MEDIA & METHODS

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**EDUCATIONAL PRODUCTS, PROG...
TECHNOLOGIES FOR SCHOOLS & UNIV...**

1. Free writing exercise
2. Write first draft
3. Revise
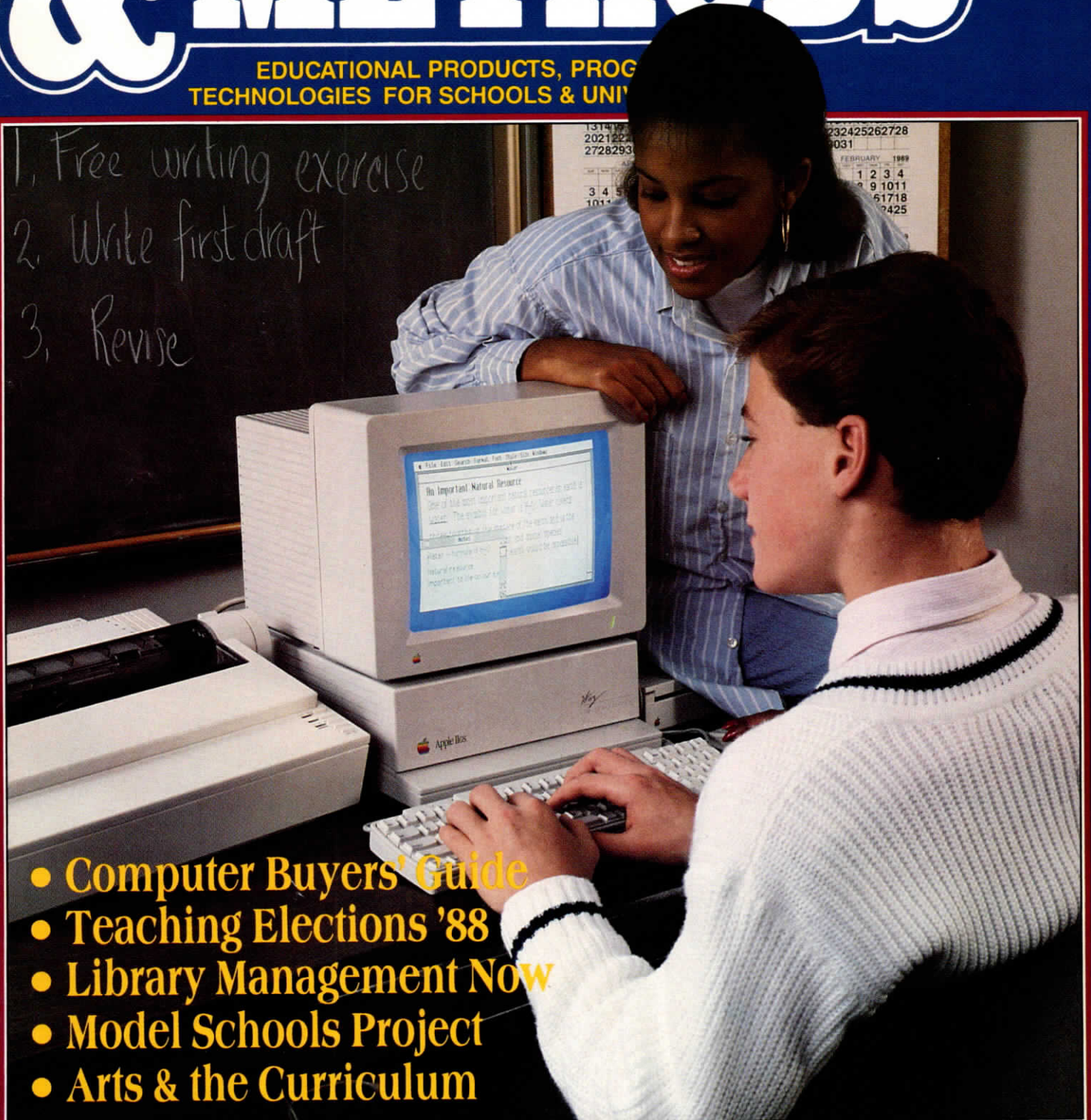
- **Computer Buyers' Guide**
- **Teaching Elections '88**
- **Library Management Now**
- **Model Schools Project**
- **Arts & the Curriculum**

Courtesy of Follet Software

By David Loertscher

The school library media center has begun to function like a high-resolution lens, enabling students and educators to see ahead into tomorrow's information age. As media specialists expand their impact beyond the LMC and into the classroom, library management systems are empowering their centers and the rest of the school environment. High technology and human know-how are indeed fostering many new benefits for more schools.

HARDWARE AND SOFTware for managing print and other media items in LMC collections are more compact, far less expensive and much more powerful than only a few years ago. Even the smallest of off-the-shelf applications and the most modest of automation systems are easier to start up, maintain and add onto, depending upon the goals of the users and the purchasing arrangements that schools and districts can make.

