



## ONLINE DATABASES

# Can Johnny Search?

By Carol Tenopir

FEDERATED SEARCHING SEEMS obvious in the age of Google: students, faculty, and the public have what they've come to expect—a simple search box for one-stop shopping for information. Of course, the unique bells and whistles of each system get lost in the process, but for most users, that's better...or is it?

The jury is still out on federated search systems, even though more libraries now have them. There are murmurings that federated search has lower-than-expected use and may not be the magic search bullet we were led to believe.

### Selling the vision

Lynn Lampert (Oviatt Library, Cal State–Northridge [CSUN]) recently conducted three studies—a survey and focused discussion of librarians and a survey of CSUN students—to consider attitudes and experiences with federated search. Lampert found that many reference and instruction librarians aren't sold on the concept and don't push it to students and faculty.

Lampert only got 33 responses, but a majority indicated they don't teach federated searching, either because they do not have or no longer have a system in their library or have a system but choose not to include it in instruction. Librarians told Lampert that the loss of controlled vocabularies and specialized features of individual databases (such as the ability to limit a search to peer-reviewed journals) are a disservice to users and federated search systems “reinforce a Google-like approach to searching” that promotes poor search habits.

Since not all library databases are available on the federated system, their use may not promote the best resources for a particular discipline. Librarians in Lampert's studies also are suspicious of the precision and recall achieved in federated searches. Finally, some librarians feel it is too time-consuming to teach in the standard 50-minute undergraduate instruction session.

### Marketing to happy users

Considering what librarians are saying, it is no wonder that many students and faculty are still unaware of federated search capabilities. Yet, even when librarians educate them, they may not be quick to switch habits. According to Lampert, “federated search, even when well marketed, is just one additional choice on [students'] cluttered screens.” They may “not see the benefit of searching multiple files, and they may be more willing to settle for the results that they get from one

their favorite targeted system to their graduate and upper-division students. Their research projects may require sophisticated features, such as restricting a search to scholarly journals or other types of materials or using controlled vocabulary terms or codes.

### Meeting their promise

“We still have a long way to go” with the state of federated search technologies, since many databases still can't be included owing to their incompatibility with standards.

## Search customization or collaboration software may ultimately shape or replace federated searching

resource.” Getting too much information from a wide variety of sources might be a bigger problem than getting too little.

CSUN students do hear about federated searching from librarians at the reference desk and in class, as did a majority of the 88 respondents to Lampert's web-based questionnaire. They find federated searching easier to use than native mode searching (databases searched via their own interface), but over half still feel that it requires instructional help from a librarian to use it well. Most of the respondents continue to use both methods for finding relevant articles and don't understand all of the limitations of either method.

Faculty may have one or two favorite databases that “overwrite their willingness to try a different search tool like a federated search. If [faculty members are] used to searching a particular resource, they may not be inclined to switch.” My researcher studies show that brand loyalty is high—chemistry professors like SciFinder and medical researchers rely on PubMed.

Faculty who know the difference might also make a “conscious decision to stick with native search interfaces that offer advanced searching features, search alerts, and other subject-specific or advanced features like thesauri.” These same faculty members may recommend

Peer-to-peer, customization of search, or collaboration software may ultimately shape or replace federated searching.

Librarians may feel better about federated search systems as they improve, but the fundamental philosophical choice of one simple system on all topics vs. multiple targeted, powerful systems remains. Lampert recommends finding the best fit for federated searching in cohesive information literacy programs. She advocates “variance in the content of library instruction to avoid repetitive lectures and work to ensure that students are exposed to increasingly more advanced and discipline-specific resources and research methods throughout their undergraduate and graduate careers.” Students can “learn a great deal by comparing search results from native and federated searches.” (The results of Lampert's studies will be published this spring in *Internet Reference Service Quarterly*.)

Federated systems remain controversial because they focus on what we think users want, at the expense of functionality, precision, and finesse. They are still a long way from providing a single, simple solution to information retrieval.

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