

SOUTHERN OREGON UNIVERSITY

FINAL REPORT

COURSE MANAGEMENT SYSTEM

EXPLORATION GROUP

RECOMMENDATIONS

February 2010

FINAL REPORT
CMS EXPLORATION COMMITTEE RECOMMENDATIONS

EXECUTIVE SUMMARY

Southern Oregon University adopted Blackboard as the campus course management system (CMS) in 2002. Since then, we have seen significant increases in CMS usage to the point where today we have concerns that SOU may have outgrown Blackboard Basic. We are approaching the limits of its capacity and find ourselves at a turning point as Blackboard Basic's features do not meet current needs and expectations. Responding to the need for a Blackboard Basic replacement or upgrade, the Course Management System Exploration group convened in early March 2009 to begin:

- Determining the role of the Course Management System (CMS) within the University and how it interfaces with other systems,
- Exploring possible solutions currently available in higher education,
- Estimating the costs of various solutions, and
- Evaluating CMS options and developing recommendations for systems with full enterprise integration.

Based on an 8-month examination of course management systems, the Course Management System Exploration group recommends that Southern Oregon University engage in the next level of CMS selection by convening a task force of faculty, staff, and students to select our new system. The CMS Exploration group recommends testing Blackboard Enterprise and Moodle for adoption at SOU. Both products have prominence in the Northwest and strong track records as viable options among institutions of higher education.

The CMS Exploration group recommends that the University promptly convene the task force to lead the selection of a campus course management system. In the selection process, the institution must examine SOU's long-term instructional and administrative needs, the financial sustainability of the selected product, the ability to transfer existing courses to a new platform, the extent of faculty and student training necessary for successful adoption, and the potential of any system to adapt to emerging technologies.

This report provides a summary of the process followed to arrive at our recommendation to test Blackboard and Moodle as well as recommendations of next steps for a CMS task force.

JUSTIFICATION FOR CHANGE

Rapid development and pervasive information technologies have dramatically changed the way we teach and engage our students. At this moment, SOU faces a challenge associated with these changes as we consider the future of Blackboard Basic, our campus course management system (CMS). Since SOU adopted Blackboard in 2002, we have seen significant increases in CMS usage. As we approach the limits of its capacity and given the state-wide charge to be more fiscally responsible, the CMS Exploration group was formed to explore options for a course management system and to recommend options that best support our current and future needs.

Blackboard Basic no longer provides all of the features needed by SOU. Increasingly, course content needs to be media rich and requires the ability to seamlessly link with Web 2.0 technologies such as blogs, wikis, and virtual meeting rooms. As the campus explores the use of plagiarism detection software, online course evaluations, and improved tracking of student outcomes, integration with a course management system would be ideal. Blackboard Basic does not support the integration of these systems, underscoring the importance of moving the campus to a more robust system.

Additionally, Blackboard Basic does not support automated course creation, user account creation, or course archiving. Consequently, these processes must be performed by IT support staff using labor intensive, home grown procedures. The recent loss of SOU Blackboard support staff has exposed inefficiencies in the University's current support system and emphasizes the value of adopting a course management system that would support the automation of these ongoing administrative tasks.

Many institutions have identified the benefits of establishing a single portal interface that seamlessly integrates the courseware and student information systems for course registrations, grade processing, etc., and simplifies access to multiple institutional systems through a single sign on. Blackboard Basic does not integrate well with MySOU. The single sign-on process currently used is not supported by Blackboard and is sometimes problematic. Implementing a seamless integration between MySOU and the courseware system is a long-term goal discussed during the initial planning for MySOU. All of the CMS options being considered will require some financial investment to build this integration.

SOU has exceeded the recommended capacity of Blackboard Basic both in the number of courses and users of the system. Storage capacity has also been exceeded from time to time. To ensure that adequate storage is available for course materials and to meet future space requirements for media rich content, SOU should evaluate practices and implement retention policies consistent with other institutions. These capacity matters need to be addressed as part of the implementation planning for a new courseware system.

EXPLORATION PROCESS

The Course Management System Exploration group convened in early March, on the authority of the Provost, to begin:

- Determining the role of the Course Management System (CMS) within the University and how it interfaces with other systems,
- Exploring possible solutions currently available in higher education,
- Estimating the costs of various solutions , and
- Evaluating CMS options and developing recommendations for a system with full enterprise integration.

The CMS Exploration group consisted of six faculty from diverse departments and five administrators. Members included:

Alison Burke, Criminology and Criminal Justice
Shawn Foster, Disability Services
Angela Huftill, School of Education
Dennis Jablonski, School of Education
Eric Levin, Theatre Arts
Joan McBee, School of Business
Jennifer McVay-Dyche, Distance Education
Teri O'Rourke, Information Technology
Larry Shrewsbury, Mathematics
Hart Wilson, Blackboard Training and School of Business
Cora Yockers, Distance Education

Additional faculty and staff were invited to serve, periodically, as resources.

The following definitions and assumptions served as the foundational concepts upon which we based our work.

- A **course management system (CMS)** is web-based software that supports the development, delivery, evaluation, and administration of online courses.
- For **proprietary** products, such as Blackboard, the source code that runs the application is "closed." Any modification of the program by someone other than the copyright owner is prohibited.
- **Open source** software gives the licensee the right to modify the software and then share or redistribute the code.
- **Hosting** (also referred to as "**ASP**" in this report) is the storage, maintenance, and servicing of software and content associated with a course management system. We examined two hosting models: on-campus hosting and external hosting.
- With **on-campus hosting**, such as we have with Blackboard today, the University has full access to and control of the server. The costs associated with maintaining, upgrading, and servicing hardware and software are the responsibility of the University. Additional personnel would be necessary to provide an appropriate level of ongoing hosting support.

