Recommendation for a Learning Management System (LMS)

Sent to Curriculum & Instruction Council – April 26, 2011 from the Distance Learning Committee

Distance Learning Committee Membership:

> Mary Johnson and Meghan Chen, co-chairs, Michael Dowdle (Assistant DLC, Psychology), Shanti Atashpoush (IT), Will Daland (Counseling), Tamra Horton (English), Paul Kittle (OLSC), Charles McGruder (Philosophy), Richard Patterson (Business Division), Sandra Weatherilt (Nutrition and Food), Carol Webster (OLSC), Jill Wilkerson (DSP&S)

Why Do We Need to Conduct This LMS Inquiry?

- In Fall 2009 administration asked the Distance Learning Committee (DLC) to revisit the choices available for an LMS, in part due to Blackboard's high costs. Budget constraints are forcing the school to find additional ways to save money.

- There have been some faculty complaints about Blackboard support and missing functionality.

- There are several reasons why the time is appropriate to pursue this inquiry at this time.

    - Our current contract with Blackboard expires on June 30, 2012.
    - Blackboard has informed us that they will not continue supporting the older versions of Blackboard, so if we stay with Blackboard, we would be forced to upgrade to the newer version of the product.
    - The newer version of Blackboard is quite different from our current version; therefore, there will be some additional training needed by faculty, IT, and staff if we upgrade to the new version.

Regardless of the selection of a new tool, additional training will be required. Therefore, this would be an ideal time to determine if Blackboard is still the best LMS for our needs.

What is DLC's Recommendation?

After an extensive review of four learning management systems – Blackboard 9.1, Desire 2 Learn, Sakai/Etudes, and MoodleRooms/Joule 2.0 – over the past sixteen months, **the Distance Learning Committee (DLC) sends forward its top two tools for the College to make a final decision: either Blackboard 9.1 OR MoodleRooms/Joule 2.0 (or the current version) as Mt. SAC's next Learning Management System (LMS) once our current contract with Blackboard expires in June of 2012.** Either LMS would meet the needs of the college, but there are important considerations prior to making a final decision. The document that is being sent forward to Curriculum & Instruction Council lists these important considerations for each possible selection. This document serves as DLC's analysis of the two tools' strengths and weaknesses as well as the unresolved issues to inform the College's decision makers.

Factual Observations Regardless of LMS

- Conversion of course content requires extensive time and effort by various entities of the college, including IT, faculty, and others
- Faculty will need training to use the tool
- IT will have to ensure the new tool works with Banner and functions appropriately to support all processes related to using the LMS for teaching
- The tool we choose would need to serve the entire campus; currently Blackboard is only serving our credit students
- There is no perfect LMS to meet Mt. SAC's unique and various needs; there is no pain-free conversion process

Learning Management Systems are primarily used by faculty and students. For this reason we have included the following table, which gives an overview of the functionality of both top runners. It is the purview of this committee to closely look at the needs of faculty and students, and therefore this functionality table should be of utmost interest in the decision-making process.

The following table is based on a comparison to our current LMS, Blackboard 8.

Criteria	Blackboard 9.1	MoodleRooms/Joule 2.0
Functionality	**Pro:** Fewer clicks than previous version (Bb 8). Very similar to what faculty are currently using	**Pro:** With one setting, the weeks or topics are automatically generated **Con:** Will require a paradigm shift in designing courses Very limited on how you can "set up" the content (only by weeks or topics)
Look and feel	**Pro:** Modern look and feel Channels can be made available to students Control panel is not a separate window – functionality is listed at left edge below student's navigation links (sections can be expanded, retracted lots of drag 'n drop)	**Pro:** Modern look and feel Channels (called blocks) can be made available to students Professor determines the blocks that will be available to students Lots of drag 'n drop
Calendar	**Pro:** There are new channels that remind students of upcoming due dates and overdue activities **Con:** Calendar must be manually set up and edited for new assignments.	**Pro:** Calendar is automatically populated when an activity is created **Con:**
Grading	**Pro:** Various types of calculated columns can be created, including weighted columns Extra credit can be accommodated **Con:** If grading directly from the Grade Center, it can be time-consuming to wait for the page to repaint Extra credit is not effective in all circumstances	**Pro:** Categories, subcategories, and individual items (not tied to a specific activity) can be set up as calculated fields using standard spreadsheet functions and formulas Various extra credit options can be set **Con:** The grading is not as forthright and obvious as Blackboard – it is a bit cumbersome

