An Examination of the Role of Reference Librarians in the Light of New Technology.

The implementation of a wide range of CD-ROM services in the California State University (Fullerton) libraries is described in this report. The three-part CD-ROM "Master Plan" outlines the library's fundamental technological goals—i.e., to offer university-level technologies, to develop a CD-ROM end-user facility with ample resources and opportunities, and to use lottery funds to explore CD-ROM technologies. The 17 CD-ROMs and accompanying services that were rapidly introduced within a 1.5 year period are then discussed, including major issues faced during that time. Suggestions are offered for establishing a management system to allow end users to access the technologies with minimal supervision from library personnel. These suggestions include: (1) placing workstations requiring the most librarian assistance closest to the reference desk; (2) setting up written procedures and dividing tasks—e.g., turning the machines on and off, changing paper, ink, and disks, etc.—among staff; (3) equipping workstations with signs, user aids, sample searches, a paper index and thesaurus, and sign-up procedures; (4) incorporating CD-ROMs into regular bibliographic instruction sessions; (5) cultivating an expert end user by producing advanced documentation; (6) roaming the CD-ROM area during peak times to answer questions; and (7) keeping statistics and means for program evaluation. (SD)
An Examination of the Role of Reference Librarians in the Light of New Technology

by

Mona Y. Kratzert

12 November 1989
Since 1984 when CD-Roms first began to emerge, reference librarians at California State University, Fullerton have followed this technology with interest. For several years, we have operated an active mediated computerized information retrieval service, and we had discussed the possibility of an enduser component. For various reasons, this service never got up and running; so we began looking to CD-Rom products as an alternative to online enduser service.

Shortly after InfoTrac became available, we acquired this product along with four workstations. We found that library patrons loved the system. In fact, InfoTrac was so popular that some students refused to use anything else and some faculty members thought it was state-of-the-art technology. Most reference librarians did not agree; objections focused on the lack of sophisticated searching techniques, the indexing methods, the short time span covered, the large number of technical trade periodicals indexed, and the subscription price. However, we were impressed by InfoTrac's reception. We could understand the library user's need to retrieve and print rapidly data that previously required multiple searches through a number of indexes accompanied by laborious manual notations.

At this point we made the decision to establish a CD-Rom program. Our goals were to provide services that further the access to information and to teach library users the most current methods of information literacy. What we later referred to as our CD-Rom "Master Plan" had these components:

1) That we offer university-level technology.

2) That we develop a CD-Rom based enduser facility with all necessary resources and ample opportunity for experimentation by us and our patrons.
3) That we use lottery funds to explore this emerging technology and work out various scenarios for future funding.

We submitted two lottery proposals which were funded for a rather substantial sum of money necessitating a much faster acquisition plan of hardware/software than we had originally conceived. Thus, we pieced together what would be our final offerings quickly and somewhat erratically, it might appear to the casual viewer. We obtained 17 CD-Roms within a period of one and one-half years.

Based on observation and a review of library literature, I have not witnessed academic libraries rushing into the mass adoption of CD-Rom technology. Hesitation is based on subscription costs of these products and anxiety over their best location in a library as well as space required for the equipment, cost of supplies consumed by the equipment, and wear and tear on the library staff.

In our case, commitment and cash swept us into a very active CD-Rom program even before all the planning was completed. One of the major issues we faced at this point was the fact that a library setting up such a program must deal with pressure to continue development and availability of this service. Users react to CD-Rom products with enthusiasm and will demand both continued access to those they come to depend on and also an even greater variety of products.

Primary to the planning of an enduser program is the location where it is available. We decided to place all CD-Roms out in a large open area adjacent to the Reference Desk in close proximity to the paper indexes they complement. Our philosophy is that these resources should be clearly visible and accessible with minimal restrictions. Because our
goals were expanded services and educational opportunities, we expected our choice for location of workstations to encourage patrons to ask for help whenever they needed it through the process of a search. We believe that placing paper and machine-readable indexes together integrates these sources. Librarians can assist students in determining the best approach to indexes by analyzing research requirements.