- **External hosting** involves contracting with an outside vendor to maintain, upgrade, and service the hardware and software for the CMS. As part of the hosting contract, the vendor is responsible for backing up data, upgrading software and hardware as needed, monitoring server response time, and providing interruption-free access to the CMS. Standard hosting contracts provide administrative help desk support, but not user support. SOU would still be responsible for maintaining the Student and Faculty-Staff Help Desk.
- **Licensing fees** are fees paid to a software provider on an annual basis. Proprietary software packages typically require licensing fees, while most open source products do not require licensing fees.
- **Integration** refers to how well a program will communicate with other software. It is imperative that any CMS selected for the University integrate with MySOU, Banner, GroupWise, Elluminate, and other third-party programs. *Integration = automation*, in most cases.

We adopted a multi-step exploration process that would allow us to identify all possible vendors and then narrow options as more information became available. Between March and November 2009, we completed the following steps:

- **Created and administered an online survey of faculty CMS usage** (Appendix A). A total of 102 faculty representing various positions in all three schools responded. Analysis of this data contributed to the development of a list of tools and features divided into these categories: a) Must Have, b) Preferred, and c) Optional (Appendix B). (March-May 2009)
- **Conducted initial exploration of CMS options.** Using the EDUTOOLS Course Management System Comparison tool available at <http://www.edutools.info>, we eliminated all products that did not include our "Must Have" tools and features. We identified six products that met our minimum requirements: Blackboard, Desire2Learn, eCollege, Joomla, Moodle, and Scholar 360¹. (May 2009)
- Created an evaluation rubric based on desired tools and features. This rubric served as the basis for a Request for Information (RFI) for select vendors (Appendix C). (June 2009)
- Submitted a Request for Information from proprietary product vendors (Blackboard, Desire2Learn, eCollege, and Scholar360). For open source products (Joomla and Moodle), members of the CMS Exploration group conducted a good-faith effort to complete an RFI so that each product could be uniformly reviewed. (June-July 2009)
- Reviewed RFIs and validated responses against the evaluation rubric. The CMS Exploration Committee determined that eCollege, Scholar360, and Joomla were not appropriate solutions for SOU. Blackboard, Desire2Learn, and Moodle were identified as potential viable options and were targeted for further exploration. (July 2009)
- Conducted in-depth evaluations of Blackboard, Desire2Learn, and Moodle through web-based product demonstrations and hands-on opportunities. (August-September 2009)

¹ Angel was another system that we considered seriously, but the company was bought out by Blackboard in early May 2009. Blackboard's plans to merge the Angel and Blackboard systems into Blackboard made further examination moot.

All of this study confirmed our initial diagnosis that identifying a campus solution would be a complex undertaking – each of these course management systems offers advantages and disadvantages: direct costs to a vendor as with Blackboard vs. personnel costs of hosting and supporting an open source solution such as Moodle. Any change that we initiate will require additional training for faculty and staff, and will doubtless meet with varying degrees of consternation and resistance. After considerable discussion and examination of the three viable products, the CMS Exploration Committee agreed that a single product recommendation could not be advanced without the participation of a broader representation of campus stakeholders. Rather, we can provide the University community with our findings as a resource for embarking on a larger campus mission to better align our CMS with our academic needs and objectives within the context of our limited resources. The following three sections present summary findings on Blackboard, Desire2Learn, and Moodle.

BLACKBOARD

Blackboard is a proprietary, enterprise-level product first released 12 years ago. Blackboard offers two product levels: Blackboard Basic and Blackboard Enterprise. SOU has used Blackboard Basic for nearly seven years. The Enterprise version is a more scalable, robust option that offers additional features and allows integration with campus and other third party systems. According to documentation provided by Blackboard, the Enterprise version expands on the Basic version by supporting:

- >3,000 active users
- English + multiple language installations
- Integration with third-party systems (i.e. email, MySOU, Banner, Elluminate)
- Open API to allow customization
- Observer access
- Content delivery/playback in SCORM, IMS, and NLN
- Adaptive release to control access to content based on individual student progress
- Blackboard messages (internal email)
- Grading within discussion forums
- Self-evaluation, peer evaluation, and anonymous evaluation within groups
- Grade book integration with Banner (additional cost)
- Course evaluation administration
- Plagiarism detection software
- Reporting beyond standard course statistics

Blackboard Basic provides fundamental instructional tools and features and is a familiar product to current faculty, staff, and students. To remain on Basic, the University must upgrade to a newer version in Summer 2010, as Blackboard will no longer support the version we presently run. While we have cobbled together the means to integrate Blackboard into MySOU, our current operation is not fully integrated with Banner and depends on staff allocations for semi-automated processes such as course and user creation. Remaining on Basic would be the most expeditious and least expensive option, but would not resolve our system integration problems, need for enhanced features, or capacity limitations. The Enterprise version, while much more

costly, would provide access to integration tools and automated processes that would dramatically increase user efficiency and productivity.

