This booklet provides a detailed description of the computerization of the library of MMI Preparatory School, a private, non-sectarian college preparatory school in Pennsylvania for students in grades 7 through 12. Each of the following functions is investigated: (1) catalog card production; (2) online reference services; (3) circulation; (4) word processing; (5) graphics; (6) circulation of software; (7) circulation of hardware; (8) evaluations of hardware and software; (9) building the collection of computer reference materials; (10) library skills instruction; (11) interlibrary loan services; (12) use of word processing to produce bibliographies; (13) use of database management programs for library management; and (14) a workshop for teachers. Recommendations are provided for others who may wish to emulate all or parts of the program, including a detailed time and cost analysis chart.

(Author/CGD)
MMI PREPARATORY SCHOOL

COMPUTERIZED MODEL LIBRARY

BY NANCY EVERHART
EHI Preparatory School, formerly the Mining and Mechanical Institute, is located in Freeland, Pennsylvania. It was established in 1879 by Eckley B. Cox and today serves 200 students in grades 7-12. It is a private, non-sectarian school which emphasizes a college preparatory education.

The school library media center houses over 7000 volumes and 1100 audiovisual items. In addition there are individual seminar rooms, a microcomputer laboratory and two soundproof typing booths for student use.

Mrs. Nancy Everhart, Library Media Specialist, (RIGHT) and Mrs. Claire Harts, Library Assistant (LEFT). Mrs. Everhart holds a bachelor's degree in library science and a master's degree in educational media.

The computer lab houses 10 microcomputers, a modem, two printers, a large video display monitor and VCR and a large variety of software programs.
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INTRODUCTION

Microcomputers can do a great deal for students, teachers and the librarian in a school library setting. Having followed the developments in this area for the past several years, we here at MMI were anxious to try some, if not all of them. However, the setback (as most times it is) was money. In the spring of 1985, the state of Pennsylvania offered funding to educators of up to $40,000 with ideas on utilizing technology. Seizing the opportunity, I wrote a proposal and was overjoyed to be selected as one of the recipients. The funds totaled $28,647 for our project.

The premise of the proposal was simple: What if a school library applied all that microcomputer technology had to offer? What steps should be followed? What are the benefits and drawbacks? These are the questions for which we sought answers.

Although current library literature abounds with success stories of librarians using computers for one task or another, our search yielded no information on a library going "hog-wild" sort of speak. Why aren't we using computers more?

The most frequently cited reasons are: lack of knowledge and training, lack of time to become familiar with the technology or to input initial information and fear of being replaced by a computer. I can argue with each of these reasons. More and more workshops and college courses are being made available that deal with microcomputers, and more specifically with library applications of microcomputers. If librarians are unable to attend these, there are books and journal articles which offer help. The best software programs (which include most of the ones used in our project) offer tutorials that are executed right on the computer, excellent documentation and sometimes toll-free help lines. Time can be a problem. But the long-term benefits really outweigh the short-term.

Where then, to start? Eric Anderson, alias the "Wired Librarian" (and my idol) writes in "The Primer of Library Microcomputing" that the microcomputerization of any library task involves three steps:

1) Identify a local task that is killing you in the manual world.
2) Identify a piece of micro software that has the potential to solve it.
3) Identify the hardware that the software runs on.

I would like to add to 1) or provides some service that is really awesome that couldn't be done any other way. This is sound advice, and what was followed in this project. Hopefully, our experiences will help you also.
### TIME SAVED WITH COMPUTERIZATION

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Hours</th>
<th>Before</th>
<th>After</th>
<th>Time Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Card Production (50 books with complete cards, pockets and labels)</td>
<td>12</td>
<td>2 HOURS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check in 50 books (accuracy is increased tremendously with computer)</td>
<td>12</td>
<td>30 MINUTES</td>
<td>5 MINUTES</td>
<td></td>
</tr>
<tr>
<td>Check out 50 books</td>
<td>12</td>
<td>1 HOUR</td>
<td>1 HOUR</td>
<td></td>
</tr>
<tr>
<td>Compose overdues and fines (for one week's circulation)</td>
<td>12</td>
<td>15 MINUTES</td>
<td>4 HOURS</td>
<td></td>
</tr>
<tr>
<td>Reports to patrons when they come in library as to books out, fines, etc.</td>
<td>12</td>
<td>10 MINUTES</td>
<td>5 SECONDS</td>
<td></td>
</tr>
<tr>
<td>Monthly circulation report</td>
<td>12</td>
<td>1 HOUR</td>
<td>10 SECONDS</td>
<td></td>
</tr>
<tr>
<td>New book newsletter (typed listings with graphics, borders, etc.)</td>
<td>12</td>
<td>3 HOURS</td>
<td>30 MINUTES</td>
<td></td>
</tr>
<tr>
<td>Bibliography updates (4-page bibliography)</td>
<td>12</td>
<td>2 HOURS</td>
<td>15 MINUTES</td>
<td></td>
</tr>
<tr>
<td>Letters (25 individual)</td>
<td>12</td>
<td>30 MINUTES</td>
<td>4 HOURS</td>
<td></td>
</tr>
<tr>
<td>Lists (update members, patrons, benefactors)</td>
<td>12</td>
<td>1 HOUR</td>
<td>5 MINUTES</td>
<td></td>
</tr>
<tr>
<td>Searching for periodical articles</td>
<td>12</td>
<td>VARY — COULD BE HOURS</td>
<td>15 MINUTES</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>12</td>
<td>2 WEEKS</td>
<td>2 DAYS</td>
<td></td>
</tr>
</tbody>
</table>
Catalog card production was the first task we wanted to computerize in our library. Although we purchased as many cards as we could with new books, there were plenty more to be cataloged originally. Several years ago, we bought one of the first programs out, the Book Trak program, then published by Follett. Since then, many more have been developed and improved. With the grant, we were able to update our cataloging software with the Quick Card program.

