Evaluation Plan

James Madison University

Evaluation Plan in conjunction with JMU-CIT LMS-Blackboard

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Evaluation Plan for: Blackboard

Prepared by Eric Jacobs, Michael May, Jason Poole and Jessica Robinson in conjunction with The Center for Instructional Technology of James Madison University

Introduction

This document describes the evaluation process of the learning management system Blackboard. The educational software platform is widely used by instructors to carry and deliver course content to students. The evaluation plan will consist of the following process: background description of the software, purpose of the evaluation and its audience, anticipated decisions, evaluation questions, methodology, sample population, tools and instrumentation, the perceived limitations, a logistics and timeline schedule, and budget.

This evaluation plan was prepared by Eric Jacobs, Michael May, Jason Poole, and Jessica Robinson who are graduate students in the Educational Technology department at James Madison University. Coordinating efforts by Andrea Adams of the Center for Instructional Technology (CIT), and by Dr. Michele Estes of the Educational Technology department at James Madison University have helped advise this evaluation plan.

Background

The evaluand is a learning management system (LMS) specializing in the hosting and delivery of course content to students. Under the administration of the instructors, the LMS provides an array of features such as hosting files, discussion boards, homework and file submission, announcements, and grade book features that allow students to

see their progress. Blackboard is a learning management system that has the ability to act as the central hub for the curriculum. This has become increasingly apparent as distance learning programs depend on the features of this evaluand to manage course content and interact with students in a web-based environment. Blackboard's diffusion wide, claiming more than 1,600 institutions using their LMS (Blackboard, 2011). Blackboard is constructed to be the central hub for all current courses in which the student is enrolled. However, under each course heading is a commonality of tools, some interactive, to help guide the student in managing course content. The following are widely used tools:

- Web page creation and file hosting

- Announcements

- My Grades

- Discussion Board

- Send Email

These features are illustrated in the following screen captures. Below, the following screen capture illustrates the landing page after a student logs into his or her account. The list of courses are available for selection. Each link in the course list is accessible for student interaction and provides all necessary materials, information and tools for which the student can engage in the course.
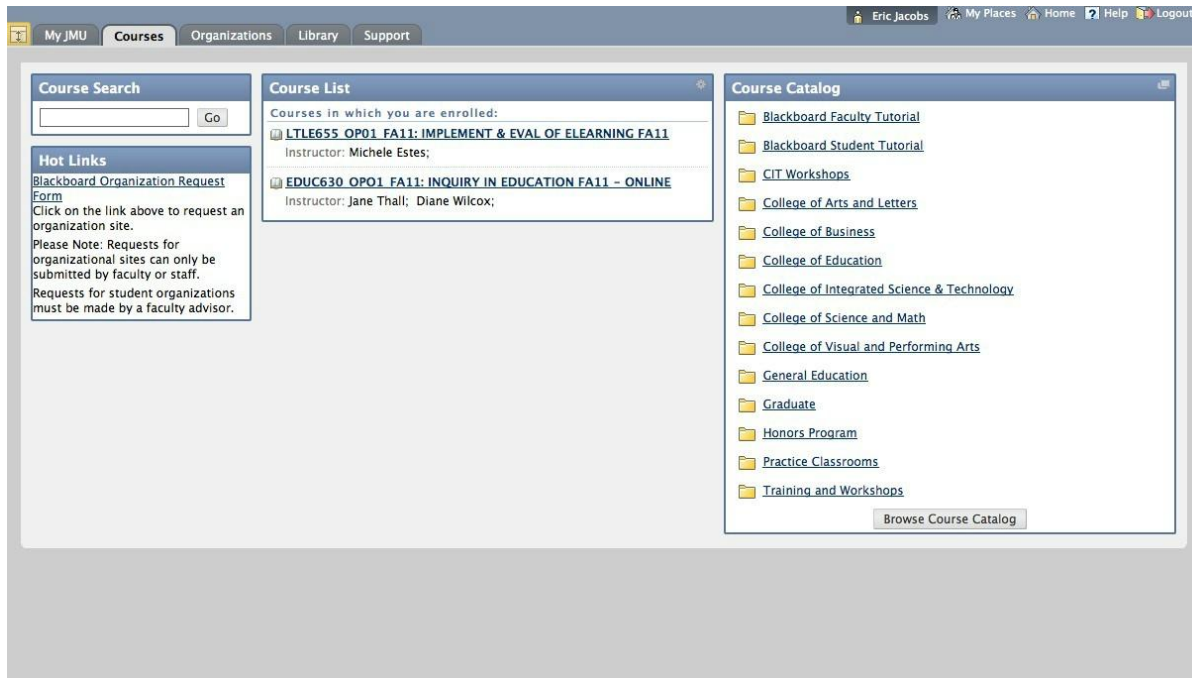
Using the example of the "Implementation and Evaluation of eLearning" course, the following section illustrates, with annotated screen captures, the actions in which a student may pursue to access necessary materials for the desired course.

In the following screen capture, the most common landing page of any instructor's course is the announcements page which features important announcements, updates to the course, and links to help the learner navigate to a desired location within or outside of Blackboard.

