Background Information About LMS Deployment from the 2008 Campus Computing Survey

Course/Learning Management Systems

The 2008 data continue to confirm the increasingly important role of Course Management Software (CMS) or Learning Management Software (LMS) as a core instructional resource. Overall, the percentage of college courses that use a CMS/LMS tool has risen from a seventh (14.7 percent) in 2000 to more than half (53.5 percent) in 2008 (Figure 13). Although the numbers vary by sector, the rising deployment of (some might say rising campus dependency on) CMS/LMS occurs across all sectors.

Reflecting the critical role that the LMS now plays in instruction at the majority of institutions, more than three-fifths (63.5 percent) of the colleges and universities participating in the 2008 survey report a strategic plan for CMS/LMS deployment, up from percent 60.2 last year, half (51.4 percent) in 2003, and 41.8 percent in 2001. Admittedly, while these numbers track rise of LMS utilization, they do not provide any data about the depth of deployment, i.e., how many of the features and how much of the functionality of the LMS are being used by students and faculty in individual courses and across the various sectors of American higher education.

Not surprisingly, Blackboard has the largest share of the CMS/LMS market. As shown in Figure 14, among campuses reporting a “single product” campus standard LMS as of fall 2008, the percentage of institutions that identify Blackboard as the institutional LMS runs from 45.8 percent in private four-year colleges to 70.7 percent in private universities. Although the numbers vary by sector, other commercial LMS providers – primarily Angel Learning and Desire2Learn – each account for about seven percent of campus CMS/LMS deployments. In aggregate (but also with variations by sector), Open Source LMS applications (Moodle and Sakai) together account for 13.3 percent of the campuses reporting a campus standard CMS/LMS application, up from 10 percent in 2007 and 7.2 percent in 2006.

The rising campus presence of four LMS applications – Angle, Desire2Learn, Moodle, and Sakai – in the years following Backboard’s acquisition of WebCT in February 2006 has brought clear competition to the campus market for learning management systems. Although still dominant across all sectors, the survey data reveal that Blackboard’s share of the campuses reporting a “single product LMS standard” has fallen in each sector since 2006. Perhaps the most interesting of Blackboard’s LMS competitors are the

two Open Source LMS applications – Moodle and Sakai. As previously noted, the percentage of institutions reporting a campus-standard Open Source LMS has almost doubled in the past two years, rising to 13.3 percent in 2008. Yet shown in Figure 15, the deployment of Sakai is highest in public research universities (8.0 up from 5.1 percent in 2007) while Moodle now serves as the campus-standard LMS in almost a fourth of private four-year colleges (23.7 percent, compared to 17.2 percent in last year). This rising competition would seem to affirm this researcher’s 2004 observation that the campus LMS market is “a mature market with immature products” – virtually all institutions have an LMS license but the products are still relatively young: the survey data confirm that the LMS market remains volatile and competitive.1

Migrating to Open Source ERP Applications

Despite the rising deployment of Open Source LMS applications, this year’s survey data point to little change in the “affirmative ambivalence” towards Open Source ERP applications among senior campus technology officers first reported in 2004. Almost three-fifths (59.3 percent, compared 57.3 percent in 2007 and 51.9 percent in 2004) agree that “Open Source will play an increasingly important role in our campus IT strategy.” However, less than a third of this year’s survey respondents (28.0 percent, percent, compared to 27.6 percent last year and 28.9 percent in 2004) agree that Open Source “offers a viable alternative” for key campus administrative or ERP applications such as student information systems, campus financial systems, or personnel/human resource software (Figures 16 and 17). Taken together, these data indicate that campus IT officials are twice as likely to agree that Open Source looms large in the future (59.3 percent) as they are to agree that Open Source currently offers viable options for ERP applications (28.0 percent).

This affirmative ambivalence is not surprising given that LMS and ePortfolio modules are the only two released and deployed Open Source ERP applications; the Kuali Open Source applications – financial and student information systems, human resources, research administration, and development – are not yet in final release.

