

Going Forward

The pathway forward into an integrated online-learning environment is not altogether clear. However, a few elements are quite certain. First, success must include library staff development. Whether a library decides to approach the challenge of providing content at a course level through a CMS or library course pages, there are significant staff development needs that library administrators cannot ignore.

If the library is going to be involved in the CMS, all library staff should have some level of understanding of how the CMS works. Librarians should know what the course sites look like, how they function, and how faculty members are using them. This knowledge and level of understanding is absolutely necessary if an academic library is going to make any positive contribution to its institution's online-learning environment.

George and Martin recommend the process of familiarizing library staff with the CMS begin with some hands on training sessions. "The CMSP administrator should enroll each librarian in the capacity of an instructor. This enables the librarian to explore all facets of the software as if they were a member of the teaching faculty before working with individual faculty members and their courses" (George and Martin 2004, 595).

Both CMS and library course page projects necessitate subject bibliographers to have a firmer understanding of the curriculum of each individual course. This will require librarians to consult course syllabi and be in regular communication with the instructors, as well as deepen their knowledge of the disciplines they support.

On a more philosophical level, the CMS and library course pages push academic libraries into theoretical issues with regard to teaching and learning. "Pedagogical issues need to be incorporated, to ensure the academic validity of teaching and using information online. These issues have a

history of being ignored by librarians in particular, but for academics to accept the close library input necessary, this must change" (Currier et al. 2001, section 5.2.3).

All of this requires a higher level of engagement on behalf of libraries with the scholarship, teaching, and learning occurring on campus. Such fundamental changes require knowledge, training, and time. An academic library will not succeed in increasing its presence in and contribution to the online-learning environment without as much focus and investment on staff development and change management as on technology.

A second part imperative to the pathway forward is a much broader understanding of the practices and behaviors of students and faculty. Too often the CMS functionality is limited to in-class tasks merely migrated into an online environment. The direct mapping of teaching and research tasks into the online environment demonstrates a lack of understanding of pedagogy on the part of system developers as well as librarians (Scantlebury and Stevenson 2004, 51).

Examining the JISC-funded DiVLE projects as a whole, Brophy, Markland, and Jones found, "Many of the tools being developed by DiVLE project imply considerable changes to the workloads and job roles of academics, and it cannot be assumed that they are willing to take on these tasks or acquire new skills" (Brophy, Markland, and Jones 2003, 4).

All of the model initiatives highlighted previously focus on how to serve up library resources and services at a course level. As Dempsey explains, the focus should be broadened to examine "the integration of library services with the learning and research behaviors of users" (Dempsey 2003, 109). This broader view of learning and research, which extends far beyond the discovery and acquisition of library resources, is essential.

User-needs analysis is one way to broaden the understanding of the research and teaching process. An example is the “User-Needs Analysis Report” undertaken by the JISC DELIVER (Digital Electronic Library Integration within Virtual EnviRonments) project (Harris 2003). DELIVER used a series of focus groups and semi-structured user interviews to develop technical and institutional requirements for the development of generic, subject-specific, and course-specific library resource tools in course-management systems.

Studies of student and faculty work practices are another method of inquiry. Work practice study is a method of fine-grained observation and documentation of people at work, based on traditional anthropological participant observation. When applied to institutional repositories, Foster and Gibbons (2005) found misalignments between the offerings of an institutional repository with faculty work practice. This, in turn, led to low levels of faculty adoption. One can use this same methodology to understand the many activities of students and faculty that encompass teaching, learning, and research, in which academic libraries play a part.

An excellent example of a project that aims to attack the problem of CMS and library integration from a more holistic perspective is the University of California, Berkeley, Interactive University’s Scholar’s Box. The project does not try to isolate the actions of placing or linking digital objects into a CMS. Rather, it focuses on the entire range of activities, including the discovery, authoring, and editing of the objects before they are placed in the CMS.

UC Berkeley Interactive University Project
<http://iu.berkeley.edu/IU/SB>

The abstraction framework of Scholar’s Box “allows users to (1) gather digital objects (of varying formats) and organize them into collections, and (2) transform them into other digital objects (through services)” (from Web site). This requires a broad focus that includes tools beyond the CMS, such as Web-syndication and portal technologies, desktop applications, and content-authoring tools.

Finally, the pathway forward also must include a great deal of collaborating and cooperation. As discussed above, we must work to break down the cultural barriers that stand between academic libraries and information-technology divisions. While this can be mandated from the top down, it is better for all involved when it occurs at an individual and departmental level.

Cooperation and collaboration must also occur between library content vendors and the academy. In the words of Flecker and McLean (2004), there is a need for proselytizing.

Many information providers have little or no understanding of the role of course-management systems, nor any appreciation of why making their content easily discoverable and reusable in a course context might matter. There is a need for librarians and course-system operators to reach out particularly to the commercial information providers to begin to educate them about the growing role of such systems in higher education (Flecker and McLean 2004, 12).

We must lobby library vendors to adopt persistent URLs, OpenURLs, and standard search protocols. Vendors need to hear how important the integration of library content and the online-learning environment is to their customers. When framed in such a way the information providers can see that *without changes* their content will remain *outside* of the online-learning environment, this approach presents sufficient incentive for change.

This report has focused on two ways in which libraries can present their content and services in a meaningful context to students. The work does not stop with course-management systems and library course pages. Personal portals and RSS feeds are two other platforms into which customized library content can be served, and this list *will* continue to grow.

The effective participation of academic libraries in the integrated online-learning environment requires proactive action. So . . . let’s get to work!