Learning Management System Study Executive Summary 2009-2010

Study conducted by Information Technology's Technology and Learning Group
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EXECUTIVE SUMMARY

With Blackboard's license renewal approaching in December 2010, Information Technology's (IT) Technology and Learning group launched a study in May 2009 to identify the learning management system (LMS) needs of the faculty community and to determine if Blackboard was meeting those needs. The feedback and data collected from faculty during the 13-month study indicated that Blackboard was not meeting the needs of many faculty members and that Sakai, a LMS that was piloted during the study, could not only meet those needs, but do it with greater ease and flexibility.

This report contains a summary of events and survey results that conclude with the decision to adopt Sakai as the official LMS at Pepperdine University.

FACULTY SATISFACTION WITH VARIOUS LMSs

In May 2009, the Technology and Learning group commenced a study of learning management systems used at Pepperdine University with a survey sent to all active faculty (approximately 630). One hundred and eighty-three faculty responded to the survey.

Figure 1. Survey Respondents Primary LMSs
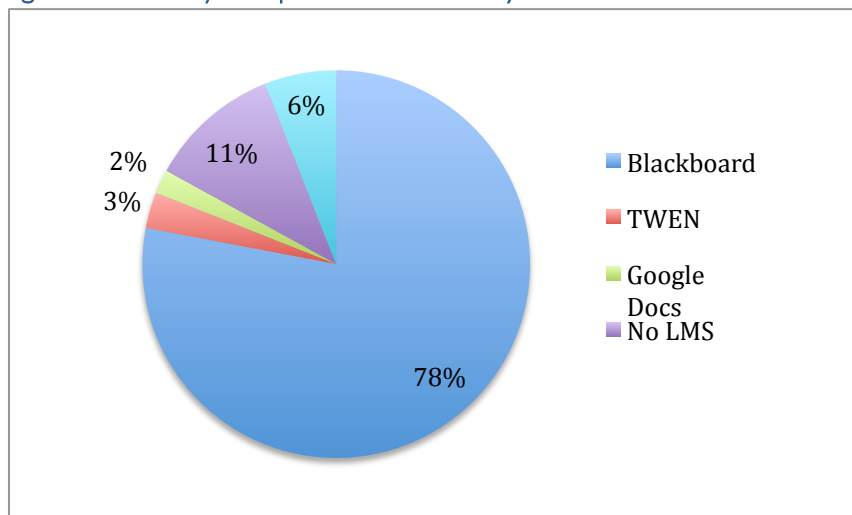
When asked, "What is your primary learning management system (LMS)?" 78 percent of survey respondents said "Blackboard." View Figure 1.

Although faculty were not directly asked about Blackboard, many responses to open-text questions revealed that faculty were not satisfied with Blackboard because it required too many clicks to use, was instructor-centric, and appeared "clunky." Feedback from subsequent Education Technology User Group (ETUG) meetings, focus groups with faculty, and question and answer sessions confirmed that these experiences with Blackboard were widespread.

To help identify LMS needs, faculty who responded to the survey were asked to rate items based on how they thought a LMS platform could be valuable to them. Figure 2 shows a clear interest in using a LMS to access material any time from any location, as well as the ability to save time and improve teaching and learning.

Figure 2. Faculty Rate the Value of Services Provided by a LMS

Question	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No. of Responses
Accessing material any time from any location (convenience)	121	43	8	0	2	174
Saving time	89	55	19	8	3	174
Improving teaching and learning	74	61	28	5	5	173
Managing course activities	65	64	36	8	2	175
Improving student-faculty communication	55	56	43	17	3	174
Collaborating with colleagues and students	36	56	61	16	4	173
Improving student-student communication	30	57	66	14	4	171

SAKAI PILOT TEST

To enrich the LMS study, the Technology and Learning group offered all faculty members the opportunity to pilot test Sakai beginning in June 2009. Sakai is an open source LMS that has many of the same features as Blackboard, offers greater flexibility for application enhancements, and was developed collaboratively by the University of Michigan, Indiana University, MIT, and Stanford. More than 200 educational institutions use Sakai worldwide.

In July 2009, thirteen faculty members who were early-adopters of Sakai attended the Sakai conference in Boston. Throughout the summer and early fall of 2009, the Technology and Learning team supported an additional 31 faculty members who volunteered to participate in a pilot test of Sakai for the 2009-2010 academic year. As the year progressed, 50 additional faculty members had logged into Sakai and were using it independent of the official pilot program. The total number of faculty who used Sakai during the pilot rose to 94 and included representatives from each of Pepperdine's five schools.