Blackboard is a popular course management system among institutions of higher education across the country and around the world, but the company also has a history of significantly increasing annual costs. Schools in the region that are known Blackboard users include:

- Chemeketa CC
- Clackamas CC (also on Moodle)
- Clatsop CC
- Eastern Oregon University
- Gonzaga University
- Linfield College
- Linn-Benton CC
- Mount Hood CC
- Oregon Institute of Technology
- Oregon State University
- Pacific University
- Portland Community College
- Treasure Valley CC
- University of Idaho
- University of Oregon
- University of Washington

Blackboard offers two options for hosting its systems. We may host the software on our own servers at SOU, requiring committed IT resources for data storage, troubleshooting, maintenance, and upgrades. Or, we may contract with Blackboard to host the system for us. When Blackboard hosts, our direct personnel and hardware costs would decrease, but we would have to pay additional fees for hosting and would also still need to have a part-time system administrator on campus to provide general administrative support. Estimated costs for different Blackboard hosting scenarios are listed in the Financial Implications section of this report.

DESIRE2LEARN

Desire2Learn is a proprietary, enterprise-level product first released 10 years ago. The system provides tools and features similar to those in Blackboard Enterprise, at a reduced cost. Like the Enterprise version of Blackboard, Desire2Learn can be integrated with other campus systems. The user interface is quite different from that of Blackboard, so extensive user training and support would be required following adoption.

Desire2Learn has a much smaller market share than Blackboard or Moodle. While there are no institutions in the Northwest currently using Desire2Learn, the national customer base is quite varied.

- Colorado Community Colleges Online
- East Tennessee State
- Marquette University
- The Ohio State University
- Saint Paul College
- University of Wisconsin system

Desire2Learn hosts all installations of its product. The University would still need to employ a part-time system administrator on campus to provide general administrative and user support.

Estimated costs for hosting Desire2Learn are listed in the Financial Implications section of this report.

MOODLE

Moodle is an open source, enterprise-level product that was first released in 2002. Its open source character allows users to access most of the system's code and modify it to fit their institutional needs. There is a strong user community that supports the continued enhancement and stability of Moodle. The product provides tools and features similar to those in Blackboard Enterprise and Desire2Learn without the licensing costs, and Moodle can be integrated with other campus systems. The user interface is different from that of Blackboard, so user training and support would be required; numerous training resources are readily available from other institutions and the Moodle user community, reducing the investment of SOU resources in creating training materials. Existing courses would also have to be exported and "massaged" to display and function correctly within the Moodle format, a process that is beyond the technical skills of the majority of our faculty and would require considerable IT resources to achieve.

Moodle software is available at no cost to anyone who wishes to download it. While there are no licensing costs, there are still ongoing expenses related to hosting, customizing, integrating with other campus systems, and maintaining the product. Institutions may host Moodle on-campus or pay a hosting service to maintain servers and software. As with any external hosting option, the University would still need to employ a part-time system administrator to assist with general system maintenance and user support.

The increasing costs of proprietary course management systems have led many institutions to implement Moodle. The following institutions in the Northwest have adopted Moodle on their campuses:

- Clackamas CC (also on Bb)
- Columbia Gorge CC
- The Evergreen State College
- George Fox University
- Idaho State University
- Lane Community College
- Lewis & Clark College
- Portland CC
- Reed College
- University of Portland
- University of Puget Sound
- University of Washington
- Western Oregon University

Additionally, two of our partner schools in the New Century Learning Consortium, Oakland University and Chicago State, have already made the transition to Moodle and are willing to share their experiences and resources. Estimated costs for different Moodle hosting scenarios are listed in the Financial Implications section of this report.

FINANCIAL IMPLICATIONS

Since the actual price for each product is negotiated through a request for proposal, the committee sought to outline the basic elements of course management system implementation and operation based on rough estimates voluntarily submitted by vendors. A first glance at the cost estimates suggests Blackboard Basic hosted by SOU or Blackboard as the least expensive solution. However, as indicated throughout this report, Blackboard Basic does not provide the integration and automation tools needed to operate efficiently and effectively, nor does it offer the range of features and tools that we need to support our distance learning initiatives. The next most cost-effective solution is Moodle hosted off-site or at SOU. Adopting Desire2Learn would be more expensive than Moodle and less expensive than upgrading to Blackboard Enterprise. The most expensive options are Blackboard Enterprise hosted by Blackboard followed by Blackboard Enterprise hosted by SOU.

The CMS Exploration group recognizes that cost is not the sole determining factor in the selection of a campus CMS. In addition to financial resources, human resources must also be considered. As a Blackboard Basic campus, moving to Blackboard Enterprise would be the least burdensome to faculty and staff. Existing courses easily convert from Basic to Enterprise, since we are primarily upgrading and not changing systems. Transferring courses into Desire2Learn or Moodle can be done using an automated process, but each converted course would require approximately 4-15 hours of instructor work to ensure the course is ready for delivery on the new system. Student assistants will be available to help instructors make the change, but the bottom line is that a change to a system other than Blackboard Enterprise will require faculty time for training and course reorganization.

Selecting Desire2Learn or Moodle would also require a significant investment of time for retraining faculty and staff. Desire2Learn offers customized training and support for new users, but at a cost. Moodle training can be purchased through vendors, but can also be created and supported internally. Additionally, the nature of open source products is such that numerous training resources and programs have already been developed and are available for immediate implementation at SOU.

For any option other than Blackboard Basic, significant one-time financial resources would be necessary for adoption. The present estimated annual cost for supporting Blackboard Basic on campus is \$133,500. This estimate includes IT personnel, equipment and licenses, trainers, and instructional design support for faculty.