Quick Card was chosen because:

1. You can have up to 8 lines for classification.
2. Classification can be either Dewey or LC.
3. The program will automatically enter series statements in parentheses.
4. The space in the author area is large enough for joint authors.
5. Summaries may be added on the card.
6. The accession area is 12 characters long as compared to 5 on Book Trak.
7. You can print as many cards as you want; even just one card.
8. Proof sets can be printed before the actual card set.
9. Quick Card information can be downloaded into Circulation Plus so that it doesn’t have to be typed again for the circulation system.
10. It follows AACR2 format.
The Quick Card program by Pollett Software Company allows information to be entered by aides, students or volunteers and places it in the correct locations on the cards. No professional cataloging experience is necessary.

By using a catalog card production program, only the shelf list card need be typed. The computer then prints a full set of cards. The program also prints labels for book pockets, book cards and spines all from the original information entered.

HELPFUL HINTS

1. Buy your cards for printing from the company where you bought the program, if possible. We tried cheaper cards and they did not align properly, etc. This goes for the labels also.

2. Adjust your printer for the thickness of the cards.
In order to access remote data services, the following items are needed: a microcomputer, disk drive(s), monitor, modem, printer and communications software.

One of the quickest ways to expand your library by about a million volumes for $500 a year is to subscribe to an online data service. We were fortunate to be chosen as a pilot site for the Lin-Tel system in Pennsylvania about two years ago. What this meant was that I went to a two day training session given by the State Library on searching BRS and was sent home with an account for $500 of search time. This was renewable for three years. There are over 90 sites in the state right now, and we have the added benefit of electronic mail between the sites, and the capacity of interlibrary loan for obtaining the journal articles yielded from the searches. It's great - especially because we are somewhat in the "boonies" here in Freeland, PA but still have the same information capacity in our little library as do many universities.

How does it work? Here is an abbreviated version. Suppose a patron comes to you for information on how monoclonal antibodies will be used in the future. (This actually happened). You then decide which database will give you the type of information you will need, pick out key descriptors and get on-line. You can choose to get very
LIAS, Penn State's on-line card catalog, can be accessed for free by calling either your local branch or the main campus.

Students as well as faculty search on-line databases. This particular student is so interested in this aspect of computers he has formed his own electronic bulletin board at school with a Commodore 64. The board contains information about homework assignments and school functions.

technical information on a database such as Medline, or you can get information written for laymen on the database Mags. It's almost as simple as typing in monoclonal, antibodies and future. The computer will then tell you how many resources are available and if you wish, print out bibliographic information and an abstract. Your local library can then be searched for the full articles that apply, or they can be obtained via interlibrary loan electronically.

With the same equipment we were required to provide for LIN-TEL, we call a local number to search Penn State's online catalog, LIAS. Searching can be done by author, title or subject.

Another on-line service our library provides is the Guidance Information System or GIS. Though this students can narrow down choices of colleges by their requirements of such things as tuition, location, major, social activities, size and much more. GIS also has career, financial aid and military files.
Circulation Plus is a hard disk system produced by Follett Software Company. There are two versions. It can be set up either for up to 30,000 items and 8,000 borrowers or up to 65,000 items and 15,000 borrowers.

The hardware requirements for Circulation Plus are a microcomputer with a hard disk drive, one floppy disk drive, light pen, 80 column card, monitor and printer. Several different brands of microcomputers are compatible.

For busy librarians, Follett offers a data entry service. You mail your shelf list cards, the information is entered on floppy disks at Follett, which are in turn downloaded to your hard disk. Each shelf list card is stamped with the appropriate bar code number for the book. All one has to do is match the correct bar code, place it on the book, and cover it with a label protector.

Books ordered from Follett can be bar coded at the company for pre-processed books if you specify. The bar code number is printed on the shelf list card.
Entire books have been written on setting up computerized circulation systems for libraries. After reading most of the literature and researching the pros and cons of each type available, we decided on purchasing Circulation Plus by the Follett Software Company. The reasons we chose this system were:

1. The software ran on equipment we presently had, with the exception of the hard disk.

2. Use of a hard disk would eliminate switching floppies.

3. Follett has a good reputation with the library community. It is a company that has been around for quite a while, and seems like it won't be disappearing in the near future. (This is critical - many software manufacturers are here today and gone tomorrow and you are left holding the bag.)

4. The availability of a data entry service meant that we could get the system up and running in a matter of weeks.

5. A local sales representative and a toll-free help line offered good support service.

6. The book division supports the circulation system by placing bar code labels on pre-processed books and noting it on the shelf list card.

7. The program itself allows for several options that were deemed very valuable for our school library. They were:
   a. Automatically prints overdue notices by homeroom.
   b. Calculates fines.
   c. Allows for downloading of information from cataloging program.
   d. Can circulate magazines.
   e. Prints fine lists.
   f. Prints circulation statistics by Dewey divisions.
   g. Prints cumulative circulation number for patrons.
   h. Prints lists of books circulated a specified number of times.
   i. Allows for inventory to be done with the computer.
   j. Forces you to make a back-up each day.

Other niceties that we don't use but others might like are printing of overdue notices that can be mailed directly to the patron's home and use of a password when checking books in and removing fines.

A very big plus to this system is that you can enter information about books and bar code them as they are checked out. (A good way to weed also.) In other words, you don't have to wait to use the system until all of the data is entered. Bar codes are not pre-assigned; you assign a bar code to the book. If a bar code gets ripped off or lost, Circulation Plus allows you to print another.

Computerizing circulation is a big commitment. However, the end result of accurate statistics and time-saving are worth it.
Appleworks is an integrated software package. It contains a data base, word processor and spreadsheet. Many library applications can be found for it.