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Not only do today's school library management systems help relieve personnel of time-consuming paperwork, they help them handle videos, films, audiocassettes, video disks and drives, CD ROM disks and drives, filmstrips, VCRs, projectors, microfiche, online services, and more.

As each piece of software adds enhancements and each system upgrades its power and capabilities, both also become easier to use. Help screens and pull-down menus replace heavy print manuals. Icons and real words replace complicated syntax and diagrams. Programs integrate with one another, so that users don't have to enter the same

data several times for cataloging, acquisitions and circulation. Students and teachers don't have to be computer buffs to use references and make searches.

Many school libraries who have automated their circulation systems are now considering how they can upgrade. Several companies have added promising enhancements. These comprehensive systems have updated components that handle circulation, online cataloging, acquisitions and accounting functions. One example is Follett, which has added *Catalog Plus* to its *Circulation Plus*. Scribe Software also handles acquisitions and circulation as well as administra-

tive library functions, and so do Mandarin systems, which are tailored to the school LMC environment. The PCemas Automated Library Management System by ScholarChips enables a district to add one school site at a time, with its distributive rather than centralized structure. A library system that has integrated public library with school functions is Dynix, Inc.

Before making any purchases, however, librarians continue to need to conduct thorough investigations. They'll be happiest if they compare their needs with those met by several systems already in use in schools and districts with similar demographics and resources.

Microcomputers. The accelerating downward slope in cost of all desktop models has abetted system enhancements. The larger memory capacities and faster processing speeds of the "super micros," along with software adapted to them, have allowed school librarians to retroactively convert, start up and maintain stand-alone automation systems within weeks.

The better to comprehend this, consider the fact that 10 years ago, IBM manufactured a mainframe for $3.4 million that is no more powerful than its PS2 Model 70 that it released this year, which costs only $10,000. More to the point, "school libraries are receiving much more for everything they spend on automation," says Michael Eisenberg, an associate director of the ERIC Clearinghouse on Information Resources.

Whereas only a few years ago, a library microcomputer could handle only 5,000 to 10,000 titles, today's desktops in the IBM AT class or the new IBM PS2s can all handle much larger files with more data in them—and house much larger hard disks, according to Emily Fayen, who is charge of library automation at the University of Pennsylvania. "With this kind of power," she says, "school libraries can manage many more functions on their own."

Another development is IBM's new multi-task operating system called the OS-2. This new micro will benefit libraries by allowing several users to network with it us-

ing different programs simultaneously, or one user to work on its word processor while printing out at the same time.

Since personal computers arrived in schools nearly a decade ago, school libraries have used all varieties to perform administrative operations. Since its emergence, the Macintosh SE has been described as better suited than the older Macintosh Plus for school libraries, particularly because of its desktop publishing and computer graphics capacities.

Library-Specific Software. Just as dynamic as the spread of more powerful computers is the proliferation of more enhanced, easy-to-use programs. Designed for these super micros, they can manage more data in more sophisticated ways.

Media management program modules, for example, catalog titles of videos, films, audiocassettes, video disks and CD ROM disks. They also keep running inventories of media equipment. Any item, software or hardware, can be put on reserve and scheduled for showings or various uses. These media management programs also have telecommunications and multi-user capacities. Examples are *Media Minder XL* (Media Minder) and Media Manager 3000 (Vis Consultants), which have menu options for producing specialized catalogs by laser printers.

Cataloging software programs have become more powerful, and in some cases much more reasonably priced. *Online Catalog* from Right On Programs, for instance, allows a small library to computerize 20,000 titles on a 20-megabyte hard drive, displays entries onscreen in a catalog card format, and is listed to schools at a cost of $200. Many cataloging modules allow users to access either stand-alone or system files. Others enable students doing research to search according by keywords and Boolean logic.

Searching in a school or other collection on either a CD ROM disk or through a local area network (LAN) can be either coarser or finer grained, depending upon how much computer memory a school library has for catalog data and how finely its catalogs are indexed.

CD ROM (compact disk read-only memory). Along with power-

ful cataloging programs have evolved a number of public access catalog collections on these small silver disks that can each store literally thousands of pages. Many school districts are taking advantage of the recent availability of lower cost CD ROM players. Companies such as Compact Disk offer either of two drives and one of the commonly used references such as *McGraw Hill Science and Technical Reference Set* and the *Grolier Electronic Encyclopedia* for only $895.

Publishers are now releasing several public access catalogs in this compact medium, which are called ROMCATS. Ulrich offers *Books in Print Plus* and OCLC's *Search CD 450* has ERIC databases on disk that amount to millions of references.

To run CD ROM on computers in the Apple and Macintosh families, a player for both came out this year. Tandy has announced that it will have a player that is able to record and erase, enabling librarians to adapt catalogs on disk to local availability of full text retrieval.

