Going On-line at the Public Library: A Very Human Endeavor

Barbara L. Anderson and S. Joy White

The Forsyth County Public Library can now retrieve information and citations of pertinent sources from data banks in distant cities through computerized searching and a telecommunications network. We have extended our information services beyond the resources of the library's own collection to include well over two hundred online data bases that cover subjects ranging from business, environment, and demographic projections to AP and UPI wire service stories, education, psychology and export information. For now, we subscribe to the information retrieval services of two vendors, DIALOG and BRS. Our on-line service is free to our public.

Our library decided to go on-line first of all because of its premier information role in the community. Moreover, it is usually appropriate to try a new experiment, to take on a new adventure, at the library.

The Story

The county commissioners' approval of our on-line budget allowed us to proceed with the plan to offer on-line reference service to our community. The budget was necessarily drafted without knowing how much we would use on-line reference or which vendor or which data bases we would use most. It has turned out that in fiscal year 1985/86 DIALOG has billed us for just under \$5000.

We did not anticipate the costs of training and support literature like the DIALOG *User's Guide*, the *BRS Reference Manual* and data base thesauri. Our administration was able to provide funds for these absolutely essential expenses.

Our next step was to select computer hardware and software. The computer that met our needs and yet was within our price range was the Apple IIe. At that time we had the glimmer of an idea we have had little time to investigate: perhaps at some future time we could perform searches at the main library and display our work at the branches, via their Apple microcomputers.

Barbara L. Anderson is Reference Librarian, and S. Joy White is Head of the Business, Science & Industry Department of the Forsyth County Public Library, 660 West Fifth Street, Winston-Salem, NC 27101.

Also arguing for the "Apple" decision was the success of Apples in our library's public-use microcomputer project. The computer could always be used ultimately in a public-use setting. The Apple does the job as an on-line terminal with "downloading" capability. The cost of the Apple IIe with two disk drives, monitor, printer, and modem, with system saver and all necessary cards, was about \$2230.

Finding communications software compatible with the Apple IIe had its frustrations. It was difficult at the time, in 1983, to find librarians performing on-line searches with an Apple or to find much literature on using personal computers for searching. We found that the computer salespeople knew nothing about data base searching and could not advise us. Finally, we were advised that professionals at the University of South Carolina School of Library Science were using Apples for on-line searching. The School's librarian recommended ASCII Express Professional, which we purchased. The software handles all the details of accessing an on-line system, including dialing the telephone number and "logging on." The cost of the software was about \$130.

The vendors, DIALOG and BRS, offer many of the same data bases. We had planned to use them equally and attended basic training sessions offered by both. As we began performing searches, we found ourselves using DIALOG almost exclusively because of its greater offering of business data bases. BRS is adding more business data bases, but DIALOG is still the best source of business information.

We decided to concentrate on DIALOG. We found the differences between the two vendors' rules for searching would force each staff member to concentrate on learning one system well before attempting to become skillful at searching two systems. As we began trying to use the data bases, each search was a separate challenge and very time-consuming. We felt very much the need for further training, beyond the basic DIALOG system seminar, and were able to attend a three-day workshop at the University of Pittsburgh School of Library and Information Science for intensive DIALOG system training. This session gave us pro-

ficiency and confidence in using the DIALOG language. Going on-line no longer intimidated us. This does not mean that we knew everything about DIALOG or could omit careful planning before accessing unfamiliar data bases. Far from it! But we had made the first big step toward successful on-line searching, gaining a feel for the system.

Training sessions offered by individual data base producers are often free. In general though, training involves considerable cost. Usually, travel is required. The cost for the DIALOG basic system seminar is \$125 per person, for the BRS introductory session \$95 per person, and for the University of Pittsburgh three-day training session \$200 per person. The training is well worth the cost. Skilled searchers are not only more effective in finding the needed information but also more efficient in terms of time spent on-line, thus reducing on-line charges.

Our training continues here at FCPL as we try to keep current with vendor and data-base changes by reading as much of the vendor and data base updates as we can, by exploring new, unfamiliar data bases, and trying new search strategies on familiar data bases.

We have extended our information services beyond the resources of the library's own collection...

