Online Reference Tools in Research Libraries

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Online bibliographic databases have been used in large academic libraries for well over a decade now and closer to two decades in a few, privileged locations. For the better part of that time, however, online searching was treated as a separate, specialized activity. Bibliographic utilities were searched in technical services areas; public services staff were offered access at scheduled times, a few days a week. The searching of commercial, vendor-offered online databases was from the beginning seen as a public service activity, but one quite different from "traditional" services. Online searching was often a separate unit, housed apart from existing public service points and staffed by "experts" — or more typically, one sole expert.

Many libraries have moved far beyond these tentative beginnings. There is a general awareness that bibliographic utilities are useful in direct patron reference assistance. Most libraries have integrated the online searching of databases offered through DIALOG and other commercial vendors into units that assist patrons with other reference tools: reference departments, departmental libraries, undergraduate libraries, government documents departments. The literature offers many examples of articles urging and chronicling these changes.[1]

At Indiana University, Bloomington (IUB), we have suffered through some of these false starts, though not all. We have at-

tempted, in the last few years, with the active encouragement of new administrative leadership, to work toward the goal of full access to a great variety of useful sources of online information and to integrate those services into our existing ones. While a central theme of these comments is the undesirability of dividing and separating such services, for purposes of discussion, we might address three kinds of online services in turn:

Commerical Databases

Separately housing and staffing online search services is one way to separate such activities from other reference services. Another and even surer way of achieving the same effect is to charge for services. Librarians discuss at length and with great passion the ethics of such charging policies, especially the effects on different classes of users. Librarians also discuss the administrative implications of search units, especially the effects on staffing patterns. But, librarians agree that in charging for such services we identify them as belonging to that small number of services which are special, separate, somehow not quite a standard part of our service responsibility. As searching responsibilities in large academic libraries broadened, however, and were no longer the exclusive province of one or two librarians who might do nothing but online searching, discomfort with this view grew. One result of this growth was the phenomenon of "reference searching": online searching used to find the answer to a specific reference question. This, it was commonly acknowledged, was a type of searching for which we should not charge. Librarians sought guidelines for this new kind of searching. Pioneering in this process was Gertrude Foreman of the University of Minnesota's Medical Library.[2] At IUB, we developed our own guidelines, following Ms. Foreman's lead, and they have largely served us well. Many librarians can give examples of the bibliographic citation so scrambled that only a computer could unscramble it, the jargon phrase impenetrable through printed indexes and quickly transparent with the aid of the computer, the request for information from the President's office that might have taken half of a librarian's day and instead took fifteen minutes.

Having written guidelines has been helpful, indeed essential, in clarifying our own thinking about the appropriate occasions for such "reference" searches and in justifying our judgments to patrons. This was an area we worried about considerably at the beginning. What if a student came back expecting or demanding a search on an inappropriate topic because an earlier appropriate topic was handled as a "reference query" by a librarian? During the first year, few such instances came up and we may have grown a little complacent. We

are now faced with such expectations (almost never "demands") and the guidelines help us justify our judgments. As we do more and more online searching, we are increasingly aware of the savings in time and annoyance as compared to printed indexing options and we are finding the guidelines increasingly less sturdy. It is becoming more difficult to see clear boundaries between a "reference", i.e., subsidized search, and a "regular" fee-based search. Take as an example a student who is looking for information on a topic that combines two subjects. The librarian's educated guess is that the student will need to spend several hours and that there may be very little, perhaps nothing, in standard indexes on that topic. Should a fee-based search be discussed? Should a "reference" search be done? Fortunately, most occasions are fairly clear, but not all. We are struggling with these issues, attempting to refine our guidelines but always recognizing that the individual librarian's judgment must be the final arbiter.

A common frustration with database searching is that databases do not contain material in all relevant formats and that they are not sufficiently extensive, i.e., retrospective. To deal with this frustration, we have been turning in the last two years to another source of online information.