Criteria	Blackboard 9.1	MoodleRooms/Joule 2.0
Discussion Board	**Pro:** Discussion Boards are easy to set up and include various settings. In addition, discussion forum postings are very easy to grade. Once in the discussion forum grading area, there is a list of all students that have submitted postings, the number of postings, and a link to directly view and grade the posts outside of the "Grade Center" page. Can easily navigate from student to student for grading	**Pro:** There are several different types of discussion boards that can be set up, including blog, debate, one post each student, and single-threaded **Con:** Grading of discussions is not as straightforward as other LMSs. Also cumbersome
Assignments/Activities	**Pro:** The assignment area allows much flexibility in how a professor can set up an assignment. The same assignment can allow direct input, and upload of one or more files.	**Pro:** There are various activities and assignments available to add to your content. Some of the assignments include offline assignments, assignments with students entering the information directly, and various assignments with one or more uploads allowed. There is a Choice activity available, which allows the professor to pose a question and get immediate feedback from students. The summary of responses can then be shared with the class (similar to using Clickers).
Help/Training	**Pro:** There is much help available without cost via online tutorials, including Help option on the navigation bar that links to the manual and Help web site Less training may be required due to faculty familiarity with the product **Con:** Some faculty may need new additional training but would probably not be needed by most faculty	**Pro:** Contextual help is available throughout the course Online tutorials are available **Con:** Because of the new paradigm, extensive training will be required to get faculty acquainted with the new product Additional training would also be required, especially course properties settings appropriate for assignments/activities, discussion forums, and tests Train the trainer workshops will be needed Faculty will need to spend a lot of time to redesign their courses SPOT certification will have to be completely redesigned and approved

Criteria	Blackboard 9.1	MoodleRooms/Joule 2.0
Student View	**Pro:** Faculty can have an internal student account that allows them to see the course as a student, including submitting of activities and tests	**Pro:** Faculty can have an internal student account that allows them to see the course as a student, including submitting of activities and tests Faculty can log in as a specific student in the course, so they can see exactly what that student is seeing. This does not show as that student accessing the course (statistics)
Transition/Implementation	**Pro:** Courses should import into the new version of Blackboard with few problems **Con:** Items in the Content Collection will need to be set up manually	**Pro:** Basic course information can be imported into MoodleRooms **Con:** The majority of courses will need to be redesigned to fit into the new MoodleRooms paradigm
IT Concerns	Importing data from current Blackboard courses to the new version will not include Content System files. These files will need to be manually uploaded Issues related to including non-credit students in both Banner and Blackboard are unknown Course Merge functions and impacts are unknown	New process for creating shells for faculty will be needed New process for allowing faculty to "visit" DL courses will be needed Moodle default setting will need to be discussed and set Banner and MoodleRooms must be single sign-on for authentication Batch and real-time triggers need to be rebuilt for Moodle IT and Help Desk personnel need training Course Merge functions and impacts are unknown
Costs	$332,333 each year over a 3-year contract for a total of $997,000 (based on 30,500 students) Additional 7,500 students cost $17,000 per year $8,200 for a 3-day training	$138,000 each year over 3 years for a total of $415,500 (based on 30,500 students) Additional 7,500 students cost $37,500 per year An additional one-time cost of $82,000 will cover additional training for first year
Investment to-date	Since acquiring Blackboard in 2005, 448 faculty have been trained to-date to use Blackboard (Bb) in their classes Approximately $140,690 in POD-related training costs have been invested in Blackboard-related training (This does not include initial Bb training)	None other than investigatory training during summer teaching pilot in which DL Faculty Coordinators, OLSC and IT teams participated

Top 10 (+) Features Needed in a Course Management System (CMS)

