SOFTWARE BUSINESS CASE

CANVAS LEARNING MANAGEMENT SYSTEM

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EXECUTIVE SUMMARY

Central Washington University requires a state-of-the-art learning management system (LMS) to meet the teaching and learning needs of faculty and students increasingly engaged with instructional technologies for multimodal learning in the classroom and online. Our current Blackboard LMS, while functional, is a first-generation platform that has added functionality by accretion rather than by design and has become overly complex and no longer user-friendly. Canvas offers a next-generation learning management system optimized for Web 2.0 applications, with an intuitive interface and navigation, in a cloud-based software as a service environment. The State Board of Community and Technical Colleges has adopted Canvas on a state-wide basis for all their institutions and the majority of universities in Washington State have also elected to migrate to Canvas. CWU has the opportunity to join this state-wide consortium of Canvas institutions, which will provide students with more seamless technology transfer from community colleges to CWU and a network of peer institutions using Canvas to share knowledge, expertise, and purchasing power.

Sponsoring Department(s): Multimodal Learning

Date of Business Case Preparation: 1 October 2013

Contact Person Name/Phone: Christopher Schedler, Director, Multimodal Learning/x1357

☒ New Product/Service
   If there is a draft or sample contract, please provide a copy. **(See Sample Contract attached)**

☐ Renewal of Existing Product/Service – if checked, include background information.
   If there is a site license agreement, existing contract or new contract draft, please provide a copy.

1. **Problem Definition:**
    In April 2012, the State Board of Community and Technical Colleges (SBCTC) completed an RFP process to select a new Learning Management System (LMS) for their institutions. Representatives from all the state universities were included on the RFP committee. A CWU representative served on the committee and participated in scoring proposals, evaluating vendor demos, and selecting the successful vendor. Instructure Canvas was selected as the LMS vendor, and in June 2012 SBCTC completed negotiations for a state-wide contract, which is also open to any of the four-year universities to join. UW, EWU, and WWU have already chosen to transition to Canvas.

    This presented an opportunity for CWU to evaluate our current Blackboard LMS in a side-by-side comparison with Canvas in terms of functionality, usability, training, support, reliability, interoperability, and costs. The Academic Technology Advisory Council (ATAC) performed the initial comparative evaluation of Blackboard and Canvas and made a recommendation to proceed with a Canvas pilot program (Spring-Summer-Fall 2013). Satisfaction surveys were administered to faculty and students participating in the Canvas pilot during Spring and Summer quarters. Results from the initial evaluation and pilot program indicated a clear preference for Canvas by faculty and students.

2. **Addressing Problem with CWU existing tools and products:**
Blackboard has been licensed by CWU for more than 10 years. During that time period there has not been a systematic evaluation of Blackboard in comparison with other LMS solutions. For the initial ATAC evaluation, eight faculty members (from all the colleges and the Library) completed a rubric comparing Canvas and Blackboard on 15 different tasks related to Content and Management Tools, Communication Tools, Assessment Tools, and Customization Tools, as well as ease-of-use. Canvas was rated equal to or, in most cases, significantly higher than Blackboard in every area except for customization of look and feel of a course (**See Evaluation Results attached**).

In general, the feedback from faculty confirmed that Canvas was more intuitive to navigate and easier to use that Blackboard. Blackboard is a first-generation LMS that has added functionality by accretion rather than design, which makes for a robust but also complex system that is often difficult for new users to navigate and requires multiple clicks to complete tasks. One faculty member likened Blackboard to a pack-rat trying to cater to every desired option. Another compared Blackboard to a classic car that has been rebuilt piece by piece, but still runs on an old platform.

3. **Organizational Impact:**

- **All Stakeholders:** The learning management system is an essential enterprise system utilized by faculty and students for all types of courses (face-to-face, hybrid/blended, and online). Based on current Blackboard usage, over 40% of all courses and almost 70% of all faculty are actively using the learning management system each quarter. Faculty stakeholders have been consulted throughout the process through presentations at Faculty Senate, Multimodal Learning Community meetings, and Faculty Development days. Faculty and students provided feedback through satisfaction surveys administered to Canvas pilot users in Spring and Summer quarters.