Funds Included in Current Budget	IT	DEC	Total
Existing Personnel	\$ 15,000	\$ 82,000	\$97,000
Existing CMS License	\$ 16,500	\$ -	\$16,500
DE Funds IT Cost Sharing	\$ 20,000	\$ -	\$20,000
Total	\$ 51,500	\$ 82,000	\$ 133,500

For any option other than Blackboard Basic, additional resources would be necessary to maintain annual licenses and system support services. Information Technology and Distance Education have examined their budgets and allocated a portion of funds to the implementation and continued support of a new CMS. Adequate funding for implementation and continued support of an upgraded or new system is available. The more critical questions are now:

1. Considering the significant differences in annual costs, which option is more fiscally responsible? Would funds be allocated to other needs or tools with a less expensive option?
2. Which course management system provides the greatest flexibility and support for pedagogically sound delivery of online content?

Table 1 Provides a summary of implementation and annual costs for the various products evaluated by the CMS group. Based on these figures, the group recommends further examination of Blackboard Enterprise and Moodle, preferably hosted (ASP) solutions.

CMS Implementation and Annual Expenses

	BB Basic @SOU	BB Basic ASP*	BB Ent @SOU	BB Ent ASP*	Desire2 Learn*	Moodle @SOU	Moodle ASP*
Implementation Costs							
Equipment **	18,500	0	64,300	0	0	12,500	0
Server & Database System Software	0	0	46,000	0	0	0	0
ASP Setup Fees	0	0	0	36,000	0	0	0
Integration Services (Banner & MySOU)	0	0	128,000	128,000	123,000	97,000	97,000
IT Staffing FTE	0.15	0.10	0.15	0.10	0.10	0.15	0.10
IT Staffing Cost	15,000	10,000	15,000	10,000	10,000	15,000	10,000
DE Staffing FTE (Temp. Support by Students)	0.00	0.00	0.50	0.50	2.00	2.00	2.00
DE Staffing Cost	0	0	2,795	2,795	11,180	11,180	11,180
TOTAL IMPLEMENTATION COSTS	33,500	10,000	256,095	176,795	144,180	135,680	118,180
Commitment Beyond Current Available Funds	0	0	-191,095	-111,795	-79,180	-70,680	-53,180
Annual Expenses							
Licensing, Upgrades, Support ***	16,500	16,500	85,000	80,000	62,000	6,150	5,250
ASP Hosting	0	64,600	0	108,600	40,375	0	21,695
IT Staffing FTE	0.65	0.75	0.50	0.25	0.25	0.65	0.25
IT Staffing Cost	50,500	55,000	39,500	20,000	20,000	50,500	20,000
DE Staffing FTE	1.15	1.15	1.15	1.15	1.15	1.15	1.15
DE Staffing Cost	82,000	82,000	82,000	82,000	82,000	82,000	82,000
TOTAL ANNUAL EXPENSES	\$149,000.00	\$218,100.00	\$206,500.00	\$290,600.00	\$204,375.00	\$138,650.00	\$128,945.00
Commitment Beyond Current Budgets	-\$15,500.00	-\$84,600.00	-\$73,000.00	-\$157,100.00	-\$70,875.00	-\$5,150.00	\$0.00

* ASP = Hosted by Service Provider

** Equipment Replacement Every 4 years

*** Software Upgrades every 18 Months to 2 years

CMS ADOPTION PROCESSES

We have talked with representatives from several institutions that have recently changed their CMS. In some cases, change has been mandated by a high-level administrator (as in the case of Washington's community colleges that switched from Blackboard to Angel this year). In others, the distance learning team has seen the need to change and brought the administration on board (as at Boise State where Moodle was adopted a few years ago). Sometimes, the change is simply announced and immediately implemented. In other cases, numerous faculty teams pilot various systems for a term or two and actively participate in the selection process. However we proceed in adopting any new system, communication with faculty and students will play a critical role in how the change is received and implemented.

CONCLUSIONS

Based on an 8-month examination of course management systems, the Course Management System Exploration group recommends that Southern Oregon University engage in the next level of CMS selection. Of the products reviewed by the group, we recommend further exploration of Blackboard and Moodle for SOU. These products have prominence in the Northwest and have strong track records as stable options among institutions of higher education.

To ensure we arrive at a decision that will serve SOU's long-term instructional and administrative needs, the next level of CMS selection must consider not only the tools and features currently in use on campus, but also the potential of any system to easily accommodate new tools and features that emerge from rapidly changing technology. The University must also consider the financial sustainability of the selected product in terms of licensing, hardware and software maintenance, course conversion, on-campus IT personnel, external hosting fees, and training. With a number of institutions in the region using Blackboard or Moodle, leveraging resources and support from our neighbors is also of value.

The CMS Exploration group recommends that the University promptly convene a task force to lead the selection of a campus course management system. The task force should consist of faculty, staff, and students with varying degrees of technological skills so that the campus community is appropriately represented. The task force should be charged with:

1. Continuing the exploration of the products reviewed by the CMS Exploration group, with a focus on Blackboard (Basic and Enterprise) and Moodle.
2. In addition to vendor-provided ASP (hosting) services, examining the cost of sharing Blackboard hosting expenses as part of an OUS consortium. We recommend SOU leadership connect with campus leadership at EOU, OIT, and OSU to investigate the potential of sharing a centrally-hosted version of Blackboard Enterprise.
3. Piloting Moodle during Summer quarter. (Distance Education will provide funding and support for external hosting.)
4. Creating a project timeline for reviewing Blackboard and Moodle within the University community.