I. **Authoring Content**

- Drag and drop interface*
- Be able to attach documents to Announcements*
- A more intuitive calendar feature (set up due date for assignment/assessment, and calendar entry automatically created)*
- Fewer clicks to complete authoring addition or change (not submit/ then OK)*
- Course merge (Have multiple sections be able to share communications and resources)
- Ability to have 2 courses open side-by-side in the same window*
- Ability to update from a Smart Phone app*

II. **Fully functional Discussion Forum**

- Allow threads
- Moderation available (but not required)
- Subscribing to DF available
- Various views for ease of grading DFs - Be able to see all of a student's posts together for a particular forum
- Be able to see all of the threads and replies in-line at the same time*
- Give various permissions to students for each forum (allow editing, deleting, locking out)
- Can hide or make forum visible to students
- Allow students to attach various types of files, including flash, video, etc.

III. **Fully functional Grade Center**

- Can assign grades in-place
- Can enter all grades before submitting
- Can allow text editing area for students to allow students to enter comments with the assignment
- Can open and grade without downloading attachments
- Can add editing comments to submitted assignments (attachments without downloading, saving, etc)*
- Rubric that is tied to the assignment grading*
- Download/Upload between CMS and Excel
- Various types of calculated columns can be added
- Extra credit should be available if faculty uses weighted categories and also if faculty uses total points method for calculating grades
- Lowest/highest grade(s) may be dropped
- Various grading schemas supported (percentage, raw score, letter, etc.)
- Categories can be set up to calculate via total points or %
- An attendance-keeping function*

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*Additions requested by Thomas Edson and other Humanities faculty

IV. **Online testing**

- Multiple-choice, True-false, short-answer, essay, fill-in, matching question types
- Allows graphics attached to either questions or answers
- Pools available so that questions can be "selected'
- Easy upload capability from Word documents
- Can be printed or downloaded (in case web site goes down)
- Statistics available for results
- Can be timed
- Different timing available for different students (DSP&S)
- Password can be set
- Can make available for certain period of time
- Can make available for only certain students
- Tests can be reset/restarted for students

V. **Assignments**

- Allow attachments from students
- Option to allow students to submit assignments multiple times

VI. **Student Progress Tool**

- Last access date of CMS
- Number of times student logged in
- Tracking each item (which items and when did student view)

VII. **Survey tool**

- Various statistics available for use with the survey
- Ability to see which students submitted the survey (for extra credit, etc.)
- Ability to download the statistics for printing

VIII. **Various platforms and web browsers work with both Content authoring and from student perspective**

IX. **Whiteboard / Chat room**

- Fast and easy access for both faculty and students
- Larger dialogue boxes for communicating with students

X. **Ease of uploading/downloading documents/files**

XI. **Multimedia Support (videos, flash, etc.)**

XII. **Sample Student – see course site EXACTLY as student sees it**

XIII. **Student Learning Objectives –**

- can be set up and assessed
- rubric can be integrated to SLO

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Fall 2009
DLC was asked to recommend a less expensive learning management system than Blackboard (Bb) prior to expiration of current contract.

DLC held video conference with Ventura CCD faculty and managers of online learning: VCCD decided to migrate from Blackboard to Desire 2 Learn, effective Spring 2010.

March 2010
Distance Learning (DL) Dialogue (3/19): Brief demo on Blackboard 9.0 and D2L; sandboxes for both were set up for faculty; **one faculty member participated** (Robert Ho).

Summer 2010
Pilot teaching using D2L: two sections in HRM (F. Al-Malood), one section PSYC 1A (M. Dowdle).

- Pilot faculty feedback: one was very positive; the other less so.
  - Issues identified: manual inputting of each student (no auto-integration in pilot process); only one way to structure course materials, e.g., one folder per week for weekly topics.
- Student feedback indicated they were neutral about D2L; they did not prefer it over Bb, or vice versa.

Fall 2010
October 8th Blackboard 9.1 and Desire2Learn Demo Day (**45 faculty and staff attended**).