- **Primary Users:** For fully online courses, the learning management system is mission-critical since it is the primary mode of communication, interaction, and content delivery for the course. Fully online classes at CWU, enroll over 2,500 students per quarter. Fully online degree programs at CWU have over 900 declared majors (undergraduate and graduate). Online program faculty are represented in Multimodal Learning Communities through which they received information and training on Canvas. Online program faculty and students participated in the Canvas pilot during Spring, Summer, and Fall quarters.

- **Staff Impacts:** Canvas is a cloud-based software-as-a-service solution hosted by Instructure, whereas our Blackboard system is server-based solution hosted on campus. The selection of Canvas would reduce the workload of the current Blackboard server administrator in ITS although there would still be ITS resources required for feeds of user accounts, courses, and rosters from Safari into Canvas, as well as integrations for single sign-on through the Shibboleth portal. Currently, there is a single LMS administrator for Blackboard and for the Canvas pilot housed in Multimodal Learning. We are in the process of hiring an instructional designer, who will provide secondary LMS support.

- **Training:** If Canvas is selected, training will be offered to faculty making the migration from Blackboard. Training workshops are offered to new Canvas faculty on a monthly basis, which provide an orientation to the new LMS and essential tools, as well as options for building a new course in Canvas or migrating content from Blackboard to Canvas. Training and support is also available one-on-one on campus and through web-conferencing for faculty at the Centers.

- **RFP Requirements Contributors:** An RFP will not be required for the selection of Canvas because it is already licensed for institutions of higher education in the state of Washington through the State Board of Community and Technical Colleges contract.

4. **Benefits:**

During the three-quarter Canvas pilot (Spring-Summer-Fall 2013), the number of faculty, courses, and students participating in the pilot increased each quarter, indicating increasing interest and engagement with the new learning management system. Faculty from all ranks and all the colleges, Library, and Centers were included, teaching courses in different modalities (face-to-face, hybrid, online, ITV) and at different levels (general education, major, graduate):

	Spring 2013	Summer 2013	Fall 2013
Faculty	21	40	83
Courses	24	54	159
Students	521	808	3,500

For the Canvas pilot in Spring 2013 and Summer 2013, satisfaction surveys were administered to faculty and students using Canvas. Faculty response rates were 12/21 (57%) for Spring and 19/40 (48%) for Summer. Student response rates were 101/521 (19%) for Spring and 173/808 (21%) for Summer. Full results of the surveys can be found at: https://www.cwu.edu/online-learning/canvas-pilot-evaluation

The satisfaction surveys revealed overwhelming satisfaction with Canvas among faculty and increasing satisfaction among students as they became more familiar with the new learning management system:

Faculty: Overall satisfaction with Canvas
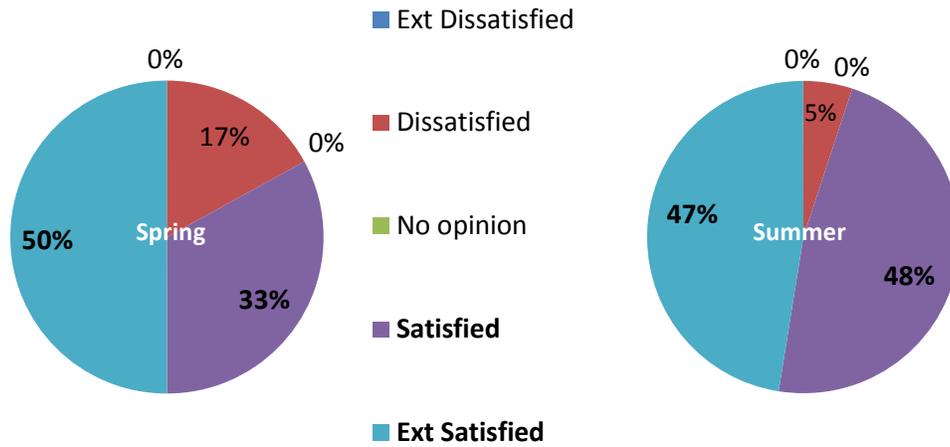
Students: Overall satisfaction with Canvas
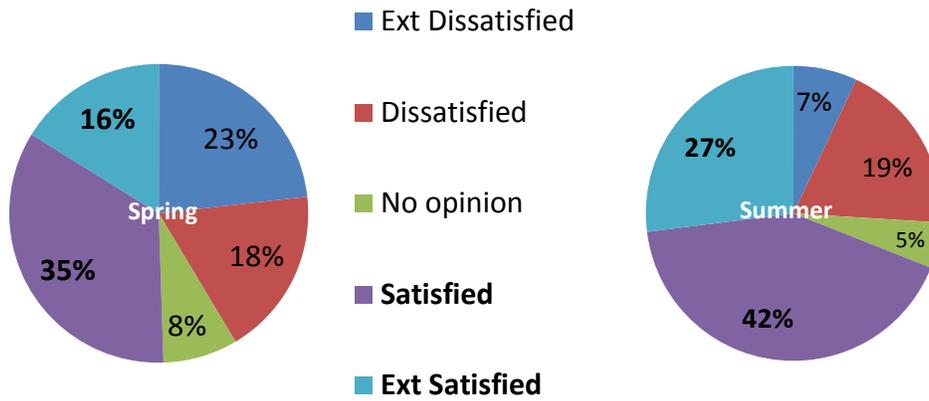
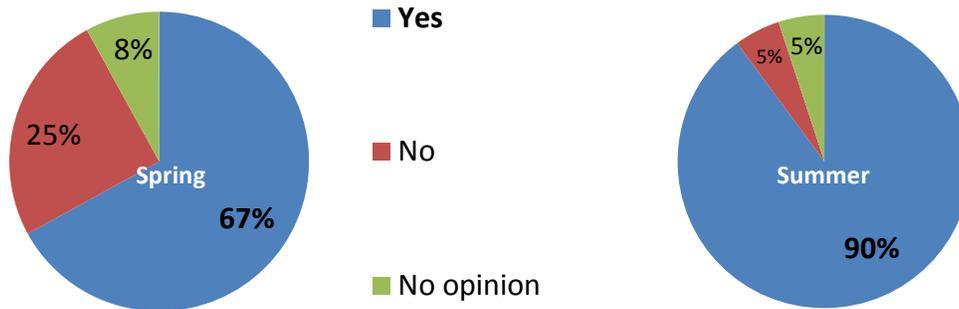Faculty: Recommend Canvas to replace Blackboard

Students: Recommend Canvas to replace Blackboard
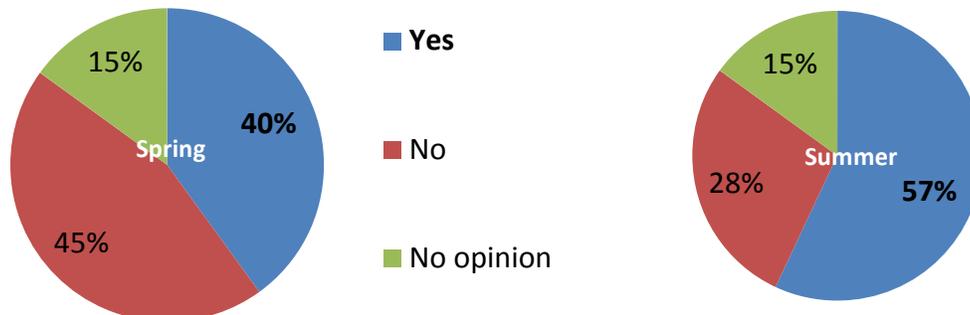
Based on comments from the satisfaction surveys, users preferred the following features of Canvas over Blackboard:

- Ease of navigation
- User-friendly interface
- Notifications: email, text message, social network
- File preview: embedded in page (no download)
- Calendar: linked to syllabus, assignments
- SpeedGrader: preview, rubric, grade, inline comments
- External Integrations: Web 2.0 apps
- Audio/Video: for discussions, assignment feedback

Besides the functional benefits of Canvas, using the same learning management system as the community and technical colleges in the state will benefit transfer students (the majority of CWU students) who will already be familiar with Canvas. In addition, state-wide

adoption and integration of Canvas might ultimately allow students to view their courses from multiple institutions within a single learning management system.

Since Canvas is a cloud-based software as a service, CWU would not need to purchase and maintain an onsite server to run the learning management system. The service provider (Instructure) is responsible for replacement/refresh of all hardware and software upgrades. Production releases to add functionality, upgrade features, and fix bugs, occur every three weeks with Canvas, rather than every 3-4 months with Blackboard.