5. Engaging the University in focus groups and pilot programs for each of the CMS products.
6. Fine tuning the estimates for total cost of ownership and developing strategies to ensure that adequate University resources are available to support long-term use of the selected product.
7. Developing a timeline for making any transition with a target adoption date of Fall 2010 and full implementation date (in the case of a change in platform) of Fall 2011.
8. Working with Information Technology and Distance Education staff to develop a plan for transferring existing content and courses into a new system as well as providing training and documentation for faculty and student users.
9. Exploring options for a phased implementation to lower initial implementation costs by deferring MySOU integration to a time when funds are available.
10. Communicating changes to the University community and generating stakeholder support.

Appendix A
Faculty Survey

What is your faculty position at SOU?

- a) Professor
- b) Associate Professor
- c) Assistant Professor
- d) Full-time Instructor
- e) Part-time Instructor
- f) Adjunct Instructor

Please indicate your affiliation.

- a) College of Arts & Sciences
- b) School of Business
- c) School of Education
- d) Hannon Library

In which department(s) do you teach?

- a) Art and Art History
- b) Biology
- c) Business
- d) Chemistry, Physics, Materials & Engineering
- e) Communication
- f) Computer Science
- g) Continuing Education
- h) Criminology and Criminal Justice
- i) Education
- j) Environmental Studies
- k) Health, Physical Education and Leadership
- l) History and Political Science
- m) Language, Literature and Philosophy
- n) Library
- o) Mathematics
- p) Performing Arts- Music
- q) Performing Arts-Theater Arts
- r) Psychology
- s) Social Sciences, Policy and Culture
- t) University Seminar (USem)

Do you use Blackboard in one or more of your courses?

- a) Yes b) No

In what ways do you use Blackboard in your courses? (Select all that apply.)

- a) Have never used Blackboard
- b) Do not currently use Blackboard

- c) As a resource site for my face-to-face classes
- d) As a resource and communication site for my face-to-face classes
- e) To deliver hybrid courses (where online component substitutes for some class sessions)
- f) To deliver courses that are fully online or meet just once or twice during the term

Which tools do you use to access your Blackboard course site? (Select all that apply.)

- a) I do not use Blackboard.
- b) Desktop Computer
- c) Laptop Computer
- d) PDA
- e) Handheld Internet device (ex. Smartphone)

What connection type do you most frequently use to access your Blackboard course sites?

- a) SOU network connection (office/lab)
- b) Cable modem or DSL
- c) Public wireless connection
- d) 28.8 K or 56 K dial-up modem

How would you rate your overall expertise or skill in using Blackboard?

- a) Do not use Blackboard
- b) Beginner-level user
- c) Intermediate-level user
- d) Expert-level

Indicate how much you use the following tools in Blackboard when teaching and interacting with students. (Select all that apply.)

(Scale: Very Often, Sometimes, Rarely, Never)

- Announcements
- Faculty/Staff Information
- Discussion Board
- Email
- Content Sharing (text/media files)
- External Links
- Digital Assignment Links
- Tests
- Surveys
- Gradebook
- Groups
- Digital Dropbox
- Course Cartridges
- Homepage
- Address Book
- Calendar
- Tasks
- Chat

Virtual Classroom
Glossary

What file type(s) do you currently post in your Blackboard course site(s)? (Select all that apply.)

MS Word or Rich Text Files (.doc or .rtf)
Adobe Acrobat Reader (.pdf)
MS Excel or Datasets (.xls, .mdb, etc.)
Sound files, including links to streaming audio files
HTML
Video files, including links to streaming video files
Images (.bmp, .gif, .jpg)
Flash (.swf)
Other (specify)

What other online tools (outside of Blackboard) do you currently use when teaching and interacting with students? (Select all that apply.)

a) Blogs
b) Web Conferencing (i.e. Elluminate, WebEx etc)
c) Personal Website
d) Skype
e) Textbook Publisher Websites
f) Web 2.0 Technologies (Specify)
g) Wikis
h) YouTube
i) Virtual Classrooms (i.e. Second Life)
j) Streaming video
k) Other (Specify)

Please rate your satisfaction with the current Blackboard system.

a) Very satisfied
b) Satisfied
c) Neither satisfied nor dissatisfied
d) Dissatisfied
e) Very dissatisfied

Add Comments box to describe any problems or issues with Blackboard:

If you do not use Blackboard, please indicate the reasons for not using it. (Select all that apply.)

a) Does not fit with my teaching style
b) Have no interest in teaching online
c) Not clear what its benefits are to me or my students
d) Does not provide adequate tools/features
e) Learning curve is too steep
f) Training is not available when I want it

- g) Interface is not user-friendly
- h) Interface is inflexible
- i) Prefer to use other tools to manage course materials
- j) Other (specify)

What barriers have you experienced in using Blackboard?

If SOU implemented a different course management system, how likely would it be that you would use that system in your courses?

- a) Very likely
- b) Likely
- c) Neither likely or unlikely
- d) Unlikely
- e) Very unlikely

In addition to the tools/features of our current Blackboard system, which of the following features would you be interested in using?(Choose all that apply.)

- Automatic course creation (no request required)
- Electronic portfolio pages
- Single sign-on capabilities
- Email alerts for discussion board postings (opt-in/out)
- Drag/drop files and folders
- Course site blogs
- Optional instructional templates
- Course site wikis
- Accessible for users with disabilities
- RSS feeds incorporated into the course site
- Greater flexibility in setting up grade book items
- Appointment scheduling
- Automatic marking and grade posting for specific assignments
- Integration of library resources into course site
- Built-in HTML editor
- Integrated electronic reserves
- Authoring mathematical and scientific equations
- Online plagiarism detection
- Supporting multiple sections in one course site
- Web conferencing
- Multiple language support
- Class photo directory
- Glossary

What other features/tools would you like to have access to in a course management system?