November 5th Sakai Etudes and MoodleRooms demo: DLC reviewed open source tools that are hosted remotely. All Bb users were invited by email to attend; one faculty (Karen Curran of Child Development Department) outside of DLC attended. Sakai Etudes was ruled out because it does not integrate with Banner.

November 9th planned follow-up virtual meeting (regular DLC meeting) with VCCD faculty since they taught with D2L in Spring 2010; VCCD declined due to its accreditation visit in October 2010 (as was Mt. SAC's own in late October).

November 11th – Bb users were invited to try sandboxes for Desire 2 Learn, and MoodleRooms, and to give feedback by November 22nd (**21 faculty** and 7 staff **participated**).

Winter 2011
Pilot teaching using MoodleRooms: two sections of hybrid ENGL 68 (T. Horton). MR 2.0 released January 3, 2011; no MR training provided due to vendor's organization changes and lack of follow through. GradeBook feature untested.

Sandboxes for D2L, Bb 9.1, and MoodleRooms were made available during the "Bootcamp" workshops offered by OLSC.

- **D2L: 143 faculty and 59 student accounts**
- **Bb 9.1: 1,316 faculty and 54 student accounts**
- **MR 1.9: 27 faculty participated; MR 2.0: 16 faculty, total 158 accounts**

DLC held an optional meeting Feb. 22nd to discuss Bb, D2L, and MR. All three price quotes considered – Bb is the most expensive; D2L is about $50,000-60,000 less than Bb; and MR is about $80,000-$120,000 less than Bb.

Outstanding issues:

- Course Merge (Bb's name) function in all three tools unseen, untested:
  - Bb offered a quote of an additional $35,000 for Course Merge
  - D2L – unseen; unclear on pricing if it's an add-on or part of quote. D2L batch-loads to Banner, up to hourly loading, but still not real-time.
  - MR – unseen; unclear on pricing if it's an add-on or part of quote.
- Actual conversion of courses and content will require faculty and IT time (minimum one year before going "live" with new LMS, including Bb 9.1)

- Cost in money and time for IT: integration with Banner, any re-programming

Spring 2011   MR demo on "how to use Moodle to teach with" training on Wed. 3/23 and Thur. 3/24.
Conducted reference check on one MoodleRooms user (the only California community college) 4/11/2011
DLC considers making its recommendation to C&I.

April 26, 2011: DLC recommends either Blackboard 9.1 or MoodleRooms/Joule as the College's next learning management system.

Faculty Involvement in selection of Learning Management System

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Learning Management System Presentations: Blackboard 9.1 and Desire2Learn - October 8, 2010

Name	Title	Department/Division
Al-Malood, Fawaz	Professor	Consumer Science & Design Technologies
Andrews, Barry	Professor, Department Chair	Computer Information Systems
Atashpoush, Shanti	Assistant Director	Academic Technology, IT
Bartman, Sydney	Professor	English, Literature, Journalism
Belinski, Vic	Chief Technology Officer	Information Technology
Chen, Meghan	Dean	Library & Learning Resources
Daland, Will	Professor	Counseling
Distante, Deb	Bibliographic Instruction Librarian	Library
Dowdle, Michael	Professor Assistant Online Faculty Coordinator	Psychology, Education Online Learning Support Center
Edson, Thomas	Professor	English, Literature, Journalism
Estes, Bob	Professor, Real Estate Coordinator	Business Administration
Farris, Bob	Professor	Business, Accounting & Management
Hanson, Grace	Director	Disabled Student Programs & Services
Ho, Robert	Professor	Architecture & Engineering Design
Horton, Tamra	Professor	English, Literature, Journalism
Isomura, Loralyn	Administrative Secretary	Library & Learning Resources
Johnson, Mary T.	Professor Faculty Coordinator	Computer Information Systems Online Learning Support Center
Kaljumagi, Eric	Professor Academic Senate President	Learning Assistance, Math
Kittle, Paul	Electronic Reference Librarian, Professor	Library, Distance Learning
McFarland, Thomas	Professor	Accounting & Management
McGruder, Charles	Professor	Sociology & Philosophy
Mercier, Paul	Senior Systems Analyst	Information Technology
Nguyen, Rick	Information Technology Specialist	Academic Applications & Portal Content , IT
Patterson, Rich	Associate Dean Interim Director	Business Professional & Organizational Development
Sullivan, Michael	Professor	English, Literature, Journalism
Weatherilt, Sandra	Professor	Consumer Science & Design Technologies
Webster, Carol	Learning Technology Specialist	Distance Learning
Wilkerson, Jill	Instructional Specialist	Disabled Student Programs & Services
Jagodka, Ralph	Professor, Department Co-Chair	Accounting & Management
Jefferson, Paul	Professor, Department Co-Chair	Public Services
Bray-Ali, Julie	Professor, Department Co-Chair	Earth Sciences & Astronomy
Dieckmayer, Dave	Computer Facilities Supervisor	Information Technology
High, Kathleen	Adjunct Professor	Learning Assistance