5. **Strategic Alignment:**
The learning management system has become an essential enterprise system supporting teaching, learning, and student success. It helps foster student success by providing an enhanced digital learning environment for face-to-face and blended/hybrid courses and the primary learning environment for online courses. It supports access to educational opportunities to students restricted by place and time through the use of learning, communication, and social technologies. It provides instructional technologies and state-of-the-art learning environment to foster student engagement.

In particular, this Business Case aligns with the following objectives of CWU's strategic plan:

- **Outcome 1.1.3:** Students and faculty will be increasingly engaged in the learning process in and outside the classroom.
- **Outcome 1.2.1:** Increase student use and impact of relevant and effective support services.
- **Outcome 2.1.2:** Promote the free and civil exchange of information and ideas among faculty, staff, students, and the community.
- **Outcome 5.2.2:** Position CWU for increased enrollment.
- **Outcome 5.4.4:** Provide information technology infrastructure, systems, and services necessary for all CWU departments to achieve their objectives and the objectives of the university.

http://www.cwu.edu/resources-reports/sites/cts.cwu.edu.resources-reports/files/documents/2012%20CWU%20Strategic%20Plan.pdf

6. **Cost**

- **Cost Breakdown:** The following table provides a comparison of recurring costs for Blackboard and Canvas, including the learning management system, admin and user technical support, and custom URL:

Recurring Costs (Annual)	Blackboard	Canvas
LMS License	$71,460.96	$96,077.00
Admin Support	Included above	$19,216.00
24/7 Tech Support	$45,325.00	$38,126.00
Custom URL	n/a	$500.00
Total Costs	**$116,785.96**	**$153,919.00**
Difference (1 Year)		**$37, 133.04**

Canvas offers a three-year contract with fixed annual costs. Blackboard only offers yearly contracts with annual cost increases of 6% on average. The following table provides a comparison of 3 year ownership costs for Blackboard and Canvas,

3 Year Ownership Cost	Blackboard	Canvas
Year 1	$116,785.96	$153,919.00
Year 2	$123,793.11	$153,919.00
Year 3	$131,220.69	$153,919.00
Total Costs	**$371,799.76**	**$461,757.00**
Difference (3 Years)		**$89,957.24**

- **Source of Funding (Project ID):** The cost of the Blackboard LMS license is currently fully paid by Multimodal Learning from a combination of state-support funds (**PID 11753500**) and online course fee funds (**PID 32525700**). The cost of 24/7 Technical Support for Blackboard is currently split between Multimodal Learning online course fee funds (**PID 32525700**) and ITS (**PID 32491000**).

The following table shows the current sources of funding for the LMS and Support costs, plus the added costs for Canvas:

Source of Funding	State Support	OL Course Fee	ITS	Canvas Add Cost
LMS License	$36,404.64	$35,056.32	0	$24,616.04
Admin Support	Included above	Included above	0	$19,216.00
24/7 Tech Support	0	$27,213.13	$18,111.87	($7,199.00)
Custom URL	0	0	0	$500.00
Total/Add Funding	**$36,404.64**	**$62,269.45**	**$18,111.87**	***$37, 133.04**

*Funding for additional Canvas costs will be assumed by Multimodal Learning.

7. **Alternatives:**

Alternative	Reasons For Not Selecting Alternative
Status Quo (Remain on Blackboard)	See Section 2 (above)
Complete RFP open to all LMS vendors	CWU was represented in the SBCTC RFP process, which was open to all LMS vendors. Through this process, Canvas was chosen as the selected LMS vendor over Blackboard, Desire2Learn, Moodle, and other vendors. There is no reason to believe that another RFP would produce a different result.

8. **Timing / Schedule:**

Task	Target Date
Implementation Design and Planning	Completed for Pilot

Task	Target Date
Create and Configure Server Cluster	Completed for Pilot
SIS Import	Completed for Pilot
Branding	Completed for Pilot
Admin Training	Completed for Pilot
Support Training	Completed for Pilot
Support Account Activation (ZenDesk)	Completed for Pilot
Custom URL	Completed for Pilot
Configure Accounts/Sub-Accounts	Completed for Pilot
Setup Roles and Permissions	Completed for Pilot
Setup Authentication (Shibboleth)	Fall 2013
Migrate Course Content	Fall 2013-Spring 2014

9. **Technology Migration/Resource Identification:**
   Authentication of users in Canvas will be streamlined through Shibboleth once the MyCWU Portal is fully implemented. Currently, CWU users can use their Novell username with Canvas, but must create a new password. This has caused some issues with new user login.

