Web-Loving Students Can Be Prodded to Cite Peer-Reviewed Works in Term Papers, Study Suggests

By SCOTT CARLSON

A report released Wednesday shows that students in a course at Cornell University have generally used fewer and fewer scholarly materials in their library research in the past six years. But the professor who teaches the course reversed the trend by providing a few clear guidelines in term-paper assignments.

The report, "Effect of the Web on Undergraduate Citation Behavior," appears in the newest issue of Portal, a library journal. Philip M. Davis, a life-sciences librarian at Cornell and author of the report, says the study on which it is based came from the feeling that students were using fewer scholarly materials.

"When I've talked to professors about this, they think something is going on, but they can't put their finger on it," he says. Undergraduate work is rarely saved and analyzed, so "it's very difficult to track undergraduate behavior, because unlike scholars we don't often have a record of their work."

Mr. Davis's study, which looked at two separate periods from 1996 to 2001, scrutinized the bibliographies of term papers in an undergraduate microeconomics course at Cornell. Each year, the researchers looked at 60 to 70 papers. The course's content, assignments, and instructor remained constant, until 2001.

In 2001, John M. Abowd, a professor of economics, required students to use at least five peer-reviewed materials in the research and noted that the accuracy of the citations would...
mandate, researchers have seen a precipitous drop in the use of books and an equally steep rise in the use of Web sites. Books composed 30 percent of cited sources in 1996, compared with 16 percent in 1999, with continued declines in the following year. Web sites, meanwhile, grew from about 8 percent of cited sources in 1996 to more than 20 percent in 1999. Most of those Web citations, around 40 percent, came from commercial sites.

However, in 2001, the use of Web sites dropped to around 13 percent of cited sources, from more than 22 percent in 2000, while journals went to 30 percent from 20 percent in those years. Book citations also rose slightly. Over all, students in 2001 were using as many scholarly materials as students had used in 1996.

Mr. Davis says that in 2000 Mr. Abowd asked students to try to use more scholarly sources, but the pleading hardly affected the students' work. "If anything, it got less scholarly," Mr. Davis says. Requirements, explicitly outlined in the assignment, made all the difference.

"They weren't just recommendations," he says. To change students' work, "there needs to be some minimum requirements for sources cited, but there also have to be consequences. And the consequence in this case was the grade on the paper."

"These research findings couldn't be more timely," says Steven J. Bell, the library director at Philadelphia University, who has read the report. Mr. Bell's article in the latest issue of American Libraries bemoans the poor quality of some online materials. Recently on e-mail discussion lists, librarians have been actively discussing pedagogy, the possibility of collaboration with faculty members, and students' overreliance on Web sites for instant, but unreliable, information.

Mr. Bell says that many librarians want
"Now here comes a study that points directly to an effective outcome achieved through librarian-faculty cooperation," Mr. Bell says, with minimal changes to the professor's assignments. "This is a great opportunity for librarians to take it to their faculty and say, Look at this."

The report is available to Portal's subscribers on the journal's Web site.