

Rider University

**Learning Management System (LMS)
Evaluation Committee**

Final Report
(excluding appendices)

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Executive Summary

The Rider University Learning Management System (LMS) Evaluation Committee was formed in summer 2011 and met from the beginning of September 2011 to the end of April 2012. The committee was tasked with recommending the LMS that will best serve the university in the 21st century.

After an open, transparent, and systematic evaluation spanning two phases, involving various stakeholders, and covering multiple potential platforms, the committee recommends the Canvas Learning Management System. In the case that Canvas can't fulfill requirements outside the range of the committee considerations, such as cost and technology integration requirements, the committee makes a secondary recommendation of moving to Desire2Learn. Comparing the primary and the secondary choices, the committee notes that Desire2Learn is an improved version of the existing Blackboard, while Canvas represents a leap of advancement in technology design and user experience. A migration plan is briefly presented in the end of the report.

With Canvas as the primary and Desire2Learn as the secondary recommendations, the committee passes the final decision to OIT for further analysis and decision.

Background

Origin:

In summer 2011, Carol Kondrach, Associate Vice President for Information Technologies for Rider University, initiated the idea of evaluating learning management system (LMS) products. The existing LMS used at the University is Blackboard 9.1, and the contract will end in summer 2013. Given the rapid changes in the LMS market, the timing was right for the University to conduct a comprehensive evaluation of LMS products to find the best system going forward.

Overall Objective:

The overall objective of the Learning Management System (LMS) Evaluation committee was to research, evaluate, and make final recommendations of an LMS solution that best serves Rider University in the 21st century.

Committee Membership:

Carol Kondrach worked with Deans of each college to appoint members of the committee with the goals of achieving broad representation across institutional sectors and disciplines, while maintaining a small group to enable efficient and effective work. A complete list of the committee members is given in **Appendix 1**.

It should be noted that given the nature of LMS and the culture at the University, the committee was designed to be faculty-driven from the start. Dr. Jia Shen, Associate Professor of Information Systems in the College of Business Administrations, was appointed as a co-chair in summer 2011. Faculty representatives from each college, members from the library, TLC, and OIT were also selected for the committee. A consultant from SunGard served as a co-chair. During the project period, there was a high turnover rate at SunGard, resulting in a number of consultants working on the project. The last three consultants whose work was the most substantial are listed on the membership list. A core team consisting of Jia Shen, Shaun Holland, Heeyoung Kim, Tim McGee, Carol Kondrach, and the SunGard Consultant was formed at the start to draft documents, conduct research, and take lead in subareas of the work such as communication, technology evaluation, surveys, and institutional assessment.

Guiding Principles:

- The work of the committee will be open and transparent. Communication with the community throughout the process is critical.
- Recommend a product that meets 21st century needs of students and faculty supporting the improvement of retention and graduation rates.
- Recommend a product that will be used for multiple purposes, such as academic instruction, organization governance, training, and research.
- Recommend a product that provides an integrated learning platform with the ability to support various technologies such as video, portfolio, assessment, mobility, etc.

Overall Process

Two-phase Process

The core team conducted research in summer 2011 to help jumpstart the evaluation process. At the first committee meeting in fall 2011, the core team proposed a two-phase evaluation approach for a systematic evaluation of LMS products:

- Phase 1 – Committee members conduct a preliminary evaluation of various LMS systems to narrow down the LMS options for further evaluation
- Phase 2 – Rider community members participate in hands-on evaluation of the LMS finalists to make the final selections

The committee approved and adopted the process. Details of each phase are provided in the next two sections.

Meetings

The full committee officially kicked off meetings on September 19, 2011. The committee then met approximately every week in the fall 2011 and spring 2012 semesters. The meetings were held in Moore Library room LP2 in both semesters. Online video and audio conferencing were used to enable the SunGard Consultants to join the meetings remotely. The core team also had several meetings in-between the main committee meetings such as during the winter break in 2012. See **Appendix 2** for the meeting schedule in the two semesters. **Appendix 3** provides the meeting minutes.

