

BY CAROL TENOPIR

Publications on CD-ROM: Librarians Can Make a Difference

CD-ROM PRODUCTS were featured many times this summer at the annual meetings of the Special Libraries Association and the American Library Association. A full-day special session on "What Is CD-ROM and Why Should We Care?" drew over 500 people at SLA. At ALA, the Technology in Public Libraries Committee of the Public Library Association attracted an even larger audience for their day-long program on the "Implications of CD-ROM for the Public Library." The Library and Information Technology Association held a two-day pre-ALA conference on "Optical Publishing and Libraries: Cheers or Tears?"

In the midst of many overviews of CD-ROM technology and the descriptions of specific products or applications, one recurring theme emerged. Attendees were reminded over and over again that because CD-ROM publishing is still in its infancy, librarians are in a good position to help direct the future development of CD-ROM products. Libraries are often first with a CD-ROM player and are frequently the first market for many CD-ROM publications. Libraries have a large constituency that allows them to test products and a knowledgeable staff to help with evaluation.

CDs & the library marketplace

The state of the CD marketplace was presented to special librarians by Nancy Melin Nelson, editor of Meckler's *CD-ROM Librarian* (formerly, *Optical Information Systems Update/Library and Information Center Applications*). She said that approximately half of the CD products currently available are being marketed to the information specialist, a trend that contradicts earlier market

projections. The library market is strong because it has a base of installed CD drives and many libraries are eager to try out new information technologies. As of June 1987 there were over 100 different CD products for the library market listed in Meckler's new annual publication, *Guide to CD-ROMs in Print*. (Learned Information also publishes an annual directory: *Optical Publishing Directory 1987* by Richard Bowers includes over 80 available products.)

Nelson separated CD products for libraries into four categories. **Cataloging Support** saw the first CD product on the market (*BiblioFile*). There are now over 500 *BiblioFile* installations. Many other library service and supply companies such as EBSCO, Faxon, and OCLC are bringing cataloging back to the local level with CD cataloging support databases. **Online Public Access Catalogs** are more recent applications for CD-ROM technology. CD OPACs can now be created by many firms, e.g., Brodart, Auto-Graphics, and WLN.

Collection Development is gaining rapid acceptance in libraries, notably with *Books in Print Plus* and *Ulrich's Plus* from Bowker and *Lasersearch* from Ingram. The fourth category provides the greatest number of CD products; **Reference Support** accounts for 80 of the 100 products counted by Nelson. Most of them are CD versions of textual databases that are already online. Since they are already in machine-readable form it is easier to create a new product quickly.

Publishers responding to users' needs

New CD publications will not necessarily just be copies of existing online databases. Publishers need to know what types of publications or combinations of publications are wanted. CD publishers are beginning to provide more innovative products in response to users' needs. Microsoft's *Bookshelf*, available this fall, combines ten reference publications on one disc. *Bookshelf* includes the *The American Heritage Dictionary*,

Bartlett's Familiar Quotations, *Rogers's Thesaurus*, the 1987 *World Almanac and Book of Facts*, the U.S. *Zip Code Directory*, the *Chicago Manual of Style*, *Business Information Sources*, *Houghton Mifflin Spelling Verifier and Corrector*, *Houghton Mifflin Usage Alert*, and a collection of forms and letters. All this for under \$300!

Bookshelf is meant to be used in conjunction with a word processing program, allowing an author to verify words or facts, or to add information to a text from one of the source publications. (A copyright notice is automatically transferred and only a limited number of lines of text can be transferred at one time.) Microsoft is planning a *Legal Bookshelf*, *Medical Bookshelf*, and similar products.

Librarians can probably think of many other useful combinations of publications. Nelson mentioned as one example the need for a combined *Index to Legal Periodicals* and *LEXIS*.

Gary Kindall of KnowledgeSet, the developer of CP/M and co-host of *Computer Chronicles* on PBS, spoke on the future of CD-ROM. He sees the possibilities of interconnecting knowledge as the most exciting future potential of CD-ROM. The random access and high-density storage capabilities allow CD publications to overcome the linear nature of a book. Information within documents can be related by topics, not by artificial page boundaries. Subject associations are built into each document so each user can retrieve related information dynamically as desired.

Text, graphics, sound, and motion will all coexist in future optical publications. The subject links will allow each user to retrieve the information and form of most interest to them. The vision of Vannevar Bush in his classic 1945 article in *Atlantic*, "As We May Think," and Ted Nelson's "Hypertext" of the 1960s may be fulfilled with optical technology. (For a good description of hypertext as it relates to CD-ROM, see T.J. Byers, "Built by Association," *PC World*, April 1987, p. 244-251, one of



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seven articles in the issue's "CD-ROM Special Report.") Imagination and guidance are needed to create useful and creative new publications.

