate files into layouts created on Nutshell Plus.

In the serials database, the main layout screen that was developed handled daily check in of current issues. This same layout contained fields for complete holdings information, claim information, acquisitions information, binding and missing issue information, and union list updating. Lansing General Hospital calculated that it took 24 hours to input 430 serial records.

Other layouts were created to print claims request forms used by each library's serials vendor, routing slips, and reporting forms for updating union lists.

The Interlibrary Loan module included a database of libraries, a request form (borrowing) database and a lending database. The system was designed to print ALA, FAX and Confirmation forms on plain paper, and to print monthly ILL statistics.

The bibliographic tracking system was created to track online search services and to print cover letters for printouts. Additional screens track usage by user group, purpose of search and turn-around-time expected, and track number of searches, time online and number of files searched, etc.

To make accessing the different databases easier for library staff, a menu system was developed using the macro capabilities of Nutshell Plus. A main menu and sub-menus take you to each specific library application.

In December of 1988, Lansing General Hospital developed a menu system on Nutshell Plus for use by Library patrons to access the book, serial, and audiovisual databases, and brought up its online catalog. Then in March, 1989, Lansing General Hospital and Sparrow Hospital combined catalogs into Lansing's Online Cooperative Health Sciences Libraries Catalog. St. Lawrence Hospital is expected to join the cooperative before Spring of 1990.

Using Nutshell Plus the libraries of Sparrow Hospital and Lansing General Hospital have created a fully functional online catalog and have been able to automate virtually all library clerical functions using one inexpensive software package.

## Public Access CD-ROM Workstations: Design and Management

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As CD-ROM hardware and software become progressively easier to install and more "compatible" with existing microcomputer systems, we must be careful not to be lulled into the belief that our CD-ROM workstations are stable, well-designed, public access systems. Public access computing is still very much in its infancy. Over the next few years we will live through dramatic changes in the ways in which we interact with computers and, in particular, with public computing services. In order to prepare ourselves, our support staff, and our users to meet the new challenges of public access computing, we must develop our understanding of public workstation design and initiate new strategies to manage the growth of this technology.

For many of us the design of a CD-ROM workstation began by staff selecting subscriptions and equipment. The minute we got the equipment and subscriptions in-house we assembled and delivered the systems with relatively simple menus built with DOS batch files. Most of us kept backups of these new systems to facilitate fast recovery from hard-disk failure or "user-disk" failure. As we began to integrate several different CD-ROM packages together we struggled with a variety of incompatibilities. To a great extent these incompatibilities are a thing of the past thanks to the High Sierra group.

By getting software to run together on a single machine we have just begun the integration process. All of the recent reports of hard-disks on public access PCs developing "lost cluster" conditions suggests that the current standards for system design are inadequate: patrons are rebooting the machines in order to get back to familiar screens! As a first step we need to expend time and money to improve the quality of end user instructions--training, quick reference guides, signs, notices, etc.--that will help a user more precisely interact with the CD-ROM services. Designing an effective on-line questionnaire will help measure system effectiveness as well as provide critical user input.

Designing user interfaces that are common to all public access workstations is our next big challenge. At a preliminary stage libraries can decide to use common equipment, menus, on-line help, documentation, and training. We can look forward to more sophisticated user interfaces that make use of operating environments such as Presentation Manager, or X-Windows. From the patron's perspective operating one public access workstation

should be the same as operating any other public access workstation. Ideally, even the ergonomics of the individual workstations should conform to some set of standards and should help cultivate a desirable set of user expectations.

Often CD-ROM services in a library system are scattered between several departments, and the front-line support for these workstations becomes the responsibility of several staff. Coordinating the activity of this group is one of the key management tasks at hand. The dynamics of this group needs to be a careful balance of librarianship, systems analysis, and project management. The focus of this group would be primarily the daily operation and support of the workstations.

In addition, CD-ROM subscriptions require a certain amount of administrative effort: keeping track of licence agreements; current CDs; distribution of new CDs; return or destruction of old CDs; software masters; upgrade distribution; documentation; and problem reports. A related administrative task is the maintenance of an equipment inventory that details workstation hardware, software, and repair history. Accurate record-keeping will facilitate measurement of operating costs that can be used to monitor and evaluate existing information services.