The Bank Street Writer is an easy to use word processor. One can become familiar with its functions in about half an hour.

If you have ever had a need for multiple copies of anything with slight variations in each in your library, you would benefit by utilizing word processing software. In a nutshell, a word processing program with your computer and printer, will allow you to type something, print it out, change or rearrange a few words, print it out, change or rearrange a few words and print it out ad infinitum. These are some of the functions we have used word processing for:

- Thank you letters for book donations
- Writing to book companies for review copies
- Writing journal articles
- Sending invitations to local librarians to see a demonstration of circulation program
- News releases
- Letters home to parents about lost books, long overdues, etc.

The above list just touches on the many applications possible. Each library could add their own unique needs to it.

There are a multitude of word processing programs available. We started out using the Bank Street Writer since it emphasizes simplicity. I'm typing on it right now and think it's great. It has most of the features that any librarian would want. We are also in the process right now of "graduating" to using Appleworks. This program includes a more powerful word processing program, along with a data base and spreadsheet. (More on data bases later). What is nice about this program is that you can take parts of a data base and print it out with a report or include a spreadsheet in with a letter, etc. If you don't have a circulation program, you may wish to keep your circulation statistics on a spreadsheet placing the months across the top of the document and the Dewey Divisions or whatever on the left side or vice versa.
I read somewhere once that a library should have as many signs as a supermarket. It made me shudder, since I am no calligrapher or artist and the things I have produced in the past get mistaken for my sons' (who are in second and third grade). However, with the help of many of the graphic programs on the market today, it makes me even look good.

We have gotten a lot of mileage out of the Print Shop. Many of the uses are detailed in an article we did in the May 1985 issue of "School Library Journal" called "Creating Graphics with the Print Shop." We have adapted it for signs, bookmarks, note paper, display purposes, bulletin boards and correspondence. I love programs where you don't have to read the manual, and this is one of them. Additional graphic disks are available, as is "The Print Shop Companion", allowing additional images and borders. The calendar option of the Companion is great for custom calendars.

The Newsroom is an o.k. program. (I predict that something better will be out soon - the type is hard to read.) Until that happens it is the only software of its type that allows the creation of a newspaper or newsletter with custom graphics, text and headlines. Of course your library has a newsletter, doesn't everybody's?

Computer graphics is a whole field to itself, and many things are available. Right now we are experimenting with "Fontrix", a program which allows you to print out in a wide variety of typestyles. The best graphics seem to be achieved with a Macintosh computer and Laserwriter (expensive yet however!).

The Print Shop by Broderbund allows for the creation of signs, letterhead, banners and greeting cards using a microcomputer and printer. The end result is very professional looking, even by amateurs. If you can afford only one graphics program, this is the one you should buy.
BOOK FAIR
NATIONAL LIBRARY WEEK
APRIL 19-25
PURCHASE A BOOK IN THE PROGRAM AND WIN A DELIVERY FROM THE PRINT SHOP.

A DEADLY CASE OF MAGIC by Joan Lowery Nixon
Reviewer: Peggy Spade
Lisa and her friends each have a secret dream which they thought they would never be able to pursue. Because of an accident, they are stranded in an old deserted house. The house is filled with the belongings of a magician. Lisa suddenly realized that this is the place where she may be able to pursue her dream — to be a magician. Inside the house she thinks her dreams will come true. Soon her fantasy becomes a nightmare. Can Lisa win over Magi, the one-time famous magician, whose spirit is much alive in this house? Can she save the lives of her friends and her own??

HUSBAND'S FAMILY IS GOING TO CHANGE by Louise Fitchburg
Reviewer: Nancy Everhart
Nobody's family is going to change -- so you had better change yourself. Both characters want to be something their parents don't agree with so what are they to do? Covered

(GEORGE)
BY E.L. Konigsbury
Reviewer: Danielle Lesko
Benjamin B. Clark, a brilliant sixth grader, has another person living within himself by the name of George. George knows that something is wrong with William, Ben's lab partner. George tries to warn Ben but Ben doesn't listen. One day found William and another boy named Ben. The boys make William and the other boy for what he discovered. Will he take the blame for not? An interesting story of loyalty.

BOYFRIEND BLUES by Judith Rae
Reviewer: An-Chian Kao
Lizie has a problem. She can't find a boyfriend who shares her interests in affairs, friend, her up who was be him. You are fall in love engaging

HOW TO HAVE A GORGEOUS WEDDING by Magdelene Shamas
Reviewer: Peggy Spade
Shari Stapleton's grandmother is getting married again. Will the groom's handsome nephew fall for Shari or Reg? If so, will either one give up their present boy friend and friendships to be rivals. A great romantic.

FORBIDDEN LONGBRES by Stuart Buchan
Reviewer: Peggy Spade
Carly and Magic are a beautiful girl from a low income family, seems destined for a great future. Her stepfather hopes she will marry Calvin Hayden, her to the Hayden Aeroplane. Cesar Hernandez, son of migrant workers, also loves Carly. These young lovers struggle to find a place in the world where love can flourish and endure. Will they protect them from the wrath of Carly's stepfather and the anger and jealousy of Calvin Hayden? This story is a very interesting story of young love and lives values.

MODEL BEHAVIOR by John J. Nakaara
Reviewer: Peggy Spade
Jacquelyn Fox is a famous teenage model. She comes to a small country town and three boys sneak into the building where she is modeling. Suddenly, she is nowhere to be found. She has disappeared. The way, who is the new girl?

STAR LUCK by Donald Nissen
Reviewer: An-Chian Kao
In this book, luck rules the world. Tests are given to everybody to test their luck. Paul takes this test and gets a perfect score on it. The emperor wants him killed because he is too lucky. He runs away and joins the 12th underground rebel force. He joins them in their fight against the emperor. This book is a great science fiction story for young adults. I hope you read and enjoy this wonderful book.

