Encouraging Self-Sufficient Electronic Searches: A Review of Ren's "Library Instruction and College Student Self-Efficacy in Electronic Information Searches"

Self-efficacy refers to a person's level of confidence in his or her ability to perform some specific task. A person's self-efficacy is related to evidence of actual successful performance of the task, but the relationship is not absolute. It is possible to have a false sense of self-efficacy. (Think of a drunk person's belief that he will be able to drive home safely.) It is also possible to be quite capable of performing an action but to have little self-efficacy. (For example, although I have successfully driven cars with manual transmission, I remain hesitant, due to lack of practice and confidence.)

Ren (2000) believes that students with self-efficacy concerning their ability to perform independent online-database searches are more likely to succeed in their searches than those without self-efficacy (p.2). The ability to perform effective searches is important to the student's education insofar as the student is likely to need to use online databases often throughout his or her college years. Additionally, research librarians sometimes feel they spend an undue amount of their time helping individual students with relatively uncomplicated database searches, which keeps them from other professional duties (Ren, 2000).

Ren (2000) studied eighty-five Rutgers University undergraduates in 1999, testing them before and after their required eighty-minute library orientation class, surveying them on "self-efficacy in using library electronic sources; attitudes toward acquiring online search skills; use frequency of computer, e-mail, the internet, and library electronic databases; and individual background information" (p.6). After completing the orientation session, the students received an
assignment requiring them to perform various database searches. Their attitudes toward using electronic resources, changes in their self-efficacy in regard to performing the searches after the orientation session, and the actual results of their searches were studied. Most of the students expressed positive attitudes about using electronic resources even before taking the class; their attitudes changed only very slightly for the better afterward. Before the training session, however, there was no positive correlation between the students' self-efficacy and their ability to perform a search. There were students, for example, whose self-confidence was ill-founded. After the library instruction, the students' mean self-rating of self-efficacy increased from 5.51 to 7.25 (on a scale from one to ten), and grades on the post-training test did indeed show a positive correlation between grades and self-efficacy (Ren, 2000).

Ren (2000) notes a need for more research regarding the most effective type of library instruction. It seems likely that providing the students with in-class, hands-on search projects to be completed during the library training session will result in more learning than lectures and demonstrations, but a relationship between instruction method and student performance has not been shown (Ren, 2000).

Discussion

Self-efficacy is only one aspect of what undergraduates need to conduct effective database searches. Other research shows less convincing evidence than Ren's that students benefit from library instruction at all. Fox and Weston (1993), for example, compared self-efficacy and actual performance rates between groups of nursing students in which one group was given library instruction, and the other was not:

Based on analysis of survey data, researchers reported students who participated in course-integrated library instruction had higher self-awareness and self-confidence
levels than those who did not participate. However, these results did not necessarily translate into higher levels of general library literacy when compared to actual gains in skills (as cited in Beile, 2001, p.2).

Ren assumes that a primary reason students ask for help with their searches is that they mistrust their own ability to search independently. Certainly this might be true; however, there are also other reasons. For example, I could, if necessary, develop my own photographic film, but it is much simpler to take it to a professional laboratory. Undergraduates, sometimes reluctant to put sufficient time into required coursework, might reasonably believe they could perform their searches unassisted, with some effort, but still consult a librarian because they realize their work will progress much more quickly if an expert helps formulate their searches.

Another reason why students tend not to use online databases effectively is not because they mistrust their own ability to do independent searches, but because they doubt the database will offer them any real help. A student who believes it very likely that InfoTrac does have articles on, say, Martha Gellhorn, will consider, when no "Gelhorn" references appear after a search, the possibility that he or she is misspelling Gellhorn's name. A student who suspects there is no information on the database about Martha Gellhorn to begin with might simply stop looking.

Librarians complain that the public does not perceive them as useful sources of information; on the other hand, the Rutgers librarians were reluctant to spend time helping individual students with basic problems. Certainly it is more cost-effective for a librarian to give database-search instruction to groups rather than to individuals. Still, students in a composition-class library-information session may well not pay close attention to the instruction, especially
when they receive their library training before the instructor has assigned a paper topic involving research.

If the skills of librarians are being wasted on basic tasks at some libraries, perhaps paraprofessionals (or just some smart work-study students) could be hired to help students formulate their simple searches. The problem, however, is that the extent of students' needs is not always immediately obvious. It is quite likely that a student who is confused about setting up a Lexis-Nexis search will also have other research problems that require the assistance of an actual librarian. Think of the student who has pulled up several hundred thousand sources by typing "education" into a subject field. That student's research problem is clearly more complicated than a lack of understanding of Boolean operators, and that is where the librarian comes in.

It may be that librarians are just going to have to live with the fact that individual users are always going to need patient and professional help, even with problems the librarians themselves do not find completely engrossing. In a way that is, after all, why we are there.
References