RLIN and OCLC

Research in many disciplines requires knowledge of only the most recent work. Often these are disciplines whose principal literature is found in journals. Many of these disciplines are served well by commercial online databases. For others, this is not the case. Historians and literary scholars — to name two — need access to book level information. For such access we have found the RLIN (Research Libraries Information Network) database very helpful. RLIN, unlike OCLC, can be searched by subject using Library of Congress subject headings. A search of RLIN can identify items that are new even to faculty members who have spent many years compiling bibliographies. RLIN is a database especially rich in foreign language material and it contains many difficult-to-find items held by only one or two libraries.

RLIN has proved useful in solving many bibliographic problems but we turn to OCLC first when we have bibliographic inquiries. Without a doubt, OCLC is the single most important reference tool we use (many librarians remark that the worst problem with working on a Sunday is that OCLC is down), but it is not all things to all problems. RLIN can be searched not only by subject but also by title phrase, title word, corporate word and corporate phrase. These

approaches often can be used to identify an item which is in fact in OCLC but which could not be retrieved with OCLC's search options. OCLC and RLIN are complementary in reference work and allow us a much greater range of choices in addressing a given research topic.[3] There are other sources of online "library" information in addition to RLIN and OCLC; these offer still other important options.

Library Databases from the Library of Congress, University of Illinois and Northwestern University

Access to each of these databases is now available to us at IUB through   arrangements with the libraries involved. Each database offers another search strategy, another segment of the bibliographic record, and another important tool with which to perform our work and serve our public.

IUB is working with the Library of Congress in the National Authority Cooperative Project (NACO). For this reason, we are allowed access to their databases. There are several databases and each has a different application. MUMS (Multiple-Use Marc System) is the database most used by our colleagues in technical services. As its title implies, it includes full, tagged MARC records. Its unique feature is that any MARC field can be searched. For example: a student was trying to sort out the activity of two very small presses with similar names. MUMS allowed a search on the publisher's name. Another important feature which MUMS offers is access to Library of Congress cataloging before such records are tape-loaded into the bibliographic utilities. We also have access to SCORPIO (Subject-Content-Oriented-Retriever-for-Processive-Information-Online),   an online catalog designed for users with little or no experience and whose command structure is much simplified.

The Library of Congress databases also include several of interest to our Government Publications staff: the Legislative Information Files which give the status of current legislation and can be searched in many ways, including by the sponsoring legislators' names. Yet another, the Bibliographic Citation File, selectively lists periodical articles, pamphlets and U.S. Government and U.N. publications for the current and preceding two years. Our access to the Library of Congress is a benefit earned by the contribution of our technical service departments. Access to the online catalogs of two major research libraries is due to the cooperative, outward-looking spirit of the administration of those libraries.

IUB has purchased a copy of the software which allows access to the databases of the University of Illinois, Champaign-Urbana. LCS is a short record circulation system which contains location information for nearly all items ever cataloged on the Champaign-Urbana campus. FBR (Full Bibliographic Record) is a database which contains a complete bibliographic record for most books cataloged by the university since 1977. We also are allowed access to Northwestern University Library's online catalog, NOTIS. NOTIS is a very user-friendly system which can be searched in a variety of ways.

Illinois is a member of OCLC and Northwestern is a member of RLIN. IUB has access to both utilities. What then, one might ask, is the importance of this kind of access to the databases from Illinois and Northwestern? One benefit is that of varying search options which allow easy location of an item in one system which would be unretrievable in another system. Also, some online catalogs (the University of Illinois database is an important example) contain information on greater proportion of a library's holdings than are in OCLC. In practical terms, the interest and use we have seen so far comes primarily from students and faculty in disciplines which have great strength at Illinois and Northwestern and similar strength at IUB: Slavic Studies (also strong at Illinois) and African Studies (also strong at Northwestern). Several students planning research visits to Illinois have found it very useful to search LCS or FBS to see if Illinois has the titles they wish to examine. Students and librarians in African Studies find direct access to Northwestern's great collection in that field a real benefit. IUB is now planning its own online catalog and will consider the example that these libraries have set by allowing neighboring universities access to information on their collections.

