Print and Electronic Information: Sheding New Light on Campus Use

By Daniel Greenstein and Leigh Watson Healy

H ow is the digital revolution af-
flecting scholars, teachers, and students in colleges and univer-
sities? What do they now seek and use for information research and coursework? How do they perceive the campus library? What patterns of use are emerging that higher education institutions need to under-
stand so they can plan effective information services and products?
To find out, the Digital Library Federation (DLF) commissioned a major survey from Oustell, Inc., a research firm serving the online information industry. In late 2001 and early 2002, Oustell conducted half-hour telephonic interviews with 5,294 faculty and administrators at nearly 400 colleges and universities. The results will be published by the Council on Library and Information Resources (CLIR), both in print and at (http://
www.clir.org/).

Analysts are breaking down the data to see how patterns differ according to whether respondents are faculty mem-
bers, graduate students, or undergradu-
ates; whether they are at public research universities, private research universities, or liberal arts colleges; and whether they are working in the arts and humanities, the sciences, biological sciences, business, engi-
neering, or law. Here are some of the find-
ings so far:

More than nine out of ten respondents are comfortable using and retrieving infor-
mation electronically, including from Web sites at their institutions. This is true of faculty, graduate students, and under-
graduates in colleges and universities, private and public.

Respondents average fifteen hours a week obtaining, reviewing, and analyzing information from all sources. Respon-
dents report using this time for accessing and using information fairly evenly among their offices, their residences, and physical
libraries, but graduate students are most likely to pursue information while in physical libraries, undergraduates in their residences, and faculty, by a large margin, in their offices. Both offices and residences are generally well equipped with computers, scanners, printers, and fax machines—but not often with high-speed connections.

Speed of delivery is less important to respondents overall than several other features of electronic information sources. Quality ranks highest in impor-
tance, followed by ease of access, subject coverage, printing and downloading search functions, and search options. Sig-
nificant gaps exist between the impor-
tance that respondents attach to features related to electronic information sources and how well such features currently ad-
dress their needs. These gaps may need attention from campus libraries and their electronic vendors.

Print remains important: A large ma-
jority of respondents continue to use
printed and hard-copy books and jour-
nals more than any other information type. They use e-books (in contrast to e-

databases) the least. Of all respondents, 91 percent said that printed books and jour-
nals would continue to be important sources for the next five years. In addi-
tion, 55 percent said that browsing stacks or journal shelves in a library remains an important way to get information. How-
ever, respondents also prefer, by a modest margin, to consult electronic rather than printed abstracts and indexes to identify the print materials they need.

At the same time, 84 percent of survey respondents indicated that the Internet had changed the way they use their own institution’s library. For research, respon-
dents reported using considerably more information from their institution’s li-
brary, physical and virtual, than from other libraries. And 85 percent said that true researchers in the biological and social
sciences, the arts and humanities, and en-
genineering, but less so for those working in law, math, and the physical sciences.

Overall, 64 percent of respondents noted that their current information needs for research are available through their own library’s Web site. For coursework, stu-
dents also reported using more informa-
tion from their institution’s physical and virtual libraries than from other sources, and 67 percent indicated use of their li-
brary’s Web site. But for instructional purposes, teachers reported using only slightly more information from their in-
istitution’s physical and virtual libraries than from other sources. That finding holds for all teachers regardless of those in the business field. In total, 59 percent re-
ported that their current information needs for teaching are available through their library’s Web site. These findings illus-
trate one of the key conclusions of the study: that the behavior and pat-
terns of information users are signifi-
cantly related to how they are going to apply the information. A faculty member may seek appropriate searching infor-

mation for a class and may use another method when searching for material for a research paper.

The survey also provides information about how teachers distribute readings and other materials for courses. Teachers provide more course materials physically rather than online. Fully three-
quarters of all teachers make course ma-
terials such as syllabi available to students
via handouts; half say they also use course Web pages. When all electronic formats (e-mail, course Web pages, e-reserves) are considered together, nearly two-thirds of all teachers say they make at least some course materials available.

Full 100 percent, however, provide some or all such material in phys-
ical form. Some variation exists depend-
ing on kind of institution and academic discipline. Teachers at liberal arts col-
leges have a greater preference for course handouts than do their counterparts at universities. Nearly four-fifths of physical scientists and engineers use the network as a means of distributing course materi-
als, compared with fewer than half of the arts and humanities teachers.

One more finding is striking. All res-
pondents considered sixteen obstacles to seeking and using information and identified whether each obstacle was a major problem, a minor problem, or not a problem. The potential “drawbacks to using information” included difficulties in finding information, knowing what is available, determining quality, acquiring training, getting advice, accessing a net-
worked computer, and “having to go to the library.” But only one drawback on the list emerged as a “major problem” for more than a relatively small percentage of the respondents: 39 percent felt vexed in their pursuit and use of information by an obstacle that seems to persist no mat-
ter how good our technologies are—“not having enough time.”

Much more will be covered in the final report. Anyone interested in meeting the future needs of scholars, teachers, and students will want to consider the results, which should shed new light on the use of both print and electronic scholarly information.

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tive Director of the California Digital Library, Leigh Watson Healy is Vice President and Chief Analyst at Oustell, Inc. © 2002 Daniel Greenstein and Leigh Watson Healy