   Since Canvas is a cloud-based software as a service, users will be differently affected by slowdowns and outages. With our onsite hosted Blackboard server, users were impacted by on-campus network slowdowns and outages. With the cloud-based Canvas system, users could be impacted by Internet slowdowns and outages (K-12 Network, Amazon Web Services, Canvas servers).

   Canvas did experience periodic slowdowns and minor outages prior to our Fall quarter start. Instructure was able to identify the issues, optimize their servers, and migrate their institutions to new server clusters. Having institutions spread across multiple clusters provides redundancy and back-up. Since addressing the issues, they have not encountered any similar problems.

   There are two options for migrating course content from Blackboard to Canvas:

   - Rebuild/revise course in Canvas
   - Migrate content from Blackboard and align in Canvas

Most of the other WA institutions we have interviewed have suggested that their faculty take the opportunity to revise their course and rebuild it in Canvas to utilize the new tools, features, and structure of Canvas. The Blackboard/Canvas administrator and new instructional designer we are hiring will be charged with providing instructional design and development support to faculty making the transition to Canvas.

In addition, we may hire additional instructional technologists on a contract-basis during the transition year if faculty require support to migrate content from Blackboard and align it in Canvas. The tables below indicate the resources needed for the project and percentage of time required for personnel:

Resource	Requirements	Timeframe
Personnel	Canvas/Blackboard Admin: Supports user accounts and course migrations	Fall 2013-Spring 2014
Personnel	Instructional Designer: supports instructional design and development	Fall 2013-Spring 2014
Equipment	Maintain Blackboard Server: to archive old Blackboard courses	Fall 2013-Fall 2014
Facilities	Office space for personnel provided by Multimodal Learning	Ongoing

Resource	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Canvas/Bb Admin	60	60	60	70	70	70					50	50
Instructional Designer	50	50	50	60	60	60					40	40

10. **Product Life/Application Sunsetting or Decommissioning:**
    Since Canvas is a cloud-based software as a service, no sun-setting or decommissioning is anticipated at this time. Migration to a new LMS takes place very infrequently, as evidenced by our licensing of Blackboard for more than a decade.

11. **References:**
    CWU has worked closely with the SBCTC during its RFP process and implementation of Canvas. We are members of the WA Canvas users group of institutions in the state using Canvas, and we participated in its inaugural conference in March 2013. We are a member of the Washington Higher Education Technology Consortium (WHETC) and have consulted through the LMS subcommittee with other member institutions who have adopted Canvas (UW, EWU, WWU). During our initial evaluation of Canvas, we interviewed the following individuals at other Canvas institutions:

    - Karin Roberts, Assistant Director, Academic and Collaborative Applications, University of Washington
    - Dave Dean, Manager, eLearning Services, Eastern Washington University

- Jeff Healy, eLearning Services, Eastern Washington University
- John Farquhar, Manager, Multimedia/Web Development, Western Washington University
- Renee Carney, Director of eLearning, Lower Columbia College
- Marc Carbon, State Board of Community and Technical Colleges

During the interviews, we discussed functionality, usability, training, support, reliability, and interoperability issues with Canvas. No major issues were raised, and all the references were positive about the support they received from Canvas through dual account and implementation managers. They noted that user help documentation and Tier-1 support provided by Canvas are high quality and resulted in diminished support requirements for faculty and students by campus representatives.

12. **Recommendation:**
While Blackboard has served as a functional learning management system for CWU for more than 10 years, Canvas offers next-generation instructional technology, added functionality, usability enhancements, and integration options. Utilizing a common teaching and learning platform across institutions in Washington State will provide a standardized set of tools for students. CWU will benefit from collaborations with other Canvas institutions to share knowledge, expertise, and purchasing power to request new features required by faculty and students. Staying with Blackboard would potentially put CWU at a disadvantage in recruiting students looking to transition from the Canvas environment of their community college to a similar environment at a four-year university. Overall, Canvas will better meet the needs of CWU faculty and students engaged in 21st Century multimodal learning.

13. **Approvals**
This section should be left blank.