Communication with the Rider Community

Communication was considered critical to the success of the process. A communication subcommittee was formed at the start of the process and was led by Shaun Holland. The following means were used throughout the process to engage the Rider community and keep the community informed of the evaluation process and the committee's work:

- A blog site was set up to keep the entire Rider community informed. The blog site is at: www.rider.edu/lmsevaluation. A Twitter account was also created and used for news and updates. **Appendix 4** provides a screenshot of the blog website.
- Emails were sent through university communications to the entire Rider community for updates, announcements of events, surveys etc. See **Appendix 5** for samples of emails sent through University Communications.
- Carol Kondrach and Jia Shen presented at the Dean's Council meeting in fall 2011.
- Jia Shen and Carol Kondrach presented at the IT advisory committee meeting in fall 2011.

- Jia Shen, Carol Kondrach, Heeyoung Kim, Shaun Holland, Tim McGee, Sharon Yang, Sue O'Sullivan-Gavin, and Diqing Lou presented at the Faculty Development day in January 2012.
- Carol Kondrach and Jia Shen attended the student organization SGA's meeting in March 2012.
- Faculty and students were invited to participate in online surveys on current LMS uses. The entire Rider community was invited to the Vendor Showcase Fair in spring 2012. Details are in the sections below.

Phase One

In phase one, the committee members examined various LMS products and narrowed down the list of options which were further considered in phase two. After completing research on the LMS market and products, the committee identified the seven systems as the initial pool of candidates, where * indicates open source LMS:

- Blackboard 9.1 (<http://www.blackboard.com>)
- Canvas (through 3rd party, <http://www.instructure.com>)*
- Desire2Learn (<http://www.desire2learn.com>)
- Epsilen (<http://www.epsilen.com>)
- Learning Studio (<http://www.pearsonlearningsolutions.com>)
- Moodle (through 3rd party, <http://www.moodlerooms.com>)*
- Sakai (through 3rd party, <http://www.rSmart.com>)*

Appendix 6 provides an overview of the LMS options.

Phase one was conducted in the Fall 2011 semester. To narrow down the LMS options, the committee adopted a variety of means, which are described below.

RFI to vendors

A Request For Information (RFI) solicitation process was conducted in the fall 2011 semester and the RFI document was sent to all seven LMS vendors. All vendors provided written responses to Carol Kondrach's office except for Pearson Learning Studio. See **Appendix 7** for the RFI document.

Vendor on-site presentation

The committee invited candidate LMS vendors on campus for a presentation at the committee's meeting. All presentations were about 45 minutes long, followed by a 15-20 minute Q&A. The vendors were asked to highlight system features, and demonstrate the system functionalities as specified in the Rider RFI.

Six vendors made presentations either onsite or remotely through online audio and video (i.e., Sakai). For the lack of response on the RFI and the on-site presentation request, and with the committee in general, Pearson Learning Studio was dropped from further considerations.

Sandbox

Sandbox environments were set up for each of the six remaining candidate systems. Accounts were provided to all committee members, and they were asked to test each system hands-on within 48 hours of the vendor presentations.

Vendor Evaluation in Phase 1

All committee members were asked to complete an evaluation for each LMS within 48 hours of participating in the vendor presentation and testing the sandbox environments. The evaluation rubric took both the functionality and usability of a learning platform into consideration. Specific categories included communication and collaboration, assessment and evaluation, course building and administration, overall usability, training and other considerations, and technical considerations. See **Appendix 8** for the vendor evaluation survey in phase 1. **Appendix 9** provides results of committee's evaluation in phase 1. From the most favorable to the least favorable, the ranking by the committee in phase 1 was:

1. Canvas
2. Moodle
3. Desire2Learn
- 4.&5. Blackboard and Epsilen
6. Sakai

Technology Feasibility Preliminary Evaluation

A technology feasibility subcommittee led by Ricardo Stella followed up with each vendor on a preliminary technology evaluation. The subcommittee recommended eliminating Epsilen given many of their integrations and options were either not ready or too early in the product development process to be tested properly.