We adapted the Newsroom by Springboard for an in-house newsletter of book reviews. The program combines graphics and text.

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Create With Garfield can add a humorous, personal touch to your library. It allows you to produce cartoons, posters (about 7" by 10") and labels that utilize Garfield and his friends along with your messages.
CIRCULATION OF SOFTWARE

Circulate software? Why not? It's part of the library collection isn't it? A lot of arguments can be made for both sides on the issue of circulating software. On the con side, one can say that software is very costly and fragile - lending itself to damage and lots of expense. On the pro side, it can be said that anything in the library isn't doing anybody any good sitting on shelves. With a little ingenuity, I feel it can be circulated successfully.

Here's my idea - and the goal we're working towards in our model library. A library ideally should have two sets of software; a circulating set, and a backup set. The steps to achieve it are as follows:

1. Each time a software package is ordered, check to see if a backup can be made or ordered. Most backups are available at a much reduced price from the original disk, around the ten dollar range. If you can't make one backup from the package, order one right away.

2. When the software comes in, separate the original and backup disks.

3. Make photocopies of any documentation that comes with the software.

4. Take the photocopies and the original disk, and package it for circulation. A small loose-leaf binder, or report cover with a plastic sheet that holds disks and fits into a binder seem to work well. Place on a bar code, or book pocket and card, stamp for identification and catalog.

5. Keep the backup copy of the disk and original manuals in a safe place, away from patrons.

We have been circulating software in the original packages temporarily until we can get caught up with setting up our system. Some do not hold up very well. Eventually, I would like to display the packages for the software on shelves, face out, much like they do with tapes in video libraries. The patron would then bring the box to the desk and we would get the software for them. This would also eliminate theft.

All of our software is for Apple II computers. Students that already have Apples at home check out the software, as do students who are taking home a school computer. Our most popular packages for circulation have been the SAT preparation programs, since they are quite expensive.

Other than regular wear and tear, there really hasn't been any problems with circulating software.
The Apple IIc is an ideal computer for circulation. It is light and portable. When students check out a IIc, they also take home the Video Accessories set to hook it up to their home TV. It all fits neatly into the carry bag made by Apple. There is even room for software.

All ready to go!

Through this grant, I was able to realize a dream I’ve had for about three or four years. That is, to have available computers that students and teachers could take home to learn how to use, or use as a tool for their everyday tasks. Originally, I wanted to have three Apple IIc computers that were strictly devoted for circulation purposes. However, the hardware budget couldn’t stretch that far and a compromise was made. The IIc’s were purchased, but during the day they were kept set up for use in the library computer lab, and used on an "as needed” basis when somebody wanted to take them home.

There hasn’t been any problem with this at all. Here’s the procedure:

1. Students who want to take a computer home, must first take home a form that the parents fill out and sign. In effect, what the form states is that if the computer is damaged in any way the parents are responsible for any repairs. The parents also write down their phone number, and I try to contact them to confirm the fact that they know their child is bringing a computer home overnight. I try to encourage them to pick up the child at school that day if at all possible.

2. At 3:00 the student comes to the library and helps pack up the computer to take home. They take home the keyboard, power supply, and a video accessories set to hook it up to their home TV. Usually they take home a program or two. We don’t allow the monitors to circulate, as they are bulky.

3. The computer must be returned before 8:00 a.m. the next day to the library. We charge $17.00 a day for an overdue computer to discourage that practice, and so far have had no overdue computers.
EVOLUTIONS OF SOFTWARE AND HARDWARE

Thousands of new computer programs burst on the marketplace each year. It is difficult to keep up. Slick catalogs make even the worst of programs look good before they are run. What’s a librarian to do?

First of all, don’t purchase programs from any company that doesn’t offer a 30 day preview policy. 95% of the software that is out there is junk and that is no exaggeration. By being able to run the software you will be able to eliminate it. I’ve seen programs that have had rave reviews in the top journals, and found them to be unsuitable for my own needs. At the prices that are being charged today, companies or jobbers should offer this service. More and more are because of pressure from teachers and librarians. Software prices are also coming down slightly and the offering of networking disks and lab packs are a step in the right direction.

There are several places to track down reviews of software. We use the following journals:

School Library Journal
Booklist
Billboard
Family Computing
Electronic Learning

EPIE, the Educational Products Information Exchange, is kind of like the Consumer Union for software. It reviews all types of software and is non-biased in its evaluations. EPIE is available on-line over CompuServe and we have been using it for about two years. If a teacher needs a program in math for 7th grade, EPIE will zero in on it. From that listing, you can get a rating of the programs and make a decision. A rating of 1 to 10 is given, and I haven’t seen too many tens. EPIE is also available through subscription in hard copy and is well worth the price. Check first with your intermediate unit, as they may have this service available.

The ideal situation is to have all computer software and reference material stored in the library. If a teacher is convinced of a program’s worth and really wants you to order it, try to get in a 30 day trial and set aside some time for both of you to evaluate it.