What improvements to SOU's course management system would be useful to you and your students?

Would you be interested in participating in a focus group discussion about the selection of a campus course management system?

- a) Yes
- b) No

Would you be interested in piloting a course management system in one or more of your courses?

- c) Yes
- d) No
- e) Maybe. I need more information.

If you are interested in participating in a focus group discussion and/or piloting a system, please provide your name and email address below. Please note: All identifying information will be stripped from the rest of the survey to maintain confidentiality.

Appendix B
Priorities List for CMS Selection

Function	Feature	Priority M (Must Have) P (Preferred) O (Optional)
Communication		
	Ability to post course-level announcements	M
	Discussion Board: Threaded conversations between participants	M
	Discussion Management: Scheduled form access and grading options	M
	Blogs: User-generated websites allowing posting of commentary or files	P
	Wikis: User-generated websites allowing collaboration between participants	P
	File exchange: Users can upload files to share with fellow students and instructor	M
	Internal asynchronous messaging (email) within CMS	M
	Online Journal/notebook: Allows students to make course notes in personal or private files	O
	Synchronous chat: Real-time text conversations	M
	Virtual meeting: Synchronous meeting opportunities including voice and file sharing (similar to Elluminate)	P
Student Involvement		
	Whiteboard: Used in synchronous meetings to display files, text, or application screens	O
	Student portfolios: Built-in electronic portfolio option that allows for the collection of artifacts documenting the student learning experience and acquired skills	P
Productivity		
	Group workspaces: Provides group work space that allows instructor to assign tasks/projects and monitor progress to a select group of students	M
	Social networking capabilities	O
	Bookmarking: Ability to save important pages for later reviewing. May be public or private bookmarks.	O
	RSS/Subscription Option- Supports subscribing to discussion forums or pages to receive notification of updates. Aggregator of important news/information.	P
	Calendar/Scheduling: Allows students to document plans for a course and track assignment due dates	M
	Tasks: Instructors can assign tasks to students and track progress with status updates	M

	Searching within course: Ability to search course site for key words and phrases	M
	Working offline/synchronization: Ability to work offline on course materials and then synchronize materials on next connection to course site	P
	Built in orientation and help	M
Administration		
	Course evaluations (security after grade posting, reports)	P
	Updates for new content: Students may opt-in to receive email notifications when new content is posted. Or, course home page displays notices of new content available.	P
	Master course/Templates	P
	Authentication (single sign on capabilities)	M
	iPhone App: Ability to work on course site through iPhone	O
	Course authorization: Instructors and students are limited to accessing only courses they are teaching/ enrolled in. Ability to assign different types of user privileges (i.e. student, course builder, instructor, administrator)	M
	Automated course site creation options	M
	Students may self-enroll in a course site	P
	Integrates with Banner for course registration (adds and removes students)	M
	Ability to archive courses (Specify: Who, what, when , where, and how)	M
	Off-site hosting services are available	O
Course Development		
	Content sharing/reusability: Product provider self-reports that the software complies with the WAI WCAG 1.0 AAA guidelines	M
	Course templates: Tools available to create the initial structure for an online course site	M
	Customized look and feel	P
	Branding: Can use SOU logo, colors, web styles to customize look and feel of product	M
	Instructional design tools: Tools to create learning sequences via templates or wizards	M
	Instructional standards compliance (SCORM): Conforms to standards for sharing instructional materials with other online learning systems	M
	Drag and drop of files and links when organizing course materials	P
Course Delivery		
	Automated testing management: Control of when and where tests may be taken and under what conditions	M

	Automated testing support: Includes system services for importing and exporting tests and test banks as well as statistical analysis of test results	P
	Supports multiple assessment types (objective, subjective, formative, summative)	M
	Online marking tools: Online marking tools enable instructors and assistants to evaluate and mark student work while online	P
	Online gradebook includes supports for keeping track of student progress and work online in support of assigning course grades	M
	Student tracking and reporting tools available	M
	Allows timing the display of materials	M
	Supports podcasting/vodcasting production within product	O
	Supports production of closed captioning within product	O
	Controlling the progression of class (ex. blind posts to discussion board or forced completion of a sequence of tasks)	P
Hardware and Software Requirements		
	Requires specific database types	P
	Multi browser support (IE, Netscape, Firefox, Safari, etc.)	M
	Operates on Linux or Windows server	P
	Multiplatform compatible (Mac/PC)	M
Product Miscellaneous		
	Demonstrated intuitiveness/ease of use	M
	Technical support available (Describe: forums, chat, phone, 7x24)	M
	Online training modules available for users	P
	Security- System has been tested and verified as secure	M
	Interface consistency	M
	Course map available	P
	Support for multiple course sections and large enrollment course	M
	Supports single-sign on integration (compatible with Luminis)	M
	Plagiarism detection software imbedded in program	P
	Integrates with MyCourses channel in Luminis	P
	Integrates with external technologies	M
	Provides technical support contacts/ list of policies	P
	Data integration capabilities (Support of file types)	M
	Application Integration (off-the-shelf integration, bridges with 3rd party applications)	M
	Demonstrated course conversion process/ease of conversion	M
	Integration /Synchronization with banner Student Information System	M
	System supports in place for disaster recovery	M
Accessibility		
	Section 508 compliance at minimum. WCAG 2.0 strongly preferred	P
	CPAT (Voluntary Product Accessibility Template) provided	M