Decision Deliberations in Phase 1

In the committee meeting on December 7, 2011, the committee considered all the data collected in phase one and make recommendations for phase two. Out of the six remaining vendors, rSmart Sakai ranked the lowest in the phase 1 evaluation, and was eliminated. Epsilen was also eliminated based both on its low rankings in the phase 1 evaluation and recommendation from the technology feasibility subcommittee. The committee recommended that the following four systems move on to phase two evaluation, where * indicates open source LMS:

- Canvas (through 3rd party, <http://www.instructure.com>)*
- Moodle (through 3rd party, <http://www.moodlerooms.com>)*
- Desire2Learn (<http://www.desire2learn.com>)
- Blackboard 9.1 (<http://www.blackboard.com>)

Phase Two

In phase two, the evaluation was open to the entire Rider community. The objective was to conduct a campus-wide evaluation of the LMS finalists and make the final recommendation to the university. Phase two was conducted in the Spring 2012 semester. The following means were used in this phase of evaluation:

Faculty and Student LMS surveys

Online surveys were administered to the faculty and students at Rider University. The purpose of the surveys was to understand the current use and needs of LMS at the university. The surveys were open online from March 5 to March 19, 2012. **Appendix 10** and **Appendix 11** provide faculty survey questionnaire and results. **Appendix 12** and **Appendix 13** provide student survey questionnaire and results.

As shown in Appendix 11 and 13, 252 students and 71 faculty members completed the surveys. Among the students, 196 are full-time and 56 are part-time students. Among the faculty, 43 are full-time and 28 are part-time faculty. The survey results present a detailed view of how students and faculty members think of and use the LMS. Faculty members reported most frequently using the LMS to access outside materials, present online quizzes, and offer a course calendar. They felt that these features were important in addition to the gradebook, announcement, and email. In their analysis, the committee felt that the survey illustrates that faculty members predominately think of the LMS as a means of one-way communicating to students rather than two-way interactions with the students. Because the results from this survey were so text-based, committee members felt that they might benefit from analysis outside of the LMS committee work.

Vendor Fair

The committee organized a campus-wide event to showcase all four LMS vendor finalists to the community. It was a two-day event on Monday April 2nd and Tuesday April 3rd from 10am-8pm in North Hall room 202 on the Lawrenceville campus. The four finalist vendors set up tables and interacted with visitors in demonstrating their LMS products and answering questions. The event was widely advertised through online communication (university emails, axis TV, blog site, etc.) and physical signs on both campuses. **Appendix 14** provides the room layout at the event. **Appendix 15** provides the poster designed for signs on both campuses.

Three of the four finalists attended the event on both days. Moodlerooms attended the event only on the first day and was absent on the second day.

Sandbox and Vendor Video Online

In addition to the physical venue for the Vendor Fair, a webpage was set up to allow people who couldn't attend the event in person to participate online. The webpage contained links to: 1) videos each vendor made specifically per the request of the committee to highlight the features for the Rider community, and 2) access to the

sandbox to allow hands-on testing of each environment. **Appendix 16** provides a screenshot of the Vendor Fair Online companion webpage, which was announced through university emails to the entire community.

Vendor Evaluation in Phase 2

After attending the vendor fair, either in person or online, attendees were invited to complete a vendor evaluation. The survey was distributed both in hard copy at the vendor fair site, and online. For brevity and simplicity, the evaluation rubrics were an abbreviated version of the rubrics as used in the phase 1 evaluation. The online survey was open from April 2 to April 6, 2012. **Appendix 17** provides the evaluation rubrics used in phase 2. **Appendix 18** provides the results of the evaluation.

Assessment Subcommittee

At the Dean's Council meeting in the fall 2011 semester, the Provost and several deans pointed out the important role of LMS in institutional assessment. Subsequently, Tim McGee was appointed by the committee to lead an assessment subcommittee to evaluate the support of institutional assessment by the candidate LMSs. The subcommittee designed evaluation rubrics, and held separate meetings with the vendor finalists at the vendor fair. Blackboard, Canvas, and Desire2Learn participated in this evaluation, and Moodlerooms did not respond. The subcommittee's final recommendation is Canvas. Appendix 19 provides the summary report by the assessment subcommittee.

Technology Feasibility Evaluation Subcommittee

Led by Suzanne Kissel and Shaun Holland in phase two, the work in evaluating the technology feasibility continued in this phase by focusing on the four finalist vendors. Shaun Holland developed a list of third-party systems for integration compatibility evaluation, and Suzanne Kissel conducted the study with the vendors. Blackboard, Canvas, and Desire2Learn provided answers to the evaluation, and Moodlerooms did not respond to this study. Appendix 20 provides the summary report on technology integration.