In October, nearly 40 faculty members attended a Sakai demonstration and presentation at Pepperdine University's All Faculty conference. Gerard Flynn, director of Pepperdine IT's Technology and Learning group, facilitated the presentation along with three Sakai pilot faculty members. First, Dr. Stella Erbes of Seaver College demonstrated key features and talked about how she used Sakai in her undergraduate class. Next, Dr. Margaret Riel of the Graduate School of Education and Psychology (GSEP) discussed how she used the Sakai environment to share a syllabus and materials with a colleague who taught the same course to a different cohort. Finally, Dr. Michael Williams of the Graziadio School of Business and Management (GSBM) concluded the presentation by comparing the philosophical and economic differences between Sakai and Blackboard.

STUDENT SATISFACTION WITH VARIOUS LMSs

In December 2009, the Technology and Learning group administered a survey to undergraduate, masters, law, and doctoral students to obtain feedback about the LMSs used at the University. The survey was completed by 905 students.

Eighty-nine percent of the students who took the survey had used Blackboard, 44 percent had used Sakai, 12 percent had used TWEN or another system, and one percent had never used a LMS. The survey showed that 77 percent of the students self-identified as intermediate or advanced users of LMSs. When asked how often they interact with their LMS, 75 percent of the students responded that they interact with the system at least once per week. (View Figure 3.)

Figure 3. Frequency of Student Use of LMSs

Answer	No. of Response	% of Total
Few times a semester/trimester	50	6%
Few times a month	84	10%
Once a week	150	17%
Few times a week	322	37%
Daily (once or more per day)	188	21%
Don't Use	81	9%
Total	875	100%

SAKAI-USER SURVEY RESULTS

In late April and early May 2010, the Technology and Learning group surveyed students and faculty who had used Sakai during the fall 2009 and/or spring 2010 terms.

All 94 faculty members who had used Sakai during the academic year were invited to participate in the user satisfaction survey. Thirty-five faculty members responded to the survey. When asked, "Would you recommend that Pepperdine discontinue the use of Blackboard and adopt Sakai?" 91 percent of the 33 faculty members who answered the question said "yes" or "yes, with comments."

Two hundred and ninety-one students responded to the student user satisfaction survey. When asked, "Would you recommend that Pepperdine discontinue the use of Blackboard and adopt Sakai?" 75 percent of the 264 students who answered the question said "yes" or "yes, with comments."

Comparison of Tools

Faculty and student responses from the April and May 2010 surveys indicated that Sakai tools were better that those found in Blackboard. Figure 4 displays the comparisons made by faculty, and Figure 5 shows the comparisons made by students.

Figure 4. Faculty Comparison: Sakai Tools vs. Blackboard (Bb) Tools

Question	Better than Bb	Same as Bb	Worse than Bb	I didn't use in Sakai	Not in Bb	No. of Responses
Resources (Course materials)	16	8	5	2	1	32
Assignments	13	10	2	6	1	32
Gradebook	11	4	6	9	2	32
Announcements	11	11	1	8	1	32
Syllabus	10	14	2	5	1	32
Dropbox	9	4	0	17	2	32
Roster	8	13	2	8	1	32
Forums (Discussion board)	7	5	3	15	1	31
Calendar	6	5	0	19	1	31
Turnitin	4	5	3	19	1	32
Elluminate	3	2	1	24	2	32
Other (please indicate)	3	1	0	1	0	5
Wiki	3	0	0	24	5	32
Emailing students	3	11	1	16	1	32
Quizzes/Tests	3	3	0	25	1	32
Other (please indicate)	2	1	0	3	3	9
Other (please indicate)	1	1	0	1	0	3
Other (please indicate)	1	1	0	1	0	3
MyLibrary	1	2	0	27	1	31
Blog	1	2	0	25	4	32

Figure 5. Student Comparison: Sakai Tools vs. Blackboard (Bb) Tools

Question	Better than Bb	Same as Bb	Worse than Bb	I didn't use in Sakai	Not in Bb	No. of Responses
Announcements	140	76	17	28	2	263
Assignments	134	84	21	21	4	264
Gradebook	130	71	17	43	2	263
Resources (Course materials)	126	91	25	18	4	264
Forums (Discussion board)	99	34	23	103	4	263
Turnitin	91	39	12	108	14	264
Syllabus	86	126	18	36	3	269
Calendar	84	38	12	124	6	264
Quizzes/Tests	83	37	16	118	10	264
Dropbox	82	42	12	115	10	261
Emailing	78	62	18	103	3	264
Blog	56	20	11	170	6	263
Elluminate	53	28	10	159	13	263
Wiki	48	20	11	173	9	261
MyLibrary	41	21	10	171	5	248
Other (please indicate)	10	2	8	22	1	43
Other (please indicate)	2	3	5	18	1	29
Other (please indicate)	0	3	4	18	0	25
Other (please indicate)	0	2	5	18	0	25

Both student and faculty survey participants were also asked to rate their experience with learning Sakai as well as its interface and tools. Figure 6 displays faculty responses, and Figure 7 shows student responses.