It may be helpful to touch on several practical considerations at this point. In order to facilitate the integration of these services, we have found it important to consider the following:

1.   Staffing: All professional staff at a given service point   or departmental library should be involved in searching. If they are not, two problems must be faced: an unequal level of immediate service depending on who is scheduled at the service point, and inequitable burden placed on those who do search. Ideally not only should the professionals be involved in such activities, but all who directly serve the public, including support staff and student assistants. (Many are involved at present, of course in, searching one or two systems, OCLC in our case at IUB.) That ideal of full participation is harder to realize, however, as long as no system standards exist

and as long as the online costs involved are so high. The require-
ment to perform in a constantly changing environment is speci-
fically a professional expectation and one which by definition
should not be imposed on non-professional staff.

2.   Equipment: It is also critical that physical access be incorpo-
rated into the service point itself. Online services cannot be
integrated with others if the equipment that is used for search-
ing is located away from the service point, if it is locked up, or
if the equipment is inadequate. At present, we have at the
reference desk in the Main Library at IUB an excellent terminal
with a VDT and a built-in printer which allows reconfiguration
of the terminal settings from the keyboard. The latter is a
matter of considerable importance since many of the systems
require different terminal configurations. The terminal can
stay on all day and we can use any one of a number of systems
without leaving the reference desk. (An IBM-PC in another
location provides privacy and the features needed for more
extensive, fee-based searches.)

3.   Record Keeping: Because substantial costs are involved, fairly
detailed records are kept on online searches. In order to facili-
tate reference searching, it is essential that only a bare-bones
minimum of records be kept. If a search to verify a citation
can be performed in three minutes and the searcher must
then spend five minutes recording data concerning the search,
procedures should be re-examined. In addition, most of the
record keeping, bill analysis and approval, and statistical
compilation should be assigned to a support staff member.
Work must be divided so that librarians are able to devote
their time to the tasks for which they have been uniquely
trained.

We should recognize that the opportunity to search so many
different systems sometimes seems a mixed blessing to those who
do the searching. The ability to approach a question in several
different ways means that one must learn several different systems.
Each system has its own search structure and commands. Too
often one system may use the same command or symbol as another
but with a contradictory meaning and effect. Librarians have
expressed the fear that learning yet another system may lead to
"system overload." The flexibility, concentration, and intellectual
curiosity required are considerable. It helps to approach online

systems the way we have always approached reference books. Few librarians open each reference book remembering all the options it presents, the special indexes, features and approaches it includes; we open the book and examine it. Similarly, with online services and online catalogs it is unrealistic to assume (and unfair to expect) that anyone can retain all the features and options of many different systems. We must study documentation, practice, and then accept some errors and false starts. The clock is always ticking in the minds of most searchers when they are online in a way that it is not when they are using a printed tool. That is unavoidable. That awareness, however, can become debilitating if it is too intense.

We are now offering reference access for our patrons to all the sources discussed here without a fee, as part of a "baseline" service concept we are working to develop. IUB has large, important printed reference collections built over many years and these collections represent much work and a financial investment. In a sense, we are now trying to develop a complementary *online* reference collection. We are working toward a truly integrated collection, one which will offer as alternatives the National Union Catalog, OCLC and RLIN. We have an extensive collection of printed book catalogs ("G.K. Hall Catalogs"), including those of specific collections at Illinois and Northwestern. We can now offer in addition access to the online catalogs of those two libraries. We have contracts with six vendors of online databases and we are continually evaluating and adding new services. Most of the databases offered through those vendors are available for searching in print when that approach is satisfactory and appropriate. Other databases are only available online and have no printed counterpart. As librarians, we are fortunate to have the opportunity to make these choices and to meet these challenges. We believe the academic librarian will remain the principal guide to the best source and best approach for any given research problem — whether that source is in print or online.

FOOTNOTES

1. One of the best is: James M. Kusack, "Integration of On-Line Reference Service," *RQ* 19 (Fall 1979): 64-69.

2. Gertrude Foreman, "Reference Database Use," *BRS Brief Paper Series* 1 [1978?].

3. A very useful introduction, comparing the two systems is found in: Julia E. Miller, "OCLC and RLIN as Reference Tools," *Journal of Academic Librarianship* 8 (November 1982): 270-277.