Third-party compliance certification preferred; user testing preferred	P
Features a feedback loop for accessibility issues as new technologies are developed	M
Chat function accessibility: HTML option available? Combination of voice/ text options?	P
Supports use of third party IM functions that are more accessible	P
Offers accessibility options for whiteboard (Specify.)	P

Key: M= Must Have, P= Preferred, O= Optional

Appendix C
Faculty Survey Summary

	50% or more	25-49%	Less than 25%
Bb Tools Used Very Often/ Sometimes	<ul style="list-style-type: none"> • External Links • Announcements • Email • Course Documents • Gradebook • Faculty/Staff Information • Discussion Board 	<ul style="list-style-type: none"> • Tests • Homepages • Digital Assignments • Groups 	<ul style="list-style-type: none"> • Digital Drop Box • Surveys • Course Cartridges • Address Book • Calendar • Tasks • Chat • Virtual Classroom • Glossary
Content/File Types Uploaded to Blackboard	<ul style="list-style-type: none"> • Word/Text files • PPT • Adobe Acrobat • Excel or other data sheets • Images 	<ul style="list-style-type: none"> • HTML files • Video files 	<ul style="list-style-type: none"> • Audio files • Flash
Other Tools Used	<ul style="list-style-type: none"> • YouTube 	<ul style="list-style-type: none"> • Personal website • Textbook publisher sites • Streaming videos 	<ul style="list-style-type: none"> • Blogs • Web conferencing (i.e. Elluminate) • Skype • Web 2.0 • Wikis • Virtual classrooms (i.e. Second Life)
Additional Features of Interest	<ul style="list-style-type: none"> • Auto course creation (no request required) • Drag/drop of files and folders • More flexible gradebook • Online plagiarism detection 	<ul style="list-style-type: none"> • Single sign-on • Email alerts/subscription to discussion board postings • Course site blogs • Optional instructional templates • Enhanced DSS • Auto grading of assignment types • Integration of library materials into course site • Integrated electronic reserves • Supporting multiple course sections in one site • Web conferencing • Class photo directory 	<ul style="list-style-type: none"> • Electronic portfolios • Course site wikis • RSS feeds within course sites • Appointment scheduling

Appendix E
Sample Request for Information

**REQUEST FOR INFORMATION
SOUTHERN OREGON UNIVERSITY
DISTANCE EDUCATION CENTER**

Purpose and Scope

This is a Request for Information (RFI), issued by Southern Oregon University (SOU). The purpose of this RFI is to solicit information from potential course management system (CMS) that will assist SOU leadership with selecting an appropriate system for campus-wide implementation.

Introduction and Background

Southern Oregon University is a public liberal arts and sciences university offering 37 majors, 100 areas of study, and select graduate programs. Designated as the Regional Center for Excellence in the Arts by the Oregon University System, SOU blends career focused preparation with a student centered approach from a dedicated faculty. Recently cited by the *New York Times* as one of 20 "hidden gems" in higher education, SOU's 175 acre main campus is in Ashland with another campus geared to working students in Medford. Total enrollment is approximately 5,000 students.

SOU offers two online bachelor's degree completion programs, three blended master's level programs, and several online post-baccalaureate certificate and endorsement programs. Many of our face-to-face courses also supplement instruction with online course materials. Since 2000, SOU has used Blackboard Basic. As our programs have grown, the tools and functions required in our campus CMS have also grown.

A CMS Exploration Committee was formed in March 2009 to conduct an evaluation of existing CMS solutions and to recommend a new CMS solution for implementation. The Committee is exploring vended and open source solutions to select a CMS that will meet the greatest number of user demands while integrating with our other campus systems. This RFI seeks information that will supplement the Committee's exploration of potential CMS solutions. Information submitted will assist the Committee with the evaluation of products and services as we compare different systems to arrive at a single solution for recommendation by December 2009.

Pre-Submittal Questions and Clarifications

Questions and clarification requests from vendors regarding this Request for Information shall be directed to Jennifer McVay-Dyche, Director of Distance Education, Southern Oregon University, 1250 Siskiyou Blvd., LIB-321, Ashland, OR 97520, e-mail McVayDycJ@sou.edu, no later than

Friday, June 19, 2009, at 5:00 p.m. PDT. All questions received by the deadline shall be responded to in writing to all known vendors no later than Friday, June 26, 2009.

Response Information

Vendors wishing to answer this RFI are asked to respond to the following items.

1. Name and address of company
2. Contact name, phone, and email address
3. Length of time your company has been in business
4. Your company’s vision for higher education
5. A list of five (5) institutions of higher education currently served by your organization that you wish to use as references. At least two (2) of these references should also use SunGard Banner Student Information System and Luminis. For each institution, include the following information:
 - Individual contact name and telephone number.
 - Length of time you have been serving the institution.
6. Responses to the Course Management System Features listed below.

Please indicate below whether or not your product offers the following features. Features not listed, but contained within your product may be listed in the *Additional Comments* area of each section. If you require more space, you may attach additional pages, clearly labeling the sections for which you are expanding your responses.