Evaluation of hardware is posing less of a dilemma today than it was say three or four years ago. At that time there were about ten different types of micros on the market. The question now seems whether or not to go IBM (or compatible) or Apple (II or MacIntosh). The periodicals mentioned above, along with InfoWorld and even Consumer Reports will aid in this selection. EPIE also evaluates hardware. The problem most schools make in the selection of hardware is that purchase it right off the bat, before any software. You’ll be better off if you follow the same steps as outlined in the introduction of this book for your library and apply them to classroom or computer lab applications. As a reminder: Identify the tasks you want to accomplish with the computer, identify appropriate software that will perform these tasks, and then identify the hardware that runs the software.
## WHAT'S IN STORE
### SOFTWARE GUIDE

<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
<th>Brief description</th>
<th>Hardware/Equipment required</th>
<th>Backup policy</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIX-IT</td>
<td>Random House Software</td>
<td>Aims to teach logic and problem-solving but falls short. You combine parts of “machines” so they work correctly. 200 puzzles for all ages, but gets tiresome.</td>
<td>Reviewed on Apple. Also for C 64/128 Optional joystick, mouse, and color monitor. 64K Apple</td>
<td>90-day warranty, 85 thereafter up to one year. 812 for backup</td>
<td><strong>☆☆☆☆☆</strong></td>
</tr>
<tr>
<td>GARFIELD DOUBLE DARES</td>
<td>Random House Software (see above for address and phone)</td>
<td>Reminds me of the word game “boggle,” the object is to make words from scrambled letters. Challenging for ages 6-12, but rather dry, even with a Garfield of comic-strip fame.</td>
<td>Reviewed on IBM PC/PCjr. Also for Apple. Atari 520ST, C 64/128. Color graphics card required for IBM PC</td>
<td>90-day warranty, 85 thereafter</td>
<td><strong>☆☆☆</strong></td>
</tr>
<tr>
<td>HOMEWORK HELPER MATH WORD PROBLEMS</td>
<td>Spinnaker Software One Kendall Square Cambridge, MA 02139</td>
<td>Helps make math problems as problem-free as possible. You know the kind. If a car travels north at 50 mph with a 10 mph head wind, how long will it take to travel 150 miles? A good adjunct to school learning for grades 7-12.</td>
<td>Reviewed on C 64/128. Also for Apple. Atari 520ST, IBM PC/PCjr. 64K Apple</td>
<td>30-day warranty, 85 thereafter</td>
<td><strong>☆☆☆</strong></td>
</tr>
<tr>
<td>THE NOTEBOOK PHANTOM DESIGNWARE</td>
<td>105 Berry St. San Francisco, CA 94107</td>
<td>By using a computer keyboard to simulate a pencil, all ages can explore the names, positions, and sounds of musical notes. Its goals are modest, but it works well.</td>
<td>Reviewed on C 64/128. Also for 64K Apple. IBM card required for IBM PC</td>
<td>90-day warranty, 812 thereafter or for backup</td>
<td><strong>☆☆☆</strong></td>
</tr>
<tr>
<td>PAINT WITH WORDS MIECC</td>
<td>3490 Lexington Ave N St. Paul, MN 55112</td>
<td>Explains the concepts of various words by producing pictures on-screen. As children use this program more, they have more fun learning. Highly motivating!</td>
<td>Reviewed on IBM PC. Also for IBM PC/PCjr. 64K Apple. Joystick or mouse optional.</td>
<td>Unlimited warranty (includes user-damaged disk)</td>
<td><strong>☆☆☆</strong></td>
</tr>
<tr>
<td>PICTURE PERFECT Mindplay</td>
<td>82 Main Ave Stoningham, MA 02180</td>
<td>Here’s a decent beginner’s program for drawing on-screen and then printing out. Also contains a library of pictures to enhance or begin compositions. For ages 4-6.</td>
<td>Reviewed on C 64/128. Also for IBM PC/PCjr. Joystick or mouse</td>
<td>90-day warranty, 810 thereafter up to one year. 87 50 for backup within 90 days</td>
<td><strong>☆☆☆</strong></td>
</tr>
</tbody>
</table>

### SAMPLING KEY
- **☆** Overall performance
- **☆☆** Documentation
- **☆☆☆** Error handling
- **☆☆☆☆** Graphics quality
- **☆☆☆☆☆** Ease of use
- **☆☆☆☆☆☆** Value for money
- **★** Poor
- **☆** Average
- **☆☆** Good

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A wide variety of computer and library periodicals provide reviews for software evaluation. This is taken from Familiy Computing.
With the grant, we were able to purchase a wide variety of computer books. Our computer reference material also includes periodicals.

With the concept of the library media center also becoming the computer center for the school, a variety of computer reference material had to be ordered and made available. The types of materials that were obtained were: computer programming manuals, computer language books, books for faculty on integrating the computer with the curriculum, computer periodicals for both students and faculty, books dealing with computer projects, and books that have emphasis on microcomputers and libraries.

Our school holds an Open House each spring, and many students use computers to demonstrate independent projects or use computers in their projects. It was essential to get some additional information on these topics.

The introduction of all of these computers was new to many faculty members, and we tried to get books for them to refer to in their fields dealing with computers.

The number of computer periodicals is dwindling almost daily, but we do have subscriptions to some of the more popular such as Family Computing, Byte, Electronic Learning, etc.

Since our library is being visited by many other librarians, I feel it is essential that we be "up" on the latest information in the field. Through the grant we were able to obtain many titles in the library computing field, along with periodicals such as SMALL COMPUTERS IN LIBRARIES and THE WIRED LIBRARIAN'S NEWSLETTER.

Hopefully, after the grant money runs out, we will still be able to keep up with the latest in computing. A good alternative is to find several other teachers or librarians, make a list of periodicals, and route them around the district.
The State Library of Pennsylvania has developed an on-line curriculum for school library media specialists. Included are lesson plans and guidelines for teaching database searching.

It is inevitable that software became available for the teaching of library skills. With over 10,000 educational programs on the market for the Apple II family alone, someone had to get the idea to include teaching how to use the library. As with software in general, these programs run the gamut from excellent to trash. Again, I wouldn’t buy anything I couldn’t preview, no matter how great the reviews.

