

# LJ INFOTECH □ ONLINE DATABASES □

BY CAROL TENOPIR

## Database Use in Academic Libraries

**LIBRARIANS INFLUENCE** which databases are used in a library or through that library's web site in a variety of ways, both subtle and not-so-subtle. While selection decisions are the most important, since users rely on libraries to subsidize the costs and make commercial databases accessible, the librarian's influence doesn't end there.

Most libraries now offer dozens, even hundreds, of online databases. Why does a user choose one over another? The answer is not so easy to find out and is not as clear-cut as you may think.

Recently I asked public and academic librarians to speculate on what influences their constituents when choosing an online database to search. This month's column relates the results from academic libraries; next month I will focus on public libraries.

Staff from 58 out of 100 randomly selected academic libraries answered my questionnaire, ranging from community colleges to large research universities. In most cases, the questionnaire was completed by either the head of reference, the electronic reference services coordinator, or the head of systems.

### Content is most important

All academic librarians rated content factors as the most important, with both usefulness and quality of content as having either some or great influence. Usefulness is most important, with nearly 85 percent of respondents saying it has a great influence on database choice. Quality of content—if the database is well organized—was rated of great importance by 60.3 percent of the academic librarians. Clearly, academic librarians consider content at the top of collection development decisions.



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Uniqueness, which encompasses lack of other databases and of print resources and could be considered an aspect of content, was also rated by many librarians as an important decision factor. Over 86 percent of the respondents cite lack of other online databases as an influence. However, lack of comparable print resources less often influences use; a third of the librarians say lack of print resources has no influence on database choice, and only a fifth believe it has great influence.

**TABLE 1: ACADEMIC LIBRARIANS RESPONDING TO QUESTIONNAIRE\***

| Academic Institution               | % of Respondents |
|------------------------------------|------------------|
| Associate of Arts Colleges         | 12               |
| Schools of Business                | 5                |
| Baccalaureate Colleges             | 14               |
| Master's Universities and Colleges | 38               |
| Doctoral Universities              | 12               |
| Research Universities              | 19               |

\* Based on Carnegie Classification of Academic Institutions

However, those at smaller institutions (community colleges, business colleges, and bachelor's degree colleges) are more likely to rate lack of print resources as having some or great influence on database selection.

### Convenience is next

After content, academic librarians cite convenience as the most important influence on end users. Availability of remote login was rated as having a great or some influence by nearly all the respondents. Almost as many cited the number of workstations in the library.

Two-thirds of librarians believe that the number of hours the library is open has some influence on database choice, and over half think the location of workstations has some influence.

The price of a database now often has only an indirect influence on end users, since most libraries do not pass on the costs for mainstream online access. Nearly half of these academic librarians feel pricing has no influence

on end users' database selection. But community college librarians cited price as a factor far more than did university librarians.

### Choosing wisely

I also asked librarians to speculate on "why people use a particular database or not." Once again, content and convenience emerged as top factors. Some respondents are sanguine about their users' motivations and abilities to choose wisely. One librarian from a medium-sized college wrote:

I think the main reason a person uses a database is because it provides adequate information for his or her needs. For instance, if they require scholarly literature in the fields of psychology, they will use PsycINFO. On the other hand, if what they want is a full-text article online in the area of psychology, they will settle for a database that is broad in scope, such as Expanded Academic Index, which has full text online. In either case, the information fills the user's requirements.

This may vary with the level of the user. For example, in one university, "many first-year students will use a...database because of [its] ease of use. They are uncritical users unaware of the variations in content. More experienced students and faculty use the databases relevant to their area of inquiry."

### Getting referrals

Others believe that while users want to select the most useful database, they don't always know enough to do so. In these cases, good recommendations are important; peer recommendations may be crucial for college students. Many respondents echoed one librarian's explanation that students "tend to base choice on peer influence (friend tells them what to use, whether it is best or not) rather than the right database for the information need."

Sometimes instructors refer to a specific database for a course assignment or recommend relevant sources.

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One librarian from a college that offers master's degrees draws a distinction between traditional and nontraditional (returning) students: "Many returning students are not aware of the variety of products unless the instructor has directly mentioned them in class."

When instructors recommend products, students generally seek them out. Often those products are subject

this library "provided instruction to 346 classes, and they all contained instruction in online sources."