Yet even with the continuing “affirmative ambivalence,” the recent gains for Moodle and Sakai are interesting, suggesting that ten years after the deployment of the first commercial LMS applications, campus officials and faculty advisory committees are reviewing seriously the various LMS offerings from both commercial providers and the collaborative Open Source community. Faculty and senior campus IT officials are eager for information about the deployment experience of the institutions that have been the early adopters of Open Source LMS applications. UCLA’s decision to move to Moodle as the campus-standard LMS as of fall 2008 may serve as a catalyst for other institutions, to review their LMS deployment activities and options. Additionally, a discussion on the EDUCAUSE CIO ListServe in September 2008 provided the names of other campuses, large and small, that have migrated to an Open Source LMS.3

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3 Information about the UCLA decision to migrate to Moodle is available on the Web: http://www.oit.ucla.edu/cdle/default.htm The EDUCAUSE CIO ListServe
Interestingly, the survey data suggest a “just do it” strategy with regard to Open Source deployment. Comparatively few colleges and universities have developed a strategic plan for Open Source as of fall 2008: only a seventh (14.4 percent) of institutions currently report a strategic plan for Open Source development and deployment, up slightly from 12.3 percent in 2007 and 10.0 percent in 2006. Across sectors, the percentage of institutions with a strategic plan for Open Source deployment ranges from 20.0 percent in public research universities (compared to 17.7 percent in 2007) to 6.6 percent in community colleges (up from 2.7 percent in 2007).

Moreover, even without strategic plans, the 2008 survey data point to serious and significant Open Source development and deployment, involving both back room system tools as well as the emerging set of (still early stage) Open Source ERP applications. Fully one-fifth (20.0 percent) of institutions report increased funding for Open Source development and deployment in 2008, about the same as in 2006 and 2007. Additionally, when asked to describe their campus strategy on Open Source tools, two-fifths (40.3 percent, compared to 38.6 percent last year and 36.4 percent in 2006) of the survey respondents report that their campus is “sampling” Open Source tools for central IT services, primarily using backroom or infrastructure tools (for example, Apache server software or email utilities); additionally, more than a third report that Open Source tools are either “operational” (14.8 percent) or “mission critical” (17.1 percent) for their institutions, or that their campus is engaged in Open Source development work that includes contributing tools for central IT operations (3.0 percent).

Finally, affirmative ambivalence notwithstanding, a new item on the 2008 survey reveals that only a small percentage of the survey respondents believe that there is a high likelihood that their institution will migrate to various Open Source ERP applications by 2013 (Figure 18). Not surprisingly, the numbers are highest for Open Source LMS applications, which are already deployed on many campuses. IT officials in public universities appear somewhat more likely to predict migration to Open Source ERP applications than their peers in other sectors. Still, the far lower numbers for other applications – student information systems, finance, human resource, research management, and development – no doubt reflect the absence of campus experience with the emerging Kuali Open Source ERP modules (www.kuali.org). The numbers for likely migration to Open Source applications will no doubt rise following the release and initial implementation of the Kuali modules by a small group of early adopter institutions.

**Migrating to SaaS-Based ERP Applications**

The 2008 survey also provides new data about migration to Software-as-a-Service (SaaS)-based ERP applications. As above, the only a small number of survey respondents believe that their institutions will migrate to SaaS-based ERP applications by 2013; in general, the numbers are a little lower for migration to SaaS-based applications than the migration to Open Source (Figure 19).
Interestingly, where respondents in public research universities are often more likely than their peers to anticipate moving to Open Source ERP applications, the survey data reveal that IT officers in community colleges are generally more likely than their peers in other sectors to anticipate a move to SaaS-based ERP applications by 2013. The higher numbers for SaaS among community colleges are not necessarily surprising; these institutions typically have smaller tech staffs to support administrative operations than other public sector institutions. Moreover, the movement to SaaS-based ERP applications does not necessarily involve a change in the software, only the expansion of the services offered by the institution’s current ERP provider. Additionally, many multicampus community colleges currently operate under a SaaS-like structure for their ERP systems, as one data center may service several campuses in a community college district.

As with the migration to Open Source ERP applications, the numbers for migration to SaaS-based applications will no doubt rise in the coming years once the larger campus community receives reports about the experience of the early adopters. An additional factor involving SaaS applications involves the willingness of campus IT officials to trust their service providers to host, service, and protect mission critical and highly confidential institutional data.