Libraries with more than 10 PCs of any type should seriously consider retaining someone sufficiently skilled with PCs and networks to assist with the setup, trouble-shooting, and ongoing maintenance of equipment and software. There is no replacement for good technical support.

Most importantly, there is a need for a group of library staff to explore the future of public access computing--a group that can help guide the development and acquisition of information technology. This group would work with library management and staff to create a conceptual framework describing the nature of the information services that the library provides and intends to provide. This group would supply the operational group with the guidelines necessary to evolve workstation designs that will be compatible with long term library plans and strategies.

Effective allocation of library resources to support the growth and maintenance of the public access workstation will require a strong and innovative commitment on the part of library management. We are clearly participating in the commotion surrounding the leading edge of information technology, and we must accordingly learn to live with risks and uncertainties. Management must be careful not to invest in the vision of a single person or group. Information technology embraces the collective need of the library community at large.

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I believe that the focus of public access workstations will change from CD-ROM to information services in general. Demand will steadily increase for a wider variety of information services and for more intuitive access to those services. I am not suggesting the end of CD-ROMs but looking forward to the integration of CD-ROMs with other information technologies. Decisions concerning networking technologies will play a critical role in the success or failure of this integration process. Awareness of the dynamics and trends in information systems will be a key contributor to an organization's ability to acquire and develop technology that will provide for its future rather than for its past.

## **COMPUTER-BASED TRAINING FOR LIBRARY STAFF: A DEMONSTRATION PROJECT USING HYPERCARD**

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The University of Tennessee, Knoxville Libraries have been funded by a Department of Education, HEA II-D grant to demonstrate that computer-based training (CBT) modules, produced as HyperCard stacks, are an efficient and effective technique for staff training in libraries. The project will run for one year from October 1, 1989 through September 30, 1990. The external funding level is \$66,901 with an additional \$36,766 in university cost-sharing.

Typical high turnover and lack of systematic training programs in libraries, at a time when libraries are becoming more complex and have diminishing funds available to them, point to a need for improvement in training technology. Cross-training and retraining as well as initial training of all levels of staff are needed. The combination of increasing numbers of microcomputers in libraries and the availability of an inexpensive but highly effective software program, such as HyperCard, creates an opportunity to explore CBT for library staff training.

Specific objectives of the project include:

- 1) Conduct an assessment of UTK Libraries staff training needs and gather national advice on general training topics most needed in similar libraries. An internal needs assessment, which focussed on topics suitable for CBT and staff attitudes toward this method, was completed and evaluated in October. There was overwhelming approval of this approach to training among our staff. A survey of members of the Association of Research Libraries to collect advice on training topics, was completed in December.

- 2) Within the twelve-month project period, produce six CBT modules, each of which can be mastered in one sitting. The topics addressed will be common to many library departments and transferrable to other libraries. They should offer a basic introduction to library work. The topics selected for development include: Orientation to the Academic

Library, Acquiring and Processing Library Materials, Integrated Online Systems for Libraries, Access to Journal Literature, Introduction to Reference Work, and Resource Sharing. If possible, a seventh module will be developed on the topic, Service Attitudes and Behaviors. A prototype module, An Introduction to Library of Congress Classification, has been developed by Bayne and Rader.

3) Develop a core of librarians at UTK who can translate training materials into CBT modules using HyperCard, act as a reviewing body during the development of these and other modules, and disseminate information about the project to the regional and national library audience through conference papers or as consultants. The project team consists of two project directors who are working with seven librarians and staff to co-author the CBT modules.

4) Disseminate results of the demonstration project through journal articles, conference presentations, and by publicizing and providing CBT stacks at cost on diskette or through electronic distribution.

5) Evaluate the effectiveness of the CBT modules through trainee responses and external reviewing mechanisms.

6) Evaluate the entire project using interviews and questionnaires administered to trainees and their supervisors.

7) Provide sufficient hardware and software to allow simultaneous development of the modules and to implement use of the training modules in all divisions of the libraries. Seven Macintosh computers and an Apple Scanner have been purchased to date.

8) Prepare an implementation plan that will regularize use of the CBT modules in training of all staff.