Who Should Care and Why

The primary stakeholders in the integration of library content and services with course-management systems are faculty, students, and campus administrators. Without faculty and students, there is simply no need for a seamless online-learning environment. Teaching, learning, and scholarship are the *raison d'être* for the entire academy, including its library and IT divisions. In that they hold the purse strings, campus administrators also are primary stakeholders.

Essentially, the library and IT divisions are service units that provide support for the learning, teaching, and scholarship of students and faculty within the funding constraints and organizational priorities as set by the campus administration.

Faculty, students, and campus administrators all have a great deal invested in the integration of libraries and CMS. Unfortunately, many are unaware of the costs this nonintegration causes in terms of time, money, and the negative impact on the quality of education. It is, however, just a matter of time before the stakeholders grow intolerant of the nonintegration as well as the poor use of resources out of alignment with the use of technology outside of the academy.

Faculty

While there is a wide spectrum of opinion, faculty members are concerned that a good number of students don't see a difference between searching for information on the Web and searching the library collection. For these faculty members, the absence of library resources within the CMS is troubling.

A 2004 survey of Cornell faculty using CourseInfo, Cornell's instantiation of Blackboard, found 45 percent included library resources into their CourseInfo site, while another 34 percent would like to (Rieger 2004, 207); this equates to more than two-thirds of Cornell faculty in desire of some level of library and CMS integration.

An obvious reason for this is the desire for students to have unfettered access to high-quality information sources for their research. This should in turn lead to better student scholarship.

Some course-management systems come with their own free research guides for disciplines that usually take the form of a collection of quality open-access Web sites. However, the recommended resources are far inferior to those available from the institution's library. Even when limited to only its digital collections, any academic library can far exceed the free resources provided by a CMS in both quantity and quality.

It is the introduction and immersion into the discourse of a discipline that makes the academy so unique, and thus far, no alternative can match the breadth and depth of a quality, academic library. Unfortunately, if it's the system's recommended resources visible in the course site, it's likely those will be the ones students use. This, in turn, lowers the quality of education.

Other course-management systems offer faculty tools and services to create online course packs from resources of high academic quality. However, these come with a cost (copyright permissions), which is usually passed on to the students. If library content can be integrated into the CMS, some of the copyright cost can be avoided because the library already has paid for the content. This is of importance to those instructors that particularly are conscientious of the high costs students incur for their textbooks and course materials.

Perhaps equally as important, the library and CMS integration is a time saver for faculty. A library resource guide tailored specifically to the curriculum of the course

within the CMS will have a significant impact on the number of students who come to the faculty member with base-level library research questions. Only the most challenging literature searches would require guidance beyond that already provided by the library course guide. Moreover, if the subject librarian has a presence within the course site, he or she may be able to field some of the more basic library research question on behalf of the instructor.

As in the past, most faculty members simply want to drop off their reserve lists to the library and be done with the process. If the library is intricately involved in the courseware administration, it can continue its copyright clearance service for reserve materials. As this task requires significant time and expertise, this is a burden faculty members are unlikely to want to bear. Moreover, instructors can be personally liable for their copyright mistakes.

If reserve materials are going to move into the courseware environment, then so must libraries unless faculty are willing to take over the reserve services and, more importantly, expend the time to do so.

Students

While there are exceptions, the majority of students want to succeed in college. To a high degree, success is tied to academic performance. Therefore, those students with a drive to succeed will want, or may even demand that, their universities and colleges provide them with all available tools, guidance, and resources necessary for academic success. As the number of classes with online components increases, Net Geners will expect all of these tools to make the transition to online as well. The services and resources of the library are no exception.

A student's course site is a natural locus for research. In the CMS, the instructor posts research assignments as well as required and recommended readings; students conduct online discussions about their research successes and failures; and when the paper is complete, it is deposited into the course's digital drop box. With so many research-related activities occurring within the course site, it's natural for students to assume the available library content and services be present there too.

If the library can push relevant resources into the course sites, those resources gain importance because of their presence within the course sites. This may causes students to try first the recommended library resources before turning to Google or Yahoo! with their research queries. This should have a direct impact on the quality of student scholarship.

Moreover, library-provided guidance through the world of scholarly materials could lessen the students' frustrations, which may help minimize plagiarism.

The research of Onweugbuzie, Jiao, and Bostick, and others over the last two decades, has established firmly the existence of the "library anxiety." Library anxiety is "an uncomfortable feeling or emotional disposition, experienced in a library setting, which has cognitive, affective, physiological, and behavioral ramifications" (Jiao et al., quoted in Onwuegbuzie, Jiao, and Bostick 2004, 25).

Among the contributing factors to library anxiety are unfamiliarity with the library and a negative perception of one's competence in library use (Onweugbuzie, Jiao, and Bostick 2004). Part of this anxiety stems from the shear number of possible books, journals, article databases, and other sources from which the student must select. The presentation of just a few, relevant library sources in the CMS can decrease the complexity of the library research process, and therefore lessen the anxiety.

Another cause of library anxiety is student perception that library staff members are "intimidating, unapproachable, and inaccessible" (ibid, 36), which presents a barrier to students asking for help from librarians. If the student can communicate with the librarian through a reference online chat service within the CMS, it can de-personalize the process of asking for help. This, in turn, should increase the number of students that seek help in their research.

