Project Report and Recommendations

Executive Summary
In March 2011, Information Technology Services (ITS) and the Center for Teaching and Learning (CTL) jointly released a Request for Qualification (RFQ) for a learning management system (LMS). The RFQ review committee selected five possible LMS options: Blackboard, Canvas, Desire2Learn, Moodle, and Sakai. To determine whether any of these options was a viable replacement for the current LMS, Blackboard, the LMS steering committee, made up of representatives from across campus, asked for a variety of data to be collected and analyzed so that an appropriate recommendation could be made.

The LMS project team organized focus groups with students, faculty, and staff to determine how they use Blackboard, as well as what they like and don’t like about it. An online survey gathering similar data was also created and sent to the campus community.

The project team contacted UT Austin’s 11 peer institutions to determine their LMS costs, likes and dislikes, and process for transitioning to a new LMS. Finally, the team, along with a number of support staff across campus, organized user testing for each of the five LMS options.

The results of the research were presented to the LMS steering committee on June 17, 2011. The committee determined that there are two vendors qualified to submit proposals when a Request for Proposal (RFP) is published: Blackboard and Canvas (provided by Instructure). The committee also recommended that as part of the RFP evaluation process, in-depth pilot tests be run so that users can experience how the systems compare in a real-world setting.

Detailed Results and Recommendations
The LMS steering Committee’s decision was based on the data collected between March – June 2011, from focus groups, online surveys, interviews with peer institutions, and user testing. This section provides a more detailed view of the research methods used and the results of the data analysis.
Blackboard 9.0 Focus Groups
During the spring 2011 semester, ITS and CTL interviewed over 75 students, faculty, and staff. Interviews were performed in groups of 2-10 participants and lasted for an hour. Participants were solicited via personal contacts and campus-wide emails. The following questions were asked of all participants:

- How do you use Blackboard in your courses?
- What are the features you use most?
- What do you like about Blackboard?
- What do you not like about Blackboard?
- What do you wish Blackboard had that it doesn’t?
- How would you feel about moving to a different LMS if there is an option to do so?

Most Frequently Used Features
Focus group participants reported that the features they use most in Blackboard include (in no particular order):

- Gradebook
- File upload/download,
- Communication tools (i.e. email and announcements)
- Discussion board
- Assignment

Likes
Focus group participants liked the following Blackboard features:

- Communication tools, including email and announcements.
- Ability to post documents (file upload)
- Grades (including students having access to their grades throughout the semester)

Dislikes
The two most common complaints about Blackboard were the interface (poor, clunky, not intuitive, required a lot of clicks, and too complex) and the speed of the system (slow). Focus group participants also disliked:

- Gradebook
- Tests
- Managing classes with multiple sections or groups
- Technical support

Requests
The most common requests were for a **simpler, more streamlined Blackboard** (“Blackboard Lite”) and for **mobile access to Blackboard**. Focus group participants also asked for:
Better email/communication tracking
Better media support
A better gradebook that includes online grading
A more reliable test/quiz tool
Wikis
ePortfolios
Tools that help build online community in courses

Other Tools Used
Faculty use a variety of tools outside Blackboard to teach – over 20 unique tools were reported in the focus groups. The most commonly reported tool was eGradebook, which many faculty remembered fondly. Other common tools included CLIPS, Google Docs, wikis, Adobe Connect, and Moodle.

Moving to Another LMS
When asked how they felt about moving to another LMS, most responded that they have a lot invested in Blackboard and that moving to a new LMS and learning how to use it would require a significant amount of time. A number of participants suggested fixing Blackboard’s problems instead of moving. Those that recommended moving said that any other LMS would have to be exponentially better than Blackboard for a migration to be worth it. The new system would also have to be easy to learn, and migration to a new system should be easy.

Blackboard 9.0 Online Survey
Between March 12 and May 20, 2011, a total of 614 students and 349 faculty members completed an online survey about their use of Blackboard. Participants were solicited via campus-wide emails and prominent notices on the CTL and ITS web sites, as well as on the Blackboard login page. The goals of the survey were to understand the most important features for students and faculty, identify what areas of Blackboard need improvement, determine overall satisfaction with Blackboard, and understand if there is a desire to move to another option.