Several other types of references are now available on CD ROM: the *Oxford English Dictionary* from Oxford University Press, *Microsoft Bookshelf* which includes *Bartlett's Quotations* and *Roget's Thesaurus* among others, and a lesson planner with 8,000 lessons called *K-8 Science Helper* by PC Sig.

Software Bibliographies. For librarians looking for less expensive alternatives, there are student databases on floppies. Libraries Unlimited's *Science Experiments Index*, for example, is a list of 700 children's science book references, the first in a series of computerized bibliographies and indexes for educators. All can be integrated with *Appleworks, Microsoft Works* and *PCFile+*. Educational Testing Service has a reading motivation program with an annotated database program called *BookWhiz*. Oryx Press has released a program called *BookBrain*, a children's book bibliography that either allows students to search for books they want to read or selects books for them.

Local Area Networks (LANs). Linked computers within library media centers, schools and districts open up possibilities for using other collections, online services, acquisitions networks and more. With a modem and networking software, students can search public library holdings nearby for the cost of a local telephone call. Library media specialists can "talk" with distributors such as Baker & Taylor or Faxon via their specialized ordering network online, to file orders and complete transactions.

Appletalk networking software allows both Apple and Macintosh computers to share the same hard disk, making it easy for librarians to share suggestions and offer one another support online. Local area networks also allow users in the same room or building to have access to the same software on one computer, without having to load and reload floppies. Availability of attachments and network software programs, now more powerful and reasonably priced, are making the option of computerized cataloging and laboratory instructional learning systems seem much less exotic than it did only a few years ago.

Online Services. Numerous examples of how students, teachers and librarians in schools use online services, E-mail and electronic bulletin boards have appeared in *Media & Methods* during the past two years. Elementary schoolers are using E-mail to talk online with one another across the continent. Librarians use E-mail or bulletin board special interest groups (SIGs) to send memos, saving time they'd have to spend in meetings. Teachers use these to hold seminars online about curricula.

Dialog and BRS both offer online databases tailor made for intermediate and high school levels. Looking hard at the issue of limited funds, some small library specialists advise using online services rather than investing in hard copy references that can't fully satisfy to-the-day needs of information-hungry users. These experts argue that people in small libraries need no longer look at online research as the last option for special situations but as the first one for general use—provided teachers and students both become skilled questioners, especially in nighttime hours when phone rates are lower.

The cry by many school online users is, how to obtain full text retrieval the fastest and cheapest way? This is especially critical for library media centers with few periodical holdings. Regional media centers in the state of Iowa, for instance, are providing within two to four days any student with copies of any articles they retrieve through the Magazine Index.

Off-the-Shelf-Administrative Applications. With new capabilities of software for library media centers, professionals need no longer adapt the basic three utilities—word processing, spreadsheets and databases—from general programs. Today's utilities tailored for schools will do any number of other tasks relating to circulation and cataloging, including card printing.

Production software, such as *Publish IC* (Timeworks, Inc.), *Page Maker* (Aldus) and *Print Shop* (Broderbund), abounds. A national survey shows that school media specialists are using microcomputers for production applications first and administrative ones second: for signs, bibliographies, newsletters, banners and visuals for overheads.

The best choice of a utility program with networking capabilities for media specialists continues to be an integrated package that offers the basic three in one, such as *Appleworks* 2.0 by Claris. Because its database supports up to 6,350 records with 30 fields each, some even use it for semi-automated circulation and media management, though many library management specialists don't recommend it. An excellent resource on its potential is *Using Appleworks in the Media Center,* published by the North Carolina Department of Public Instruction, Media and Technology Service (Raleigh).

Extending memory of the ubiquitous school Apple can be accomplished by the Applied Engineering Card. A good add-on for Appleworks appeared during the past year entitled *Ultra Macros,* (Apple) which allows for huge clipboard transfers and provides 22,000 lines in the database.

For Macintosh and MS-DOS computers, *Microsoft Works* (Microsoft) is much like *Appleworks* in its ability to handle all three utilities in integrated ways. Several other programs in the IBM world are worth investigating for economy and ease of use. There are *First Choice* and *Eight in One* (both by Spinnaker Software Corp.). Shareware called *PCFile+ 2.0* and *PCCalc* (both by Buttonware) and *PCWrite* (Quicksoft) are also recommended.

Criteria for Automating School Libraries. The best reasons continue to hold, especially after the media specialist develops a plan projecting future uses for that particular library media center. To be really feasible, automation ought to: save time, allow for greater accuracy, allow for more efficiency, be adaptable to the media center as it exists, and be cost-effective.

When the first school Apple was introduced in 1979, many thought microcomputers were another technology that would come and go. We know now that it succeeds as an instructional innovation, just as we know it wins as a library management innovation. We can either decide to learn to drive, or perhaps be passed up in our horse and buggies as they move more slowly down the road. ∎