Learning Management System Presentations: MoodleRooms and E-tudes – November 5, 2010

Name	Title	Department/Division
Chen, Meghan	Dean	Library & Learning Resources
Curran, Karen	Professor	Child Development
Daland, Will	Professor	Counseling
Dowdle, Michael	Professor Assistant Online Faculty Coordinator	Psychology, Education Online Learning Support Center
Hanson, Grace	Director	Disabled Student Programs & Services
Isomura, Loralyn	Administrative Secretary	Library & Learning Resources
Johnson, Mary T.	Professor Faculty Coordinator	Computer Information Systems Online Learning Support Center
Kittle, Paul	Electronic Reference Librarian, Professor	Library, Distance Learning
McGruder, Charles	Professor	Sociology & Philosophy
Potter, Don	Manager, Deaf & Hard of Hearing	Disabled Student Programs & Services
Weatherilt, Sandra	Professor	Consumer Science & Design Technologies
Webster, Carol	Learning Technology Specialist	Distance Learning
Wilkerson, Jill	Instructional Specialist	Disabled Student Programs & Services

Sandbox Accounts for LMS Review, November 11, 2010 (Feedback from users requested by Nov. 22nd)

Name	Title	Department/Division
Al-Malood, Fawaz	Professor	Consumer Science & Design Technologies
Atashpoush, Shanti	Assistant Director	Academic Technology
Beam, Terri	Professor	Chemistry
Chen, Meghan	Dean	Library, Distance Learning
Curran, Karen	Professor	Child Development
Daland, Will	Professor	Counseling
Dowdle, Michael	Professor Assistant Online Faculty Coordinator	Psychology, Education Online Learning Support Center
Edson, Thomas	Professor	English, Literature, Journalism
Hanson, Grace	Director	Disabled Student Programs & Services
Horton, Tamra	Professor	English, Literature, Journalism
Hunter-Buffington, Carrie	Professor	Learning Assistance Center
Impara, Carol	Professor	Consumer Science & Design Technologies
Isomura, Loralyn	Administrative Secretary	Library & Learning Resources
Johnson, Mary T.	Professor Faculty Coordinator	Computer Information Systems Online Learning Support Center
Kittle, Paul	Electronic Reference Librarian, Professor	Library, Distance Learning
Lackey, Hilary	Professor	Earth Sciences & Astronomy
Ledeboer, Lisa	Professor	Consumer Science & Design Technologies
Mbuthi, Stanely	Professor	Counseling
McGruder, Charles	Professor	Sociology & Philosophy
Metter, Jean	Professor	Consumer Science & Design Technologies

Name	Title	Department/Division
Nguyen, Rick	Information Technology Specialist	Academic Applications and Portal Content
Olds, Jennifer	Professor	English, Literature, Journalism
Patterson, Rich	Associate Dean Interim Director	Business Professional & Organizational Development
Swartz, Pauline	Instruction Librarian	Library, Reference
Weatherilt, Sandra	Professor	Consumer Science & Design Technologies
Webster, Carol	Learning Technology Specialist	Distance Learning
Wilkerson, Jill	Instructional Specialist	Disabled Student Programs & Services