Most Important Features
The most important features in Blackboard for both students and faculty are the gradebook, file upload/download, and communication tools (i.e. email and announcements).

Areas that Need Improvement
Faculty reported that the most difficult feature to use is the gradebook.

Other common complaints about Blackboard included:

- Speed (too slow)
- Clunky (i.e. too many clicks to make something happen or get to where you want to go)
- Interface (cluttered making navigation difficult)
- File manipulation (i.e. upload/download) is difficult
- Features don’t work as expected

Respondents most frequently requested the following features:

- Calendar with due dates that is integrated into Outlook and/or Google
- Ability to view current courses/view courses by semester
- An attendance module
- A more appealing, streamlined interface

**Overall Satisfaction**

In conclusion, **44.2% of faculty members are dissatisfied or very dissatisfied with Blackboard.** 44.7% would either like to move or would be the first ones to move. Only **26.6% of students were dissatisfied or very dissatisfied**, but 40.5% would either like to move or would be the first ones to move.

**Interviews with Peer Institutions**

During June 2011, ITS and CTL interviewed a total of 11 of our peer institutions, as well as two additional institutions that were undergoing LMS reviews. Interviews were 30 minutes each. Topics that were covered included the name of LMS, why they chose the system, how they transitioned to it, faculty and student satisfaction with the system, adoption rate, costs, and number of staff supporting the system.

Of our peer institutions:

- 1 using Blackboard
- 1 using Canvas (not a peer)
- 1 using a homegrown system but piloting Canvas
- 2 using Desire2Learn
- 3 using Moodle
- 4 using Sakai
- 1 in the midst of a review and has not made a decision

The overall impression for each tool, based on conversations with peer institutions, is as follows:

<table>
<thead>
<tr>
<th>Blackboard</th>
<th>Canvas</th>
<th>Desire2Learn</th>
<th>Moodle</th>
<th>Sakai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement over previous tool. Adopted because of pre-existing contract with Blackboard.</td>
<td>Solid positive feedback – simple user interface with good messaging and time-saving grading options. Parent company provides excellent, timely support (sometimes in the middle of the night). Built on modern code base from the ground up.</td>
<td>Positive feedback from faculty – one university reported over 80% satisfaction rating. Students like ease of access to course materials. Gradebook is hard to learn/use and slow for large classes.</td>
<td>One university likes it but has invested a large amount of time and money customizing it. Two institutions are still transitioning so feedback is limited. Another university suggested that pilot</td>
<td>Feedback was focused on the positive aspects of the community and how the school is “in charge of its own destiny” because the tool is open source. Core community spends a lot of time and money on development. Universities acknowledged that Sakai was not designed as an LMS and that it lacks pedagogical support. In addition, mobile</td>
</tr>
</tbody>
</table>
Supports research and collaboration. Provides easy integration with external apps like Google.

Positive feedback on support.

testing showed that Moodle is rated about the same as D2L.

access, the gradebook, and user interface need improvement.

Sakai OAE is the next big release – an alpha version came out in 2010. However there is no defined timeline, so it’s unclear when it will be available for production.

**User Testing of 5 LMS Options**

During June 2011, over 100 students, faculty, and staff members were asked to review one or more of the five learning management system options: Blackboard, Canvas, Desire2Learn, Moodle, and Sakai. Testers were asked to provide feedback via an online or paper survey. They ranked specific tasks as well as provided feedback on their overall impressions for each system.