We began publicizing the on-line reference service only after the librarians were comfortable searching DIALOG. Six months after the February 1984 University of Pittsburgh training session, we began publicity with a brochure mailed to businesses in Forsyth County. The Chamber of Commerce membership list served as the basis for the mailing list. (Our new computer with List Handler software was used to prepare the mailing labels. The very same computer that we use for on-line searching is used by several of our librarians for reference support functions.)

Press releases were issued to newsletters of local associations—e.g., the Chamber of Commerce, the Better Business Bureau, and the Retail Merchants' Association. Bookmarks were distributed to all branches and displayed at the Main Library. Future publicity plans include posters and an article in the business section of the Winston-Salem Journal.

Public response has been slow. A few callers have wanted massive searches or have had otherwise unreasonable expectations of what online searching can achieve. A few farsighted callers have asked if we could display information on their office or home monitors. Even now, two years after we began searching at FCPL, most searches are initiated by the librarian.

Policy

Now, when to search? How much to search? For whom to search? Our points of view and philosophy evolved as we began our work with the new service. We drafted broad guidelines that reflected rigidity on only one point: our on-line service was to be an extension of our reference service. The spirit of our mission was clear in guidelines that have served us well through a wide range of situations.

In terms of our operations, this means essentially that we consider on-line searching when the information needed is beyond our print resources. Also, we consider on-line searching when traditional forms of searching would be unlikely to yield a good answer or would involve an unacceptably great amount of time.

When a patron *requests* a computer search, we evaluate the request, consider all our library resources and perform a search if the librarian judges the request appropriate for data base searching.

We do receive requests for data base searching that are in fact inappropriate for on-line retrieval. Some are completely inappropriate in terms of the subject content of the data bases. Some are impossible to translate into the "key word" format required by the computer. Perhaps bibliographical citations would be completely useless for the particular patron or situation. Certainly on-line searching is not magic nor the solution to every problem. Some individuals have requested an amount of searching that is clearly above average, thus making their requests inappropriate in terms of the basic mission of our on-line service, which, after all, operates on a fixed annual allocation.

The instances of inappropriate requests have been relatively infrequent. We can handle these requests well because we have other library services to offer, and we can refer patrons to other libraries for paid searches. We always give library service, whether or not we give a computer search.

Our Use of the Service

The on-line service is part of our Reference Department. Experienced reference librarians bring to the on-line searching knowledge of the full range of our reference services and bring to our traditional reference services knowledge of what computerized data bases have to offer.

Many libraries recognize the time and concentration required of a successful on-line effort by assigning to a librarian the full-time job of managing the service. In some libraries, on-line searching involves a separate department. These libraries make a strong point about the time commitment involved.

We believed at the outset and through our first two years of searching that making the online service part of the Reference Department was right for our library. If we gave up a little on the side of searching expertise, we gained terrifically on the side of quality reference choices. Certainly, we, as professionals who treasure the broadest possible work orientation, would not choose to be confined to only one area.

Most data bases offer information in the form of bibliographical citations. Occasionally, the abstracts are so full that the information need is met by the computer printout alone. It is usually the case, though, that the citations indicate enough about the full document that the patron can decide to pursue, with our advice, procuring the entire document. Sometimes it is available in our collection; sometimes we make an ILL request; if ILL does not seem promising or quick enough, the patron may choose to order the document directly from the data base producer for a fee. Other data bases offer their information in the form of directory listings, which we use quite frequently; and still others, which we have hardly used, offer statistical tables.

We believe our use of specific data bases, outside the special library setting, is fairly unique. Most librarians tell us they search ERIC and PSYCHINFO most. We suspect these would be favored in situations that meet many academic demands. We use business data bases, for short searches, often. Dun and Bradstreet Market Identifiers provides us a directory listing, including sales figures, that may be the only information other than an address that we can find on a company. Often the patron is overjoyed with the D & B directory listing. Trade and Industry Index, and the very current Newsearch give us descriptive news, beyond financial statistics. Again, it may very well be the case that this is the only information we can find for the patron. Electronic Yellow Pages, undergoing changes at the moment of this writing because of its recent acquisition by Dun & Bradstreet, gives us benefits equivalent to having yellow pages for every city and town in the U.S., and, of course, the information can be sorted in any way. The patron who wanted real estate firms in several sparsely populated North Carolina counties that our exhaustive telephone book collection did not cover could be easily served. And the Predicasts data bases are excellent for keeping up with new company developments, especially products, technologies, and market information. ABI Inform gives full abstracts on business concepts and often very practical information, for instance, the benefits and disadvantages of a telephone Centrex system. Each of the data bases mentioned has a toll-free number. The staff at Predicasts, ABI Inform, Dun & Bradstreet, and Information Access, producer of Trade and Industry Index and Newsearch, give excellent telephone advice on search strategy. This support is invaluable.