There are programs out there that teach how to use the card catalog, Reader’s Guide, reference books, dictionaries, encyclopedias, arrangement of books, parts of a book, and on and on. It is tempting to get all we can, but it is also important to be selective. The traditional sources that were mentioned in the page on evaluation of software applies here also.

Some of the early programs that came out were nothing more than games, and didn’t integrate library resources at all. Many of the latest ones now combine utilizing the computer and your library’s books, allowing you to customize the program to your collection. Grolier makes some excellent ones.

Use of on-line data bases such as BRS and DIALOG are becoming more and more common in today’s high school libraries. However, there isn’t much out there to guide librarians wishing to teach this skill. A notable exception is the on-line curriculum published by the State Library of Pennsylvania entitled “Pennsylvania Online: A Curriculum Guide for School Library Media Centers.” This excellent document includes not only lesson plans, but a complete scope and sequence, a section on online management, sample budgets, annotated bibliography, sample searches, telecommunications networks and common databases. I see more of these types of helps being published for us in the future by independent authors and publishers.

Another alternative to subscribing to a large data service, is to use local free online services for the teaching of library skills. Here in Pennsylvania, Penn State University’s LIAS, online card catalog, can be accessed for the cost of a phone call (in many cases to a local branch campus) where students can search by author, title, subject and location.
On-line data services are great, but not much of a service if you cannot actually retrieve the entire book or article once it has been identified. We have expanded our library tremendously since going on-line by participating in interlibrary loans with Penn State and Millersville University (the participating library for interlibrary loan on BRS).

Once we see a book or books that look good on the LIAS system of Penn State, we print out the information on the computer printer and transfer the necessary information to a standard interlibrary loan form. These forms are available from library supply houses such as Demco and Brodart. The form is sent to the appropriate library and we wait for the book to be mailed. The usual turnaround time is about two weeks until the book is received. Students must be alerted to this fact by their teachers when term papers are assigned so they do not wait until the last minute if interlibrary loan materials are needed.

Several years ago, the State Library of Pennsylvania instituted a program called LIN-TEL. What the LIN-TEL system did was link up 90 school, public, college and other libraries electronically as well as provide each of these libraries the capacity to search BRS. The real benefit of the project was that once journal articles were identified on BRS, a request could be transmitted via electronic mail to Millersville University for a photocopy or microfiche of the entire article. This service is much faster, with an average turnaround time of about four or five days. Also, articles don’t have to be returned.

If you are considering instituting online services in your library, I feel it is essential that the materials identified be able to be retrieved. There are several ways to do this; through your public library, interlibrary loan forms, telefax machines or local electronic bulletin boards. Do a feasibility study before you commit yourself to see how much time and effort it would take you to obtain these materials.
BIBLIOGRAPHIES

New Books March 1986
MMI Preparatory School
Freeland, PA 18224

=== NEW BOOKS ===

004.16 Van
Van Young, Sayre.

323.44
Friendly, Fred.

355.1 Sto
Storry, Richard.

623.4 Sch
Schell, Jonathan.

921 Fer
Ferraro, Geraldine.

Fic Eph
Ephron, Nora.

Sample from "Bibliography Writer."

Part of our job (so they tell us in library school) is to prepare bibliographies of what is available in our library so that faculty can be kept up to date as to what we have in their field. I agree, but who has the time, the white out and the glue for this yearly or even monthly procedure? Not many of us, but here is an area where the computer can be a big help.

It seems as though as soon as you get a bibliography organized and typed up either new materials have arrived, or old materials have been discarded. It is much easier to type the information into a bibliography program, save it on a data disk and either add or delete information as needed. Another print-out can then be made, as neat and as in order as the original. The bibliography program can also format the bibliography by author, title or call number when it is printed.

There are two routes you can take if you want to computerize your bibliography printing process. You can either use a specific bibliography program (we use Bibliography Writer by Follett) or adapt a general word processing program. The advantage of using a specific bibliography program is that it is much easier to enter the information - so easy in fact, that a student or untrained volunteer can do it. The end result is entries that have correct bibliographic form as regards to set-up and punctuation.

The advantage of using a general word processing program is that it is something you probably have and no additional expense would be incurred. Entries could be added and deleted, but different orders of listings could not be obtained. When typing the entries with a general word processing program, care must be taken as to the correct format for order and punctuation.

With either choice, the use of word processing for bibliography printing will save time and make this job easier and more efficient.
As librarians, we manage a large amount of information constantly. Data base management programs allow us to organize that information in an orderly fashion and access it from many points. For example, if you wanted to organize your ordering process you could set up a data base that allowed you to enter information such as: title of book, author, price, publisher, ISBN, jobber, date, reviewed in, or whatever your needs are. From that information, you could print lists for book orders to each publisher or jobber, keep a listing of where to find reviews on books and keep a check on double orders. There are other uses of data base management programs that we have identified for our library:

- Book Memorials
- Book Donations
- Circulation Statistics
- Mailing Lists
- Dewey Summaries
- Software information
- Book Reviews for our newsletter
- Students' opinions of books

Some of these ideas are for library management, and some could involve student participation. I have read in several journals that various librarians have developed a data base where students record their opinion of books. When other students come in, they can access this data base on a computer set up in the library to see whether or not they want to read a certain book.

Our circulation program is a data base itself, and provides us with many statistics from that data base. If you don't have computerized circulation, you may want to record your daily circulation statistics on a data base. From this you could print out lists such as circulation from highest to lowest according to type of book or day. You could also print individual lists for fiction, non-fiction, AV, etc. Combining these lists with your end of year report to your administrator makes you look organized and efficient.

Another type of data base management program is a mailing program. We use the Bank Street Mailer and keep mailing lists of such things as addresses of other libraries in the county, local businesses, parents and the like. What this program allows us to do is to type a letter and merge it with the addresses for individually addressed copies.