The following table shows the weighted average for each question (out of a possible 5 points), normalized for the number of respondents for each specific LMS.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Blackboard (14 responses)</th>
<th>Canvas (38 responses)</th>
<th>Desire2Learn (29 responses)</th>
<th>Moodle (35 responses)</th>
<th>Sakai (21 responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation</td>
<td>3.43</td>
<td>4.24</td>
<td>3.10</td>
<td>2.34</td>
<td>2.90</td>
</tr>
<tr>
<td>Tasks were straightforward</td>
<td>3.14</td>
<td>4.08</td>
<td>3.11</td>
<td>2.50</td>
<td>2.90</td>
</tr>
<tr>
<td>Location in tool apparent</td>
<td>3.58</td>
<td>3.92</td>
<td>3.14</td>
<td>2.62</td>
<td>3.33</td>
</tr>
<tr>
<td>Understanding information and instructions</td>
<td>3.29</td>
<td>4.11</td>
<td>2.79</td>
<td>2.50</td>
<td>2.90</td>
</tr>
<tr>
<td>Information organization</td>
<td>3.31</td>
<td>3.97</td>
<td>2.75</td>
<td>1.91</td>
<td>2.95</td>
</tr>
<tr>
<td>This tool was (Frustrating to S-Satisfying)</td>
<td>3.21</td>
<td>4.18</td>
<td>2.82</td>
<td>2.17</td>
<td>2.85</td>
</tr>
<tr>
<td>This tool was (Hard to use to S-Easy to use)</td>
<td>3.46</td>
<td>4.29</td>
<td>3.04</td>
<td>2.37</td>
<td>3.00</td>
</tr>
<tr>
<td>This tool was (Slow to S-Fast)</td>
<td>2.43</td>
<td>4.30</td>
<td>3.57</td>
<td>3.53</td>
<td>3.70</td>
</tr>
<tr>
<td>This tool was (The worst ever to S-The best ever)</td>
<td>3.38</td>
<td>4.03</td>
<td>3.00</td>
<td>2.46</td>
<td>3.00</td>
</tr>
<tr>
<td>If this tool were offered at the university (1-I would be the last to use it to 5-I would be the first to use it)</td>
<td>3.42</td>
<td>4.08</td>
<td>2.85</td>
<td>2.29</td>
<td>2.95</td>
</tr>
<tr>
<td>Average score:</td>
<td>3.27</td>
<td>4.12</td>
<td>3.02</td>
<td>2.47</td>
<td>3.05</td>
</tr>
</tbody>
</table>

Testers were also asked if they would recommend each of the tools as an alternative to Blackboard.

They responded as follows:

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Blackboard (9 responses)</th>
<th>Canvas (27 responses)</th>
<th>Desire2Learn (22 responses)</th>
<th>Moodle (32 responses)</th>
<th>Sakai (16 responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44.4%</td>
<td>66.7%</td>
<td>31.8%</td>
<td>12.5%</td>
<td>43.8%</td>
</tr>
<tr>
<td>No</td>
<td>55.6%</td>
<td>33.3%</td>
<td>68.2%</td>
<td>87.5%</td>
<td>56.3%</td>
</tr>
</tbody>
</table>

**Schedule and Milestones**

<table>
<thead>
<tr>
<th>Milestone/Deliverable</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard 9.0 Focus Groups</td>
<td>April – May 2011</td>
</tr>
</tbody>
</table>
Blackboard 9.0 Online Survey | March – May 2011
Interviews with Peer Institutions | May – June 2011
User Testing of 5 LMS Options | May – June 2011

**Project Management and Governance**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name(s)/Title(s)</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Sponsor(s)</td>
<td>Brad Englert, Chief Information Officer</td>
<td>Responsible for the success of the project.</td>
</tr>
<tr>
<td></td>
<td>Chief Operating Officer, Information Technology Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Harrison Keller, Vice Provost for Higher Education Policy and Research, Office of the President</td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>David Moss, ITS</td>
<td>Provide project planning, coordination, and communications. Provide overall status reporting of deliverables to the project team and identified stakeholders. Track progress toward completion of the identified project goals. Meeting organization and overall meeting facilitation.</td>
</tr>
<tr>
<td>Research and Communications</td>
<td>Jennifer Jobst</td>
<td>Coordinate research, data analysis, and communication.</td>
</tr>
<tr>
<td>Technical Team</td>
<td>Technical Team</td>
<td>Clifton Brown, ITS</td>
</tr>
<tr>
<td></td>
<td>Mario Guerra, CTL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Karron Lewis, CTL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sejal Shah, CTL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matt Wedgwood, ITS</td>
<td></td>
</tr>
<tr>
<td>Stakeholder(s)</td>
<td>University of Texas at Austin faculty, staff and students</td>
<td>Customers utilizing the chosen solution.</td>
</tr>
</tbody>
</table>

**Endorsement**

The Course and Learning Management System Steering Committee endorsed the research and the recommendations presented in this document on June 30, 2011.