Figure 6. Faculty: Rating of Experiences with Sakai

Question	Easy	Somewhat easy	Neutral	Somewhat difficult	Difficult	No. of Responses
Learning Sakai	22	8	1	4	0	35
Sakai Interface	18	9	3	4	0	34
Sakai tools	10	13	8	3	1	35
Getting technical support	19	9	4	1	1	34
Migrating material from Blackboard	4	3	20	2	3	32

Figure 7. Students: Rating of Experiences with Sakai

Question	Easy	Somewhat easy	Neutral	Somewhat difficult	Difficult	No. of Responses
Learning Sakai	158	76	33	14	4	285
Sakai Interface	137	60	57	19	8	281
Sakai tools	132	72	50	21	5	280
Getting technical support	80	36	136	15	6	273
Collaborating with others	96	47	102	18	12	275

FOCUS GROUPS AND FACULTY MEETINGS

General Focus Groups

To follow up on the results of the April and May 2010 surveys and to further engage faculty in the LMS study, the Technology and Learning group hosted several focus groups and question and answer sessions at each of the graduate campuses during April and May.

Nineteen faculty members participated in 90-minute focus groups held at each of the five schools. Faculty shared their thoughts on the LMSs, identified the critical and desired features required in an LMS, and expressed how they would feel about adopting a new LMS. Subsequent to the focus groups, "Blackboard vs. Sakai" informational sessions were held at the Encino, Irvine, Malibu, Westlake, and West Los Angeles campuses to generate additional feedback.

Faculty who attended the focus groups and information sessions were positive and supportive of Sakai, but expressed concern about the support and time needed for the migration from Blackboard to Sakai and about overall technology change fatigue.

Deans' Council

In late April 2010, Gerard Flynn, director of Technology and Learning, and Jonathan See, deputy chief information officer, presented the results of this LMS study at the Pepperdine Deans' Council Meeting. The deans and the provost were supportive of the recommendation to adopt Sakai as the University's official LMS and encouraged the Technology and Learning group to communicate clearly and frequently to all faculty members about the plan to move forward and the options available to faculty for support during the migration period.

Seaver College Meetings

In early May, Gerard Flynn presented the results of the study to the Seaver College dean and cabinet. While generally supportive of the transition to Sakai, there was no clear consensus about an implementation timeline. Some faculty who attended the meeting suggested immediate implementation, while others advised delaying the implementation. At their request, a list of frequent Blackboard users was provided to three Seaver chairpersons.

In mid-May, a summary of the study was presented to the Seaver Faculty Association Executive Committee. The committee endorsed the recommendation and indicated that no further approval was necessary from Seaver College faculty.

Reaching Out to Blackboard Users

As an ongoing effort during the month of May, the Technology and Learning group reached out to faculty who are frequent Blackboard users to determine their opinions about adopting Sakai as their new LMS. Nearly all of the Blackboard users were aware of the potential transition to Sakai and the majority were supportive of the transition. Those opposed to the transition had concerns about the amount of time required to learn the new system and migrate material to the new system.

Sakai Conference 2010

At the conclusion of the study in June 2010, several faculty members representing each of the five schools were invited to attend the Sakai conference in Denver, Colorado. In small group meetings, Pepperdine attendees made several suggestions regarding the implementation of Sakai at Pepperdine. In line with the suggestion of the Deans' Council, faculty attendees also recommended clear and direct communication to faculty about support for the transition process. Faculty also recommended that a member of the Technology and Learning group schedule and present brief overviews at various fall faculty meetings as well as at the All Faculty conference in October.

CONCLUSION

Data collected throughout the LMS study clearly identified the need to provide greater LMS services and flexibility to faculty and students. Given this, there is general consensus among faculty and students who participated in the study that Sakai is able to meet those needs. Based on the results of this report, Pepperdine University will move to adopt Sakai as its official LMS. The University's contract with Blackboard will expire on December 31, 2010; the University will not renew it.

All faculty members are encouraged to begin using Pepperdine's version of Sakai, named "Courses," for their fall 2010 courses. Several support venues have been created for faculty including one-on-one assistance, introductory and intensive workshops, and helpful online documentation. More information about the Sakai transition can be found on the Technology and Learning website at http://services.pepperdine.edu/techlearn/.