What happened to us was that once we got a data base management program, we thought of new uses for it almost daily.
The Stack Street Filer is a simple database management program. It can find many uses in a typical library.

LIBRARY MEMORIALS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MEMORIAL</th>
<th>DONATED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Civil War Treasury</td>
<td>Patrick S. Sharpless '78</td>
<td>Mr. and Mrs. Llewellyn Dryfo</td>
</tr>
<tr>
<td>A Piano for Mrs. Cimino</td>
<td>Patrick S. Sharpless '78</td>
<td>Mr. and Mrs. Joseph G. Rudaws</td>
</tr>
<tr>
<td>A Sparrow Falls</td>
<td>Mary Rutulo</td>
<td>John E. Tarnopolski</td>
</tr>
<tr>
<td>Across The Rhine</td>
<td>Andrew Shovarsky</td>
<td>Mrs. Andrew Shovarsky</td>
</tr>
<tr>
<td>Adventures on Closeup Photography</td>
<td>William Schaub</td>
<td>Mr. and Mrs. William P. Fox</td>
</tr>
<tr>
<td>Air Around Us</td>
<td>Mrs. Lenora H. Toslosky, William A. Yuhas</td>
<td>Mr. and Mrs. Emil Timko</td>
</tr>
<tr>
<td>All The Sky Together</td>
<td>Mary J. Scatton</td>
<td>Mr. and Mrs. Joseph G. Rudaws</td>
</tr>
<tr>
<td>All The Years of American Popu</td>
<td>Mrs. Mabel M. Sharp</td>
<td>Mr. and Mrs. Joseph Weber</td>
</tr>
<tr>
<td>America's Spectacular Northwes</td>
<td>Patrick S. Sharpless '78</td>
<td>Mr. and Mrs. William L. Morse</td>
</tr>
<tr>
<td>An Outline of World Architec</td>
<td>Margaret Williams</td>
<td>Attty. and Mrs. James V. Senap</td>
</tr>
<tr>
<td>Anecdotes For All Occasions</td>
<td>Michael Yurkanin</td>
<td>Mr. and Mrs. Joseph Weber</td>
</tr>
<tr>
<td>Animal Heroes</td>
<td>John Yanochko Sr.</td>
<td>Mr. and Mrs. Bernard Byorek</td>
</tr>
<tr>
<td>Autobiography of Fran. Lloyd</td>
<td>Mrs. Mabel M. Sharp</td>
<td>Mr. and Mrs. William K. Rudew</td>
</tr>
<tr>
<td>Automobile Answer Book: Sports</td>
<td>William G. Schaub '48</td>
<td>Benjamin Matteo(Palmer &amp; Co.)</td>
</tr>
<tr>
<td>Bacteria: How They Affect Othe</td>
<td>Mrs. Mabel M. Sharp</td>
<td>Mrs. Naomi B. Warner</td>
</tr>
<tr>
<td>Basic Made Easy</td>
<td>Frank A. Scheers</td>
<td>Mr. and Mrs. Joseph G. Rudaws</td>
</tr>
<tr>
<td>Battles For Scandanavia</td>
<td>Dr. John Yankevitch '37</td>
<td>Atty. and Mrs. Henry Giulani</td>
</tr>
<tr>
<td>Becoming a More Creative Perso</td>
<td>Samuel Schaeffer, Sr.</td>
<td>Mr. and Mrs. William J. Smith</td>
</tr>
<tr>
<td>Blueprints</td>
<td></td>
<td>Mr. and Mrs. William K. Rudaw</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. and Mrs. David Stiller</td>
</tr>
</tbody>
</table>
The objective of our teacher training was to demonstrate how computers could make the teacher's job more manageable. Therefore, the concentration of our training was spent on teacher utility types of programs.

The training was divided into three workshops. The first workshop took place on October 28, 1985, shortly after our hardware arrived. This was a full day workshop. Here is an outline of that day:

9:00 - 10:00  Orientation to Computers
Literacy/Keyboarding/Applications

METHOD: lecture, overheads, "Apple Presents Apple" tutorial

10:00 - 10:15 Break

10:15-11:15  Hands on CAI Applications
11:15-12:00  Word Processing

METHOD: "Bank Street Writer" tutorial, lecture

12:00-1:00  Lunch

1:00-3:00  Mini Workshops (Groups of 5 rotated to each station for a half hour each)

Station A - Penn State's LIAS, Guidance Information System

METHOD: demonstration

Station B - Using the Print Shop in the classroom

METHOD: demonstration

Station C - Grade Book programs

METHOD: demonstration

Station D - Test Generator programs

METHOD: demonstration

Comments that were heard back from the workshop were:
"More time for hands on."
"I'd like to know more about what is available specifically for my field."
"This is nice, but I really won't be using it much in my classroom."

A sheet was sent around at the end of the workshop asking about interest areas for future workshops and almost everybody wanted to know more about word processing, so that was chosen for the next offering.
That workshop was held on November 20 from 4:00 p.m. to 6:30 p.m. About 70% of the faculty attended, which was pretty good, considering they were giving up their free time and not getting paid.

The teachers were taught word processing on the Bank Street Writer. A brief explanation of the different modes (write, edit and transfer) was given after which they went through the tutorial. They were then given sample text to type in for practice.

Other types of word processing programs were briefly explained that are available in the library. They were: Bank Street Mailing, Labels Letters and List by MECC, Crossword Magic and again the Test Generator.
WHAT WE GOT WITH OUR GRANT

1. A computer lab with nine microcomputers (with one more that we already had), and two printers.

2. A computerized circulation system encompassing a microcomputer, hard disk drive, two floppy drives, monitor and printer. Also included in this was data entry for our collection, bar code labels and label protectors.

3. Funds to pay for online searching on BRS, LIAS and CompuServe, along with local bulletin boards and electronic mail services.