... our on-line service was to be an extension of our reference service.

Also, to meet requests for practical technical information the on-line service gives us the benefit of massive technical libraries at our fingertips. We were surprised to find that we did not have to be technical geniuses to provide this kind of information. (And again the data base producers give priceless support.) One patron wanted all the particulars on extracting precious metals like gold and silver from scrap metal. The Metadex data base turned this into a very manageable request. A local businessman needed to study the economic advantages of variable speed motors in a manufacturing setting. The Compendex data base, an Engineering Society product, turned this into a request filled by the local public library.

Subjects we are hard pressed to find in print indexes are possible on-line because of the computer's ability to search for any word or combination of words in the bibliographical record, whether or not these words are official subject headings. A request for the most recent information on Hopi Indian recipes is easily filled with an on-line search.

The on-line ability to manipulate numerical data in all possible ways brings us quick answers to extremely difficult questions. We can easily find that there are 1.677 companies in North Carolina with sales of at least ten million dollars. Also, we can find that zip code area 27612 in Wake County has the highest quality of life score of any area in North Carolina.

A local attorney was looking for information, a few days after the fact, on a California Supreme Court reversal of a conviction. It was still too early for the legal reporting to be available at the law libraries. The day after the news is reported in the respective media, the public library has access to the full text of the AP and UPI wire service stories, as well as the bibliographical citations to the New York Times or Wall Street Journal articles, and in a day or so more, we can provide bibliographical citations for the Los Angeles Times, Washington Post, and Christian Science Monitor articles. The on-line service gives us a degree of currency we could only achieve otherwise by daily reading of major articles in these newspapers. Although not as dramatically current as the news data bases, other on-line data bases are significantly more current than their print equivalents.

We have available to us on-line data bases like *ABI/Inform* that have no print equivalent. Also, Predicasts' *Regional Business News*, a new data base of locally written articles from regional newspapers and business magazines is available only on-line.

The *BIP* and *LC Marc* data bases give us tremendous bibliographical capabilities. If we are asked to find full-length books on starting a travel agency, or to produce a correct book title and author with only the benefit of a garbled title, we have information power.

The on-line service allows us to create special reference sources. The *Donnelly Demographics* full record on Forsyth County (or any geographic area down to the unincorporated place), a neat packaging of census data with 1985 estimates and 1990 projections, is a new source of demographic information. The *Disclosure* search for all the publicly-traded companies in our area, by stock exchange, is a valuable reference tool.

The on-line service brings us the benefit of print resources we could not afford to purchase for our collection. Our library has, through the years, purchased the Moody's Manuals instead of the Standard & Poor's Corporation Records. We now have on-line access to the Corporation Records and can, for a small fraction of the cost of purchasing the set, provide the Corporation Records data, when needed, for our patrons. For reference works that would be used only infrequently by patrons, on-line access can easily take the place of purchasing the print edition. In some libraries, having on-line access to the Foundation Directory, the American Statistics Index, or the MLA Bibliography would be more than sufficient.

We perform about fifty searches each month. We have chosen for this writing some of our interesting uses and some of the benefits of computerized searching. Next year's list of examples would probably be somewhat different. We are always

learning new ways to use the on-line service.

There is the potential for abuse of the service. We are not completely comfortable with performing free on-line searches for consultants or information brokers who would be charging other parties for their services. Even in our regular reference service, this is not a situation that we enjoy—i.e., to provide information for someone else's paid information agent. However, it does seem to us that in the case of the on-line service, which so obviously costs dollars by the minute and involves a considerable amount of staff time, one needs to hesitate and assess. These requests may be completely out of bounds.