The following actions have been taken by the appropriate Sub-Council (ATAC or Non-Academic Sub-Council) and University Enterprise Team:

Date	Action	By

Upon approval by the Enterprise Team (ET) or one of the two Sub-Councils (Academic or Non-Academic), CWU procurement policies and procedures should be used to initiate a purchase. Please contact the Purchasing office at x1001 with any questions regarding the procurement process.

If you have any questions, please contact Sue Noce 963-2927 or Tina Short 963-2910.

Services Order Form

9020 South Sandy Parkway, Suite 300, Sandy, UT 84070

Customer Contact Information

Customer	Central Washington University	**Contact**	Tracy Pellett
Address	400 E. University Way	**Phone**	(509) 963-1689
City	Ellensburg	**email**	PellettT@cwu.EDU
State/Province	WA		
Zip/postal code	98926		

Products & Fees					
Description	**Term**	**Metric**	**Quantity**	**Price**	**Total**
Canvas Cloud	7/1/14 to 6/30/15	FTE	10,893	$8.82	$96,077
	7/1/15 to 6/30/16	FTE	10,893	$8.82	$96,077
	7/1/16 to 6/30/17	FTE	10,893	$8.82	$96,077
Canvas Support-Premium	7/1/14 to 6/30/15	20% of subscription	N/A	$19,216	$19,216
	7/1/15 to 6/30/16	20% of subscription	N/A	$19,216	$19,216
	7/1/16 to 6/30/17	20% of subscription	N/A	$19,216	$19,216
Tier 1 Support Annual	7/1/14 to 6/30/15	$3.50/FTE	10,893	$38,126	$38,126
	7/1/15 to 6/30/16	$3.50/FTE	10,893	$38,126	$38,126
	7/1/16 to 6/30/17	$3.50/FTE	10,893	$38,126	$38,126
Custom URL	7/1/14 to 6/30/15	N/A	N/A	$500	$500
	7/1/15 to 6/30/16	N/A	N/A	$500	$500
	7/1/16 to 6/30/17	N/A	N/A	$500	$500
				Total	$461,757

Implementation & Training Services *includes*:
● Production account setup.
● Authentication integration assistance (for supported identity providers only , (i.e., LDAP, CAS or SAML 2.0).
● Starter training to be delivered online. Administrator Training, Support Training, User Training.
● Site Branding (school color header w/ logo.)
● Basic SIS endpoint (We enable the Instructure bulk enrollment API which accepts updates provided in the Canvas SIS Import Format.)
● Production Support Configuration for support ticketing system.
● Test Instance (Test instance that refreshes weekly)

User *means* a part-time or full-time student, teacher, or administrator of Customer's educational institution, which is authorized by Customer to use the Service with a login credential.
FTE *means* the number of full-time equivalent students calculated in accordance with the definition published by the Integrated Postsecondary Education Data System.
> Customer must annually notify Instructure of its most recent reported FTE count within 30 days of the filing. If the reported FTE count for such year is different than the number of estimated FTEs in the Fee table above, then the reported FTE count will be used to calculate the Fees for the renewal Subscription Term directly following the filing date of the most recent reported FTE count.

Payment Terms: Customer agrees to pay to Instructure the applicable fees set forth on this order form .
> For the initial term Customer must pay such amount to Instructure on the date of this order.
> For each subsequent term, Instructure will invoice Customer 30 days prior to the beginning of such term and Customer must pay such invoice within 30 days of receipt.

Duration: This order begins on the initial date listed above under Term, and continues until the last date listed above, unless sooner terminated under the Agreement.
Terms shown on this Order Form is **optional**. Customer is required to notify Instructure of opt-in by June 1, 2014.
Terms: This order is governed by the terms of Master Subscription Services Agreement between the parties (**Agreement**), which terms are incorporated into this order for all purposes. If there is a conflict between the terms of this order and the Agreement, this order governs. This order and the Agreement are the entire agreement between the parties, and they supersede and replace all prior and contemporaneous negotiations, agreements, representations and discussions regarding this subject matter. Only a signed writing of the parties may amend this order. Any terms used in this order but not defined, will use the definitions in the Agreement.