Although we did not plan all this, we made several discoveries about the visibility of CD-Roms. No matter how much you publicize a service, people who do not experience it do not have a clear conception of what it could mean for their research. Our experience has been that the visibility and availability of hands-on technology seems to advertise to library users, especially students, that the library is not a relic but an up-to-date institution. The same students who consider the Social Sciences Citation Index complicated and tedious will expect to invest learning time in computer resources and not even resent the complications. Different search languages and approaches, a spectrum of user-friendly systems, problems understanding the full range of options offered by a system, and so forth – these matters are weighing heavily upon librarians, not endusers. The installation of CD-Roms has brought students and faculty into the library just to find out about our wonderful new "information technologies" described to them by a friend or colleague.

Of course, the greatest challenge in establishing a CD-Rom area in a Reference Department is the integration of this service into your Reference Desk service. We planned to have a complete enduser facility with user aids, formal user training, and an expert staff to assist but we certainly did not begin with these components. We received many of
our databases simultaneously and at the busiest time of year. When word gets out that a new database is in, there is pressure from inside and outside the library to get it up and running before we ourselves have mastered the system but we found patrons very patient as long as they could have access to the database.

Developing user aids needed to save staff time was also problematic. Besides requiring a great deal of time and perhaps a specific person whose job this is, these guides actually require technical writing skills not included in most librarians' training. We discovered that user aids must be carefully produced and coordinated with help screens. They should serve as a supplement or quick reference guide to help screens. Included should be stepwise "how to" or command information, an explanation of the database, and some simple information on the logic of searching.

While setting up our CD-ROM program, we suddenly began to wonder who had primary responsibility for training anybody; serving as a liason with vendors; seeking guidance in the resolution of equipment, disc, and software problems; installing and testing software; turning on and off the machines; etc. We found that we had to start matching staff to tasks. What we needed but did not have was a systems librarian to coordinate and monitor our CD-ROM installation. However, one of our reference librarians is a microcomputer expert and he took over all technical aspects of our operation. Someone with these skills is a necessity to your program.

In a short period of time, we came to establish the following system of enduser management so as to interfere with regular service as little as possible.
1) Placement of workstations is important. Those needing most librarian assistance should be closest to the Reference Desk. We also group by subject and system.

2) Set up written procedures for turning on and off machines, changing paper, ink, and discs. Decide whose tasks these are.

3) Each workstation should have signs indicating the system, user aids, sample searches, a paper index and thesaurus (if appropriate), and sign-up procedures (if necessary). We keep lists of journals indexed by any CD-Rom database at the workstation and check our holdings to mitigate user frustration and to allow limiting a search to periodicals in our library.

4) Incorporate CD-Roms into regular bibliographic instruction sessions. Offer CD-Rom classes. Students having problems searching and requiring a lot of help should be encouraged to make appointments with librarians to learn or work on strategies.

5) Cultivate an expert enduser; our target for this population is upper division or graduate students and faculty. Produce advanced documentation for this group. Send every scrap of documentation you can find or produce to appropriate faculty. Our experience has been that they will read it and pass it on. Become an expert consultant. You will save a lot of time doing online searches.

6) If you have the staff, roam the CD-Rom area during peak times to answer questions.

7) Perhaps most helpful of all is the belief that enduser training
is necessary, important, and every reference librarian's responsibility.

8) Keep statistics and means for program evaluation.

Conclusion:

We have experienced most positive results from our exploration of new public service technology in the Library. Our CD-Rom program has enabled us to offer computer-assisted searching to a large number of library patrons. We have seen user sophistication increase and include requests for remote access to other institutions' resources and even access to national databases. Our plans for next year include the development of a Local Area Network or LAN for the CD-Roms in Reference. Our lottery proposal for a LAN has been funded. This will allow most databases to be accessed from every terminal and will also allow more than one user to access a unique database at one time. In addition, we are considering a charge-back system for printing; expansion of our CD-Rom holdings; expansion of our user education program; a CD-Rom user study; and a proposal to cancel some paper indexes that the CD-Roms duplicate. Excited by our accomplishments to date, we hope to continue learning, developing, and adapting new technological advances which increase the quality of reference service.