Decision Deliberations in Phase 2

The committee considered all the data collected in phase two in the final meetings in the spring term. Over 149 people attended the vendor fair in person, and 110 people participated in the vendor evaluation survey in phase two, as shown in Appendix 18. From the most favorable to the least favorable, the ranking by the community members in phase 2 was:

1. Canvas
2. Desire2Learn
3. Blackboard
4. Moodlerooms.

As shown in Appendix 19, the assessment subcommittee recommended Canvas.

The results of the technology feasibility evaluation were provided in Appendix 20. The committee discussed the results of the technology evaluation, and agreed that overall, the results suggest all three vendors offer support of integration with various third party system, although the pricing structure varies from building blocks to separate licensing fees etc. Thus no system was eliminated in this aspect. Meanwhile, the committee noted that this evaluation was a useful exercise in considering the changing landscape of technology and platform integration.

In addition to these data, the committee also re-examined the market share and reputation of the finalists. The SunGard consultant Jonathan Pratt briefed the committee on the market shares and trends of LMS when the committee started its work in fall 2011, and Sharon Yang updated the committee on market share of LMS products as of April 2012. The result suggests a trend of decreasing market share of Blackboard, and an increase by other systems especially open source systems such as Moodle. There was not sufficient data on Canvas and its market share given the system was released in 2010, although preliminary data suggest a rapid increase in the adoption of Canvas since its release.

When considering the various systems, the committee made the decision to eliminate Moodlerooms as a possibility for Rider University, despite the fact that they ranked second in the Phase One results. The decision to eliminate Moodlerooms was based on several factors. The first of these was that Moodlerooms was ranked last in the Phase Two survey results. The second reason was the impression left with the Rider community that the company would not be a good fit with the institution. The Moodlerooms representative only attended the vendor showcase for one day. A majority of showcase participants mentioned that Moodlerooms was not working during that first day and they were disappointed in the representative's inability to overcome the issues. Moreover, the representative did not provide the information requested by the Assessment and Integration subcommittees. In addition, the status of the company was thrown into doubt as a result of their acquisition by Blackboard in March 2012. Based on these reasons, the committee decided to eliminate Moodlerooms as a possible LMS for Rider University.

Recommendations

Primary and Secondary Recommendations

At the final meeting on April 24, 2012, the committee considered all the data collected in phase one and two, and reached the final recommendation. The committee's primary recommendation is Canvas. Canvas ranked the first in both the evaluation by the committee in phase one, and the evaluation by the community in phase two. The survey results suggest that Canvas not only supports the Rider community in its functionality, including institutional assessment, but also equally importantly, excels in usability compared with all other candidates.

The committee also makes a secondary recommendation of Desire2Learn. In the case where Canvas can't fulfill requirements outside the range of the committee considerations, including cost and technology compatibility requirements, Desire2Learn would be the next choice. The system ranked the third in the evaluation by the committee in phase one, and the second in the evaluation by the community in phase two. Comparing the primary and the secondary choices, the committee noted that Desire2Learn is an improved version of the existing Blackboard, while Canvas represents a leap of advancement in technology design and user experience.

With Canvas as the primary and Desire2Learn as the secondary recommendations, the committee passes the final decision to the OIT for further investigation on factors outside the scope of the committee, such as cost and technology compatibility requirements.

Related Migration and LMS Training Recommendations

The committee recommends a one-year transition period to migrate to the new LMS. During the transition period, the existing LMS (Blackboard) and the new LMS will run in parallel, to allow the gradual migration to the new LMS. To promote adoption of the new system, one particular approach was recommended by the committee: using faculty "champions" who are early adopters to help promote the technology to other faculty. Faculty members on the committee are natural choices, and many on this committee are willing to contribute in this front. **Appendix 21** provides an outline of the migration plan.

Related to migration, the committee notes that the rich data collected through this process including the faculty survey, student survey, and vendor evaluation surveys would be useful resources in designing future LMS training and faculty development programs by OIT and TLC.