All but one of the 58 librarians in this survey emphasized database selection in their library instruction courses (that one has temporarily suspended all library instruction due to lack of staff). These courses may be a formal one-credit course taught by librarians, part of

a required freshman English course, part of subject courses, or one- to three-hour database instruction sessions. Most academic libraries, regardless of size, regularly offer several of these options. One library saw its usage statistics triple for a particular online system after it was promoted to faculty and also in a separate instruction class.

Instruction goes beyond the face-to-face

encounters in classes or the reference room, especially for remote users. Print user aids, newsletters, fliers, signs, web pages, online user guides, and help screens are all part of online instruction.

## Familiarity takes over

Though recommendations may point to an initial database choice, after that, familiarity often takes over. If students have had success, they are likely to select the same source again, even if "its use in this instance may or may not be appropriate" (according to a small college librarian).

Past success makes a source or system easier to return to, and nearly all of the academic librarians surveyed commented that factors relating to ease of use influence database selection. Though most did not elaborate on that, a few did, citing intuitive commands, Windows or web versions, a simple interface, natural-language searching, easy printing, ease of navigation, clarity of output, simplicity and elegance of search features, and a source that is easily reached.

What students or faculty members see when they sit down to search their library's online system will vary, but almost all academic libraries these days support web access. Many have a central library web page that leads users to the online catalog, some reference

databases, and other web sites. To access reference databases, a user typically must page through several screens.

Even if a library doesn't design the search system for its commercial database products, databases can be made easier to use. A library web page that leads users to useful resources in as few steps as possible may have a dramatic influence on database usage. When one library "had an accidental link to FirstSearch on our homepage, we were using tens of thousands of searches per term. When we moved it back a page, so that only those who were really looking for it got to it, the usage dropped significantly," wrote one respondent.

Products listed first on a menu get more use than those further down, and links from class web pages to online resources encourage repeated use. Ease of use also includes the convenience of accessing online resources from dormitories, offices, and homes.

## Full text trumps all

Despite other cited factors, the most important is the availability of full text, which was cited by almost all respondents. According to one librarian from a small college, "Students expect to see the full article pop out. Also, full text greatly enhances our own, small collection." Another explained that "the concept of one-stop information shopping is an important factor in using any electronic information resource."

Full text often overrides all other factors, in particular for undergraduates. Librarians who trust users to pick the best content sometimes change their opinion when full text is the issue. And, increasingly, not just any full text will do. One librarian summarizes the new expectations: "End users want full text, preferably with graphics, and they want it delivered over a web interface that provides the flexibility for a variety of output and access options."

Academic librarians influence database choice in direct ways such as instruction, recommendations in reference encounters, and user aids. Indirect ways may be just as important. In the final analysis, good choices by librarians help users make good choices. Database products that combine quality content, intuitive interfaces, convenient access, and full text will be the first choice for both librarians and students.

**TABLE 2: FACTORS INFLUENCING DATABASE USE IN ACADEMIC LIBRARIES**

| Factor                       | Some Importance | Great Importance |
|------------------------------|-----------------|------------------|
| Number of workstations       | 44.8%           | 43.1%            |
| Location of workstations     | 58.6            | 20.7             |
| Hours the library is open    | 66.7            | 17.5             |
| Availability of remote login | 52.7            | 43.6             |
| Usefulness of content        | 15.5            | 84.5             |
| Quality of content           | 39.7            | 60.3             |
| Lack of other databases      | 60.3            | 25.9             |
| Lack of print resources      | 46.6            | 20.7             |
| Pricing option               | 37.7            | 15.1             |

specific (such as BIOSIS, SocioFile, or PsycLIT), while databases recommended by peers may be more general sources such as Academic Index.

Most respondents consider a librarian's recommendation to be very important, though it's hard to reach a large proportion of students and faculty. A database demonstrated in instruction classes or English 101 will be selected if students remember it. For those students motivated enough to ask at the reference desk, the recommendation of a specific source is believed to be very influential.

## Teaching them early

Some academic libraries place tremendous emphasis on this important role. One small college library does "extensive orientation (all freshman) and instruction (all students taking required critical thinking sequence) and demonstrate all relevant databases at all of these sessions."

A librarian at one medium-sized university described its "information/computer literacy requirement for graduation, which includes demonstrating competency in the library catalogs and online databases. We provide instruction to all English 101 classes in searching databases and to classes that need subject-specific instruction to using selected databases." In one year alone,