As with faculty, efficient use of time is critical to students. The presentation of library resources in the CMS is a time saver for students. Electronic reserves eliminate the need for a physical trip to the library. Recommended library resources eliminate the time that students usually have to spend working through the complexities to determine the best article databases, for example, from the several hundred to which the library may subscribe.

Administration

Regardless of whether it's technical, cultural, or some combination of the two sets of barriers that stands in the way of library and CMS integration, university administrators should be concerned. If library resources and the CMS remain in separate, unconnected silos, an impact is felt both in the quality of education as well as in the university's return on investment.

As discussed previously in this chapter, if properly used, a CMS can have a positive impact on student learning. In this new assessment-centered higher education environment, campus CMS use can come under close scrutiny in the search for evidence of well-spent technology dollars and quality education.

In a recent *Library Issues* briefing, Bell and Shank begin by describing an event in which a member of the accreditation team asks the unnamed institution's librarians to describe "the ways in which they used the campus course-management system product to facilitate access to library resources and promote information literacy objectives" (Bell and Shank 2004, 1).

Unfortunately, the librarians had to admit that they had never used the CMS. Far too many librarians would have to answer that question in much the same way.

If accreditation and assessment issues don't catch the attention of campus administrators, these stakeholders may be more convinced of the severity problem when illustrated in terms of financial inefficiencies. As Cohen explains, "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" (2002, 12).

The cost of courseware, which includes software and hardware, plus annual licensing, maintenance, and staffing fees, is not inconsequential by any means. The cost is usually based on the number of user accounts or by student FTE, which can range into the tens of thousands for large state schools. Consequently annual costs range widely.

A 2003 ad hoc poll of the Consortium of Liberal Arts Colleges (CLAC) found an average annual cost of $31,200 for course-management systems at these small liberal arts colleges (OCLC E-Resources Task Force 2003). On the other end of the spectrum, the University of Wisconsin and Ohio State University expect that their enterprise-wide courseware systems will cost more than $5 million each for five years of licensing, installation, and maintenance fees (ibid).

At the same time, libraries are paying thousands, and sometimes millions, of dollars annually for access to electronic serials and monographs. In the 2002/2003 academic year, the 111 reporting libraries of the Association of Research Libraries collectively paid more than $228.5 million in electronic resources, with a median of $1.77 million (Young and Kyrillidou 2004, 10).

When the millions of dollars worth of library resources cannot be used with the course-management system, which costs thousands or millions of dollars to support and maintain, the result is a poor rate of return on both investment. "At the University of California, this translates financially as follows: The $240-million annual investment that UC makes in its libraries is not available to the $170-million investment that it makes in instructional technologies" (Greenstein 2003).

Moreover, without regular communication between library and CMS staff, additional inefficiencies could result from redundant purchases. Some CMS vendors, leveraging the organizational and technical disconnect between library resources and courseware, have expanded their businesses to include the licensing of content. Often this content is identical to that which the library already subscribes. The result is the institution inadvertently may be purchasing the same content twice—once by the library and again by the CMS users.

Non-CMS vendors have also taken advantage of the lack of clarity in the CMS content space to market content packages directly to faculty. XanEdu is a perfect example.

XanEdu is an online coursepack service of the ProQuest Information and Learning Company. Proquest owns several large and popular article databases, including

XanEdu
www.xanedu.com

ProQuest Research, ABI/INFORM Global, and ProQuest Historical Newspapers. As reported by Bell, the XanEdu service is "marketed in professional literature targeted to faculty, at faculty conferences and is offered through partners, such as Blackboard" (2001, 4).

In addition to the tools to create course packs, XanEdu also provides the content, which comes from the Proquest databases. Consequently, a XanEdu coursepack essentially is a repackaging of much of the same content contained in the ProQuest suite of databases. As most large academic libraries have subscriptions to many of the ProQuest databases, students are purchasing some content in their coursepacks that the library licensed already, most likely unbeknownst to the faculty member.

As an example, the distance-education unit of Regis University was approached by XanEdu to consider using the coursepack service in Regis' WebCT system. Fortunately, the distance-education unit asked the library for its opinion on the XanEdu service. Upon evaluation, the library was able to recommend the distance-education faculty should "instead . . . take advantage of the databases we already licensed—which duplicated much of XanEdu's content" (Riedel 2002, 482).

In addition to re-licensing the same materials, CMS users "might be doing it under a set of terms that were inconsistent with the policy positions that the library had painstakingly hammered out on areas ranging from preservation to privacy" (Lynch 2004).

The library can provide expertise in many areas that touch upon courseware. A short list includes copyright, digital preservation, online reference support, and a deep knowledge of available information resources. Not to apply this available expertise to the management of the CMS is yet another inefficient use of institutional resources, which campus administrators should not tolerate.

All of the stakeholders have real incentives to encourage work toward the integration of library resources and services into the CMS. The technical barriers are significant but ultimately solvable. The stakes simply are too high for the cultural barriers to be tolerated for very long by campus administrators, faculty, and students. It's time to get to work.