Central Washington University/Customer
By: _____
Name: _____
Title: _____
Date:_____

Instructure, Inc.
By: _____
Name: _____
Title: _____
Date:_____

Faculty LMS Evaluation Rubric - SUMMARY - OVERALL AVERAGE

Faculty Instructions: As you complete the tasks listed below for each vendor, please use the rubric to score the LMS product based on how well you feel it meets your needs, both in terms of functionality as well as ease of use. **Scores are: (0)-does not meet, (1)-meets, (2)-exceeds, (3)-superior.** Please record any specific observations or comments on the companion comment form.

Faculty LMS Evaluation Rubric	Canvas	Blackboard	Comments
Content & Management Tools			
Task 01: Create a representative unit of course materials in your demonstration classroom. This should, at a minimum, include: - creation of week/unit/chapter/etc. folders/directories - uploading a typical unit/week/chapter worth of files into the folder(s) - set documents/folders to be time released	2.4	1.1	
Task 02: Add a link to an external Website or external resource. You should, at a minimum, determine which areas will support external links, attempt to create one or more links in those areas. Typical areas might include course content, announcement, discussion message, test, etc.	1.9	1.4	
Task 03: Create links between course areas and content. Examples of links to create could inlcude: linking an announcement to content, discussion message, or quiz, linking from one document to another, etc.	2.0	1.5	
Task 04: Copy or move course content within the classroom. For example, move a document from one unit to another unit, or reorganize content already uploaded/created.	2.3	0.9	

Task 05: Test any tools provided by the solution for writing equations or typing in mathematic (or other) symbols. Determine where such tools are present throughout the solution, as well as the completeness and usability of these tools.	**1.8**	**0.4**	
Task 06: Upload multimedia files into the system and test the system's ability to display audio, video, and other multimedia file formats.	**1.9**	**1.3**	
Communication Tools			
Task 07: Send messages using the tools provided by each the solution At a minimum, send messages to external email addresses as well as through any internal message system provided.	**1.7**	**1.5**	1 NA response for Canvas
Task 08: Setup two or more discussion forums. You should, at a minimum: - set up the discussion forums - post several messages - reply to messages - sort messages - search for a specific message - grade the discussion (if such tools are available)	**1.4**	**1.4**	
Task 09: Create a student group or working space. You should, at a minimum: - set up at least one group - add at least one student to the group - test the available group & group management tools	**2.0**	**1.4**	1 NA response for Canvas
Task 10: Add a course announcement. At a minimum: - create at least one course announcement - determine where announcements can be posted - test options to send announcements via email, to pre-schedule announcements, prioritize announcements when displayed, or any other	**1.5**	**1.4**	

announcement options provided by each solution.			
Assessment Tools			
Task 11: Create representative exams. This should include, at a minimum: - using several types of questions - multiple choice, matching, short answer, etc. - setting a test timer - set an exam to be time released - grading an exam - importing questions from a test bank (if applicable) - creating and drawing from a question pool	2.1	1.1	
Task 12: Create a gradable assignment/activity. This should include, at a minimum: - set up the assignment- set assignment to be time released- complete the assignment (as a student) - grade, comment on, and return the assignment	2.3	1.5	
Task 13: Create a manually entered grade book item. You should also, at a minimum: - modify the grade book item - apply weights to items in the grade book - remove a grade book item	1.9	1.6	
Customization Tools			
Task 14: Customize the look and feel of the course (colors, graphics, etc.).	0.5	1.3	

Task 15: Customize the layout and arrangement of your course, At a minimum, add and remove course tools, modules, buttons/links, etc. to your classroom.	**1.6**	**1.4**	
Ease of Use - Overall Impressions			
Content & Management Tools	**2.1**	**1.1**	
Communication Tools	**1.4**	**1.4**	
Assessment Tools	**1.6**	**1.3**	
Customization Tools	**1.0**	**1.1**	
If you downloaded the mobile app, rate the functionality and usability.	**1.3**	**0.2**	4 NA responses for Canvas, 3 NA responses for Blackboard
If you used the vendor technical support, how useful was it?	**1.8**	**0.3**	4 NA responses for Canvas and Blackboard
How intuitive is the system to use, overall?	**2.3**	**0.9**	
Overall consistency of tools throughout the system	**1.8**	**1.1**	
Number of clicks required to accomplish tasks	**2.0**	**0.8**	
Navigation - how easy is it to get around?	**2.0**	**0.9**	
Total Scores:	**41.4**	**27.1**	**Max score = 75**