Communication	Yes	No
Ability to post course-level announcements		
Discussion Board permits threaded conversations between participants		
Ability to schedule discussion forum access		
Provides flexible grading options for discussion board posts		
Users can upload files to share with students or instructor		
Internal asynchronous messaging (email) included within CMS		
Can conduct real-time text conversations within CMS		
Contains virtual meeting capabilities		
Additional Comments:		

Student Involvement	Yes	No
Includes a whiteboard that can be used during synchronous meetings to display files, text, or application screens		
System includes a built-in electronic portfolio option that allows for the collection of artifacts documenting the student learning experience and acquired skills		
Includes social networking tools		
Users can create blogs restricted to a course		
Users can create blogs restricted to the system		
Users can create blogs that can be made available to the public		
Users can create wikis restricted to a course		
User can create wikis restricted to the system		
Users can create wikis that can be made available to the public		
Additional Comments:		

Productivity	Yes	No
Provides group work space that allows instructor to assign tasks/projects and monitor progress to a select group of students		
Bookmarking feature available		
Supports subscribing to discussion forums or pages to receive notification of updates		
Includes a calendar/tasks feature that allows students to document plans for a course and track assignment due dates		
Instructors can assign tasks to students and track progress with status updates		
Ability to search course site for key words and phrases		
Provides options to work offline		
Includes a course map		
Students can make course notes in personal or private files (e.g. Online Notebook, Journal, etc.)		
Additional Comments:		

Course Development	Yes	No
Tools are available within the system to create the initial structure for an online course site		
Ability to provide a customized look and feel at the course level		
Permits institutional branding of product		
System contains tools to create learning sequences via templates or wizards		
CMS product is SCORM Compliant		
Allows drag/ drop of files and links when organizing course materials		
Additional Comments:		

Course Delivery and Assessment	Yes	No
Supports uploading and delivery of varied files types (i.e. text, multimedia, spreadsheets)		
Includes ability to control when and where tests may be taken and under what conditions in the online environment		
Includes system services for importing and exporting tests and test banks as well as statistical analysis of test results		
Supports multiple question types (e.g. multiple choice, true/false, matching, fill-in-the-blank, and ordering)		
Supports multiple assessment types (i.e. objective, subjective, formative, summative)		
Online marking tools are available for instructors and teaching assistants to evaluate and mark student work within CMS		
Online grade book available		
Supports importing data into online grade book		
Supports exporting data from grade book		
Usage, login, and activity reporting available for user/ activity/ course		
Allows timing the display of materials		
Supports podcasting production within product		
Supports vodcasting production within product		
System includes plagiarism detection tools		
Provides tools to set progression of class (e.g. blind posts to discussion board or forced completion of a sequence of tasks)		
Additional Comments:		

Accessibility	Yes	No
Section 508 compliant		
WCAG 2.0 compliant		
VPAT (Voluntary Product Accessibility Template) is provided. Please attach to response, if available.		
Feedback loop is articulated for accessibility issues as new technologies are developed		
Supports production of closed captioning within product, for vodcasting		
Internal chat function is accessible		
HTML chat function available		
Chat feature includes voice and text options		
Product offers accessibility options for whiteboard (Specify.)		
Product meets third-party compliance certification		
User testing for accessibility has been completed		
Additional Comments:		

Administration	Yes	No
Supports set up and distribution of online course evaluations		
Students may opt-in to receive email notifications when new content is posted		
Course home page displays notices of new content available		
Supports master course and/or template creation		
Interfaces with iPhone and/or other handheld devices		
Users are restricted to accessing course sites only for which they are enrolled		
Ability to assign different types of user privileges (e.g. student, course builder, instructor, administrator)		
Includes automated course site creation options that interface with SunGard Banner Student Information System		
Students may self-enroll in a course site		
Allows creation/distribution of system-wide announcements		
Integrates with Banner to automatically add/drop students from course sites		
Ability to archive courses. Please attach a description of archive options and automated processes and controls.		
Supports setup of multiple course sections into one course site		
Supports large enrollment courses (50+ students)		
Ability to restrict file size for attachments		
Supports import/export of courses from other course management systems		
Off-site hosting services are available		

Additional Comments:

Training and Support	Yes	No
24/7 telephone support is available for Administrators		
24/7 telephone support is available for Instructors		
24/7 telephone support is available for Students		
24/7 email support is available for Administrators		
24/7 email support is available for Instructors		
24/7 email support is available for Students		
Vendor provides packaged training materials than can be customized for local distribution. Please specify the format(s) of these materials.		
Learning curve for novice end users is less than 2 hours		
Additional Comments:		

Hardware and Software Requirements	Yes	No
Mac and PC Compatible		
Please list all supported web browsers (including versions).		
Please specify the supported operating system platforms (including versions).		
Please specify the supported database architectures (including versions).		
Additional Comments:		

Additional Technical Information	Yes	No
Encrypts authentication login		
Encrypts information exchanged over the network		
Supports single-sign on integration		
Integrates with Luminis		
Integrates with MyCourses channel in Luminis		
Bridges with third-party applications (e.g. Elluminate, TurnItIn, Wimba)		
Provides the ability to conduct the following levels of back and restore <ul style="list-style-type: none"> • Server instance level (if applicable) • Course level • User level (restoring user profile and activity files) • Components within course 		
What level of failover does the system support?		
Additional Comments:		

Response Instructions

Responses to this RFI must be received no later than Wednesday, July 8, 2009, at 5:00 p.m. PDT to be considered. Responses must be mailed or e-mailed to:

Jennifer McVay-Dyche
 Director of Distance Education
 Southern Oregon University
 1250 Siskiyou Blvd.
 LIB-321
 Ashland OR 97520
McVayDycJ@sou.edu