

Assignment 1

Undergraduate students

I have chosen to focus on undergraduate university students because they are a particularly problematic group of users within academic communities. Within institutions that accept undergraduates, they vastly outnumber faculty, staff, and graduate students. At the same time, it can be a challenge for information professionals at these institutions to lure undergraduates into the library or another situation where they can obtain the services and materials that meet their needs.

In an academic institution, those needs range over at least as many subject disciplines as the institution's curriculum supports and tends to be concentrated on academic projects. Although other needs may be satisfied as well, almost all studies of this user group focus on their information behavior in relation to academic work, since that is the set of information needs and behaviors which defines the user group as unique. Students gather information for projects, papers, presentations, and experiments, among others. The subjects on which they search range from history to botany to computer engineering. The fields and applications are diverse enough that undergraduate students in one field sometimes exhibit different information behaviors from those in other fields.

One key trend in the information behavior of undergraduate students is that they "are no longer physically visiting libraries." Circulation statistics and door counts everywhere are significantly lower than they were five years ago. At the University of Idaho in 2002, book circulation and door counts were down by more than 20% since 1997, while the number of electronic articles retrieved by Idaho students increased by approximately 350%.¹ Libraries are trying various tactics to counteract the trend of the "deserted library;" in order to adequately solve this problem, it will be necessary to understand the reasons for which undergraduates are deserting the physical library space and all the print and service resources it can offer, in favor of the solutions which are available online, anywhere, around the clock.

Dilevko and Gottlieb conducted a survey in 2002 of undergraduate library users at the University of Toronto and made two important conclusions. Firstly, undergraduates

see definite and unequivocal value in print sources of all kinds, including print books and journals. If given a choice between a “good enough” online source and a “better” print source, they would choose print over digital; moreover, they see the limitations of digital formats and trust the reliability and authority of print.² However, the researchers also found that many students chose to use online sources because of time constraints. Especially in the middle of the night, when the library is closed, online access can be a godsend: “It is three a.m. and my assignment is due in six hours. It is a ten page exegesis of a passage in *Finnegan’s Wake*. I have just finished watching six hours of television, having a nap, and drinking....”³ Even without the pressure of crisis, online information-seeking is often perceived as faster than going to the library to access print sources.

Davis and Cohen conducted a citation analysis at Cornell University of student term papers in the field of microeconomics. Unlike Dilevko and Gottlieb, who are concerned with students’ physical visitation of the library, Davis and Cohen draw the line not between digital and print resources but between the open Web and authoritative, academic sources, in whatever format. They compared term papers from 1996 and 1999 and found that during those years, “there has been a remarkable shift in the use of information resources away from books in favor of general web resources.”⁴ Furthermore, many of the Web citations were mistyped, or the resource was no longer available when the researchers tested it.

The authors acknowledge the ease of access of electronic materials, including scholarly databases as well as online magazines, journals, and the general Web. They also emphasize that “although the *ideal* fully-networked electronic academic library would have a positive effect on the information use of our students, we need to realize that the library does not have complete control over the information available to students, and competes with other resources available on the Internet as a whole.”⁵ Therefore, both librarians and professors must educate students about how not only to find information but to evaluate it with a critical eye. The solution is not to forbid students from using Web resources, especially since many academics, journals, and institutions are publishing online, but to teach them to examine each and every source for authority and accuracy.

Davis and Cohen argue for a complex, multipart solution involving action by both professors and librarians in assignment guidelines, access to resources, and instruction.⁶

Rothenberg is very condemning of students' uncritical use of Web sources, suggesting that "use of Web sources destroys student research papers."⁷ He complains that the Web's distributed, networked, and linked nature, which is its greatest strength, can be distracting when attempting to conduct research. Search engines, purported guides to the Internet, "are closer to slot machines than to library catalogues. You throw your query to the wind, and who knows what will come back to you?"⁸ Rothenberg argues that research and composition aids like search engines and word processors make the process look too easy; while access to information is faster, via the Internet, and spellcheckers are indeed a boon, the steps of careful reading, evaluation, synthesis, and presentation are as intensive, time-consuming, and difficult as they ever were. To an extent he blames libraries for sending a "clear message to students: Don't read, just connect. Surf. Download. Cut and paste."⁹ At the same time, he takes responsibility as a professor for not teaching his students to take the time to read, evaluate, and synthesize originally and meaningfully.

It is clear that undergraduates perceive the value of print sources in providing them with exactly the information they need and in helping them to get the best possible grade. However, what they do not know is exactly how fast information-seeking with print sources can be. (Lydia Harris tells an anecdote about having some of her undergraduate students find movie times by three methods: Web, phone, and newspaper. The telephone was by far the slowest, while the print newspaper was also by far the quickest.) Another side effect of using print sources is that it forces students to make time for information access well before the assignment is due, thus allowing them time to read and digest the information instead of regurgitating it raw. Students' knowledge of the availability of online resources allows them to procrastinate, sometimes until single-digit hours before the assignment is due.

It is unclear that undergraduates know how much reference librarians can help in the search process, by speeding it up as well as by all the other means that librarians use to uncover needed information in all kinds of sources. Alerting undergraduates to the power and painlessness of this particular information resource would give them access to

a far broader range of sources as well as to on-demand information literacy instruction. Especially if the library is able to offer digital reference, asynchronously but especially synchronously, reference librarians are enabled to help students with their remote, online searches.

Most of all, undergraduates need to know how to evaluate sources, in print but especially on the Web, in order to determine their authority and accuracy. Critical thinking is, in my opinion, the most important and most elusive information literacy skill. If students have it and use it, it will help them not only with evaluation of sources, whether Web or print, academic or public, but with all other steps of the information cycle as well.

URL for WebQ survey:

<http://catalyst.washington.edu/webtools/webq/survey.cgi?user=lbmelton&survey=1>

(Ironically, all the sources used in the researching and writing of this paper were available online, through databases licensed by the University of Washington libraries.)

¹ Juris Dilevko and Lisa Gottlieb, "Print Sources in an Electronic Age: A Vital Part of the Research Process for Undergraduate Students," *The Journal of Academic Librarianship* 28 (2002): 381.

² *Ibid.*, 391.

³ *Ibid.*, 390.

⁴ Philip M. Davis and Suzanne A. Cohen, "The Effect of the Web on Undergraduate Citation Behavior 1996–1999," *Journal of the American Society for Information Science and Technology* 52 (2001): 312.

⁵ *Ibid.*, 313.

⁶ *Ibid.*

⁷ Dilevko and Gottlieb, 382.

⁸ David Rothenberg, "How the Web destroys student research papers," *Education Digest*, 63 (1998):61.

⁹ *Ibid.*, 61.