By David Cohen

Course-Management Software: Where's the Library?

Professors who once might have augmented lectures with slide shows, film clips, and audio recordings now find that digital technology offers exciting aids for teaching and administering their courses. The Campus Computing Project, begun in 1990 by Kenneth C. Green to conduct annual surveys of the use of information technology in higher education, found that one in five college/university courses employed a course-management system (CMS) in 2001—nearly 50 percent more than in the previous year—and that 80 percent of public four-year institutions provided teachers with access to course-management tools.[1]

Though course-management software is generally considered in connection with Web courses and distributed education, such software is actually used most often in traditional courses, to make them Web-assisted. Using course-management tools, students can click on courses, identify textbook requirements, review assignments, receive instructors' messages, discuss coursework with others, join electronic chat-rooms to prepare for tests, and even take exams. Moreover, CMS programs may lead a student to a range of course-relevant materials from anywhere in the world that the Web reaches—except, it often seems, from the library on the student's campus.

CMS vendors provide their own educational resource centers, pointing students to digital library collections and informational Web sites, including some that charge fees. This practice concerns college and university librarians because of the uneven quality of resources accessible via the Web. In addition, what then becomes of the resources, electronic as well as traditional, that the library has developed or acquired with the specific curricular needs of its campus in mind? What happens to the investments that the institution made in digital library information? Such investments are not trifling. In 1998–99, members of the Association of Research Libraries spent nearly $78 million on electronic monographs and journals—more than 10 percent of their total materials expenditure.[2]

Without any integration of the CMS with the educational computing applications of the institutional library, will students independently use, or even find, such expensively digitized and leased course material? Or will they overlook the digital books, e-journals, and research databases that the library, in consultation with professors, has organized and provided online, often on the basis of long experience with campus course needs? Librarians spend much time selecting resources from the Internet and organizing, on library Web pages, information that is best for student use. Integrating course-management software with the library's digital offerings is essential for getting the maximum value from the institutional investments of both money and expertise.

What can be done to get library resources—and librarians' expertise—into courseware development? CMS programs could provide icons on which students could click to search their campus libraries' online catalogs and databases, which faculty members could add to their course Web pages. Pages used by CMS programs to link to resources could highlight and provide access to the print and electronic offerings of the campus library. The software could search the library's catalog and full-text databases to create bibliographies of use to students in preparing coursework and writing papers. Programs designed to help students search databases and Web sites for material relevant to specific courses, assignments, and lectures could even be incorporated. Also, CMS programs could be integrated with virtual reference-desk software so that students conducting searches could request and receive online help from librarians. These services would enable students to submit reference requests on electronic forms available from the library Web site, e-mail queries directly to reference librarians, or even engage librarians in back-and-forth discussions of research needs through the use of chat software. Additionally, CMS programs could be integrated with electronic-reserves software, so that students could benefit from the scanning, check-in and check-out, and copyright-management functions, and also with interlibrary-loaning and document-delivery software.

Academic librarians need not only to participate, along with faculty, administrators, and IT professionals, in course-management software development and adoption but also to influence standards for such software and to help train faculty and students in its use. Librarians should determine the ways in which software products enable students to use the expertise of librarians and the collections, physical and electronic, of the libraries.

These concerns currently top the agenda of the Academic Library Advisory Committee (ALAC) of the Council on Li-

brary and Information Resources (CLIR). A study commissioned by ALAC from the research company Outsell, Inc., confirmed that libraries have been left out of alliances of CMS vendors with portal companies and other providers of content. Subsequently, ALAC invited some courseware developers and integrated library systems developers to a meeting in January 2002. Here, ALAC members learned that vendors overlooked their resources because librarians generally were not involved in the software-purchase decisions made by their institutions, which often buy course-management software as part of integrated administrative packages for automating a range of functions campus-wide. Several other considerations arose at this meeting as well:

■ Institutions investing in a lot of digital content want to be sure they are not repurchasing it in course-management packages.
■ Institutions serving many distance learners want these learners to have the same access to library information that on-campus learners receive.
■ Students and faculty authorized to use course-management and campus-library resources want to be able to sign on using one password at a single authentication point.
■ Students and faculty need guidance from libraries—as the campus entities that license digital content—to avoid violating copyright restrictions on using electronic materials, from whatever source.
■ Libraries need to capture for preservation many of the digital teaching re-

sources and scholarly databases that faculty create, along with the campus administrative databases, which can be analyzed to see how people are using systems, content, courses, and collections.
■ Finally, institutions need to assess the larger question: Do CMS programs and library systems that facilitate access to digital resources actually contribute in substantial ways to the improvement of education and to the efficiency of course administration?

ALAC is continuing its investigation into all these issues. We hope to bring others—provosts, chief information officers, and interested faculty, as well as librarians and vendors—into the conversation. And we are looking for models of systems integration. Throughout this process, we plan to focus not on the interests of vendors and librarians, but on those of the campus library users: the students and teachers.

Notes

1. See ⟨http://www.campuscomputing.net⟩.
2. Martha Kyrillidou, "Research Library Spending on Electronic Scholarly Information Is On the Rise," *ARL Bimonthly Report*, no. 213 (December 2000), ⟨http://www.arl.org/newsltr/213/spend.html⟩ (accessed March 11, 2002).

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