4. A catalog card production program with supplies of pin-fed catalog cards.

5. Over 200 software programs.

6. Computer literacy of all faculty.

7. Computer literacy of all students.

8. A wealth of books and periodicals on library computing.


10. Supplies for processing software and books.

11. A large screen TV and VCR for computer lab instruction.

12. Funding for staff development to attend the PSLA and ALA conferences in 1986.

13. Funds for printing, copying and postage to disseminate information about the project.
EVALUATION

Our evaluation design attempted to examine answers to the following questions. A committee of faculty and the librarian met at the end of the year in order to accomplish this.

SOFTWARE
Was the software identified?  
Was the software ordered?  
Was the software received on time?  
What problems were encountered with the software?  
How can the software portion of the project be improved?

HARDWARE
Was the hardware identified?  
Was the hardware ordered?  
Was the hardware received on time?  
What problems were encountered with the hardware?  
How can the hardware portion of the project be improved?

TRAINING
Were training modules developed?  
Were the modules implemented?  
How many modules were developed?  
With whom were the modules used?  
What problems were encountered with the training?

TEACHERS AND LIBRARY STAFF
What evidence can be cited that the teachers and library staff were trained to utilize the materials?  
What problems were encountered by teachers and library staff?

STUDENTS
Were the students trained to use the materials?  
What benefits did the students receive from the training?  
What problems were encountered by the students?
CONCLUSIONS

After a year of library computerization, I feel I can make some conclusions, observations and recommendations to other librarians who are considering doing the same. With this grant we were able to utilize computers for most everything we wished to with the exception of the development of an online catalog. Hopefully, this will be accomplished in the year to come. We chose not to get involved in computerized magazine control after investigating programs available as they did not do this service any faster or more efficiently than a manual method for our small library. If, in the future, a program becomes available that uses the bar code already on the magazine for control, we may consider purchasing it. If you plan on installing a circulation system, you could use it for other things such as catalog card production and word processing with some careful scheduling, but we recommend that it be a dedicated system. Another point on circulation - look for a company that offers an update option at a minimal or free cost.

As far as students are concerned, the library computerization has affected their attitudes in several ways. No longer do they see their school library as limited. They now realize that we can get them information on anything - even if it isn't on our shelves. Planning for projects and term papers has taken a turn for the better because they know it takes more time for interlibrary loans so therefore they come in early for their resources. The availability of computers in the library has had another plus - more girls and previous non-computerites are now using the computers because of the wide range of software that we have received. The most popular programs for all students are those of the utility nature - Koala Pad, word processing and The Print Shop. SAT preparation programs are also very popular. Who can say whether or not they had an affect on scores, but 25% of the senior class ended up commended students by the National Merit, many of which checked out the SAT programs for home drill.

Nearly all of the faculty have used the computers for their own management purposes or with classes throughout the year. Those who already had an interest in computers have used them more heavily - two have purchased their own home units - and some borderline cases of interest have been warmed. Continued training and passing along of information must go on in this area so that everyone feels comfortable and gets the most value out of what we have.

The biggest testimonial to the computerization has come in this past week. The circulation system was down because I was demonstrating it on the road to other librarians. We were lost without it here as students had become accustomed to finding out what they had out, fines, where books were at the drop of a hat.

The final bit of advice I can offer is to start one step at a time. Get a cataloging program and master it. Move on to online searching. Try developing a spreadsheet or data base. Get a circulation system. Things are much more manageable done in this manner. Would I do it over? Definately yes!
PROGRAMS

1. APPLEWORKS (integrated word processor, spreadsheet, data base), Apple Computer, 20525 Mariani Avenue, Cupertino, CA 95014

2. BANK STREET FILER (data base management), Broderbund Software, 17 Paul Drive, San Rafael, CA 94903

3. BANK STREET WRITER (word processing), Broderbund Software, 17 Paul Drive, San Rafael, CA 94903

4. BIBLIOGRAPHY WRITER (bibliography production), Follett Software Company, 4506 Northwest Highway, Crystal Lake, IL 60014

5. CIRCULATION PLUS, (circulation manager), Follett Software Company, 4506 Northwest Highway, Crystal Lake, IL 60014

6. CREATE WITH GARFIELD (graphics), Developmental Learning Materials, One DLM Park, Allen, TX 75002

7. THE NEWSROOM (newsletter), Springboard Software, 7808 Creekridge Circle, Minneapolis, MN 55435

8. THE PRINT SHOP (graphics), Broderbund Software, 17 Paul Drive, San Rafael, CA 94903

9. QUICK CARD, (catalog card production), Follett Software Company, 4506 Northwest Highway, Crystal Lake, IL 60014

RESOURCES

1. A+, Ziff-Davis Publishing Company, One Park Avenue, New York, NY 10016

2. APPLE LIBRARY USERS GROUP, Monica Ertel, Apple Computer, Library and Information Services 32 AJ, 20470 Valley Green Drive, Cupertino, CA 95014

3. BOOKLIST, American Library Association, 50 E. Huron St., Chicago, IL 60611

4. THE BOOK REPORT, Linworth Publishing Company, 2950 North High Street, P.O. Box 14466, Columbus, OH 43214-0466

5. SCHOOL LIBRARY JOURNAL, R.R. Bowker Co., P.O. Box 1426, Riverton, NJ 08077

6. SMALL COMPUTERS IN LIBRARIES, Meckler Publishing, 11 Ferry Lane West, Westport, CT 06880

7. WIRED LIBRARIAN'S NEWSLETTER, #20 Congress Avenue, Sioux City, IW 51104
COPIES $7.50
FROM:
MMI MODEL LIBRARY
154 CENTRE ST.
FREELAND PA 18224

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USING THE PRINT SHOP
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