Time is a tremendous problem. The fact that we are on-line for just three minutes in a typical search is hardly expressive of the time commitment involved. Each search involves considerable preparation time. Deciding whether or not to go on-line, deciding on the proper data base, framing the request in the "DIALOG" language, often calling DIALOG or the data base producer for advice, explaining the results to the patron, and explaining options in securing entire documents, when appropriate, all add up to much more than three minutes. And, as we have said, time required to learn the basics is considerable. Ultimately, time, in the form of hours and days of manual searching, is what you save by computerized searching.

A problem accompanying any library's new on-line effort would be not knowing answers ahead of time. This applies to small details as well as the big picture. It was very difficult for us, ahead of the event, to make the right hardware choice, the right software choice, to guess at online costs per month. How could one know how much time it would take for librarians to learn, to be comfortable? How could one know what role the new service would assume in a library? Would on-line reference be part of the background that is taken for granted or a major show in itself? We believe this last problem is truly an opportunity. We would advise librarians considering on-line information retrieval to be open to whatever unique role the on-line capability takes on at their libraries.

Even now, ... most searches are initiated by the libraries.

Elements of our Success

The flexibility we have brought to our on-line decision making as well as to our use of precious time, now allocated among an even greater number of jobs, has been extremely important to the success of the operation. We have been able to evaluate special circumstances and make decisions consistent with the spirit of the project. If a patron needs an expensive search, which would turn out to provide us with a new reference source for future inquiries, then we would probably decide to perform the search. We did not spell out at the outset the position on-line searching would have at our library. Not knowing what lay ahead of us, we wisely avoided hard and fast prescribing.

We gradually integrated on-line service into traditional reference service. The formal publicity effort has been slow. We found that we had to absorb a changed work environment, understand a new range of options, and make significant adjustments. While we did this absorbing and adjusting, we needed to convey to our public on a one-to-one basis, with enthusiasm, the purpose of something they hardly understood. The slow approach was the right appoach.

Our on-line service is free to our public. Surely, this is one of its most special qualities and, we believe, a large part of its success. This allows the reference librarians to try the on-line option whenever it seems an appropriate way to meet the public's need for information. On-line data base searching is just another way to find information at the local Public Library.

The fact that the Library absorbs the cost of the searches has made all of us in the Reference Department clear on the basic mission of the service. It is not the vehicle for amassing all possible references for someone's research paper. It is not a proper research tool to serve the same individual continually. It is a powerful tool in the public library's information service to the community.

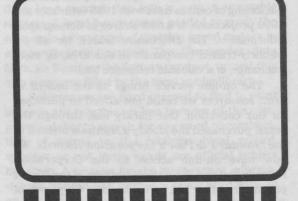
Our judgment is a key factor in the use of the service; if patrons were paying, this would not be the case. It seems to us that our use of the on-line service is the most professional possible. The reference librarian, who may sometimes consult with other librarians in the department, with DIALOG, or with the data base producer, decides whether or not to perform an on-line search.

On-line service, for a very reasonable fee, is offered at other libraries in the Triad area. We know we are fortunate that this is part of our library environment. If someone needs to have printed out every citation for his dissertation topic, all the companies with sales over one million dollars in several states, or all foundation grants involving churches and youth, his need can be accommodated nearby. The relationship between the libraries in Forsyth County is friendly.

The other libraries are delighted to know they can advise inquirers to call us to discuss their information needs and the possibility of on-line searching and we are delighted that we can refer search requests which are inappropriate for the public library, to other libraries.

At our library, the on-line service enhances traditional reference services. Our regular reference work and our on-line work complement and strengthen each other. We would not choose to make the on-line service the major focus of the Reference Department nor permit it to diminish in any way our regular reference services and all related activities.

Now that we have made our initial investment in hardware, software, introductory training sessions, and learning time, we are earning dividends. Certainly, there are hidden dollar savings in print sources that now need not be considered for purchase. Our on-line information retrieval brings to our public an information capability that is not possible through traditional searching. The computer printout we present the patron usually represents huge time savings. Our on-line reference service brings to our patrons the benefits of massive collections of periodicals, reports, and documents that our library could not possibly house and index. Certainly, our position as our community's information specialists has been enhanced.



Terminal
Happiness
Computer
Know-How