Practical administration policies

In addition to the content of the CDs, publishers and libraries need practical information about administrative aspects of the new technology. Many questions still need to be answered, such as: How frequently should discs be updated? What software features and search techniques work best? What kind of hybrid systems (such as links between online and "ondisc" databases) are desired?

Nelson described a joint project between the nonprofit Alexandria Institute in Boulder, Colorado and Melin-Nelson Associates to put together a group of ten key libraries across the United States that would serve as testing grounds for CD products. These test libraries would help provide information to other libraries about the space needed for CD-ROM publications, staff requirements, and environmental requirements. They would work closely with the publishers to help develop better products and ensure CD is integrated successfully into the library environment.

Librarians & product development

The potential important role of librarians in CD product development was mentioned by several speakers at the LITA preconference. Tom Lopez, vice president of the CD-ROM Division of Microsoft, told of some ways libraries and librarians can help in the development stage:

- Serve as Beta test sites and/or set up demonstrations of CD products. Formal and informal user reactions can be communicated to publishers.
- Help design new products by talking to end users to discover what publications are needed on CD-ROM and to help publishers develop better search techniques and better user interfaces.
- Understand cost and space issues to make the best choices and to help other libraries plan for the future.
- Assume a new role in education and distribution of information.

Lopez urged librarians to enter the challenge of creative, innovative CD products. "Technologists will work out the bugs" of the optical medium, he said, but it takes "creative

people who will design products that people will enjoy." Value adding in new CD publications will go beyond the indexing and abstracting librarians do today to include specialized indexes for different types of users, cross references across data types (e.g., the telephone directory with an atlas), and the dynamic links of hypertext. Both the contents and the software can add value. Lopez's goal is "to make information retrieval as easy to use as an automatic teller machine."

Ron Dunn, director of Washington operations of the American Chemical Society, emphasized the immediate potential and challenge to librarians at this stage in CD development. He urged librarians to understand the implications of CD in the library in terms of: hardware, space, demand, security, coexistence of media for different users and different uses, and costs. Publishers haven't always set sensible prices for their CD products, partly because of fear of migration from printed products to discs and partly because they don't really know what is a sensible price. Librarians have already helped send CD prices down by not purchasing products that initially were priced too high.

Librarians can also influence product design. "Don't just accept what's given to you," Dunn challenged, but do let publishers know the types of products you would buy."

LITA is distributing a 99-page report on optical publishing prepared by David C. Miller of DCM Associates. *Special Report: Publishers, Libraries, and CD-ROM; Implications of Digital Optical Printing* is \$12 per copy prepaid from: LITA/ALA, 50 E. Huron St., Chicago, IL 60611-2729.

Taking on the challenge

Parke Lightbown, vice president of Utlas, concluded his talk on standards at the PLA workshop with a list of actions that libraries should take now. First of all he urged librarians to "take on the challenge" of assuming a leadership role in the CD publication industry. The market hasn't yet taken off with the public as it will in the near future, so librarians can establish themselves early as leaders and make a difference in the products and prices offered. "Money talks" and if libraries buy right now the "vendors are listening," he said. It means being willing to spend some money now, some on products that might not be used until next year.

Once products are purchased, Lightbown urged librarians to take the time to evaluate them and respond with serious thought. Communicate with publishers in writing about what you like and what you don't like about the products. Tell them about future enhancements or products you would like to see.

Lightbown recommended that libraries only purchase discs that conform to the High Sierra data format standard. This standard is being voted on in 1987 by both NISO (National Information Standards Organization) and ISO (International Standards Organization). Also watch for and contribute to user interface standards. A NISO committee under Charles Hildreth is now working on the issue of a common command language and interface for information retrieval systems. The proliferation of CD-ROM publications makes the problem of many different software interfaces even more evident.

Librarians are also involved in developing a standard for description of the contents of CD publications. Catalogers may already be having nightmares at the thought of ten or more different books placed on one CD-ROM. Other unique cataloging challenges such as parts of several books intermixed with sound and graphics or elimination of the static page reference system (How will an author cite a portion of hypertext?) need to be confronted by the information retrieval community.

The most concrete evidence of a publisher's willingness to listen to librarians occurred at the PLA program. Min Yee, vice president of Microsoft, announced the establishment of a Library Advisory Committee at Microsoft. Committee members will bring their knowledge of what products are needed and will help design products and test programs for Microsoft's expanding CD publishing plans.

As a first step, Yee distributed a questionnaire to attendees that will help tell Microsoft how CDs are presently being used in libraries and how they will be used in the near future. Each respondent is asked to supply a "wish list" of CD-ROM products. The results of the survey are available from Microsoft.

For more information about the survey or the Library Advisory Committee contact: Min Yee, Vice President, Microsoft Press, 16011 NE 36th Way, Redmond, WA 98073-9717.