The left navigation bar provides a variety of links that the instructor deems important enough to be visible at all times. These links navigate to particular web pages set up according to their description. However, the tools link is where Blackboard offers the most opportunity for student engagement.
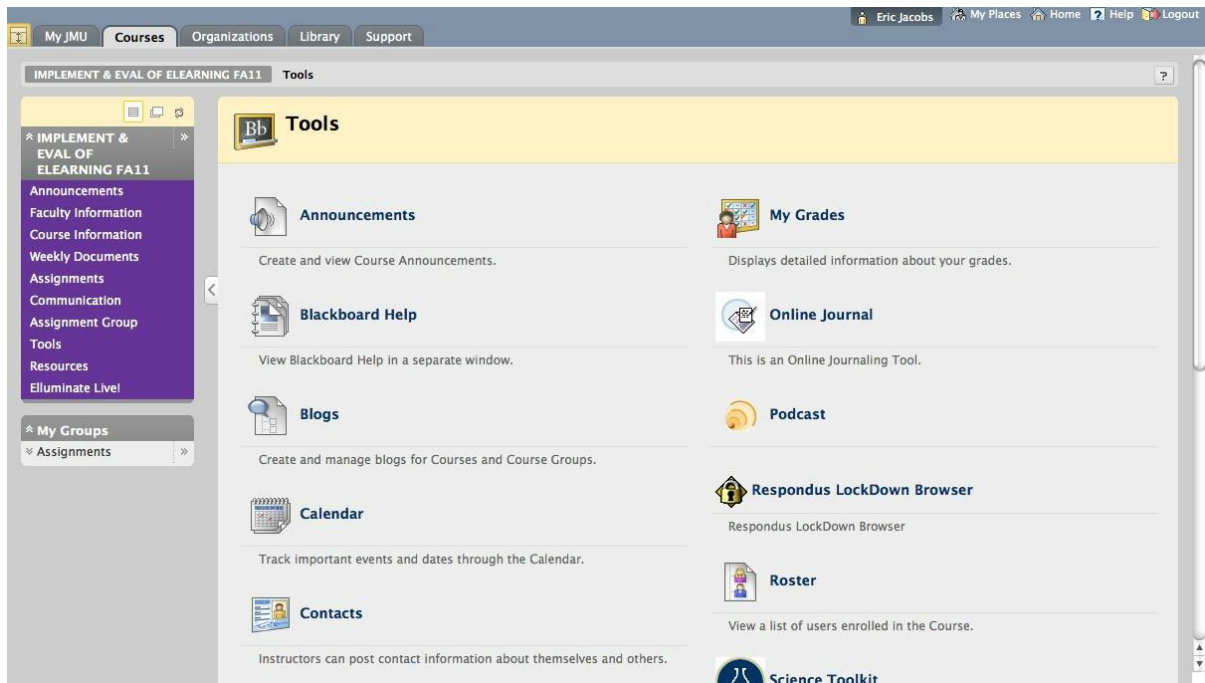
A feature accessed by many students is the 'My Grades' page. This page informs the student of every assessment to be graded in the course. Students also can see their performance as the instructors assesses work, and comments provided next to grades are also an added feature to help provide feedback in evaluation of work. All work is time stamped to provide adequate information regarding deadlines if applicable.
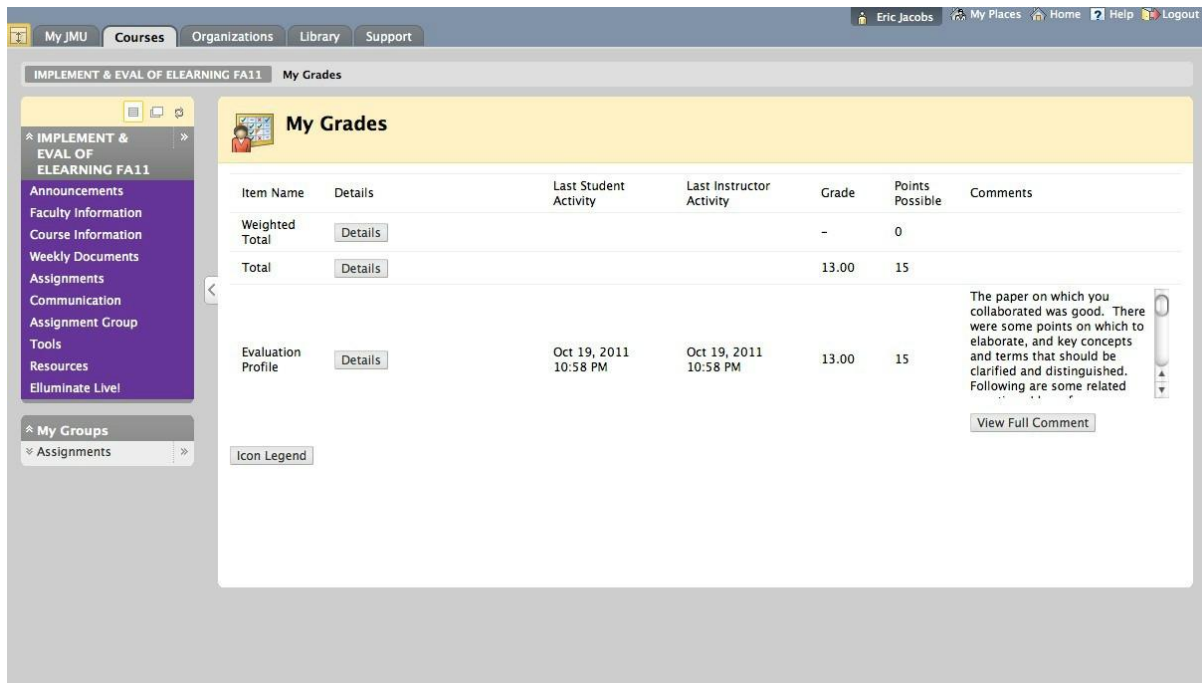
The discussion board feature is an interactive place for students to engage in various topics provoked by the professor or with each other. The following screen capture shows how the discussion board lists students, topics, and responses to particular discussions.

The direct communication with peers and the instructor(s) in a course can be done through the use of the email tool. As illustrated, the following options listed in the screen capture show a variety of ways a student can communicate with anyone listed in the course. This tool is conducive to helping communication flow between students in the classroom if necessary.
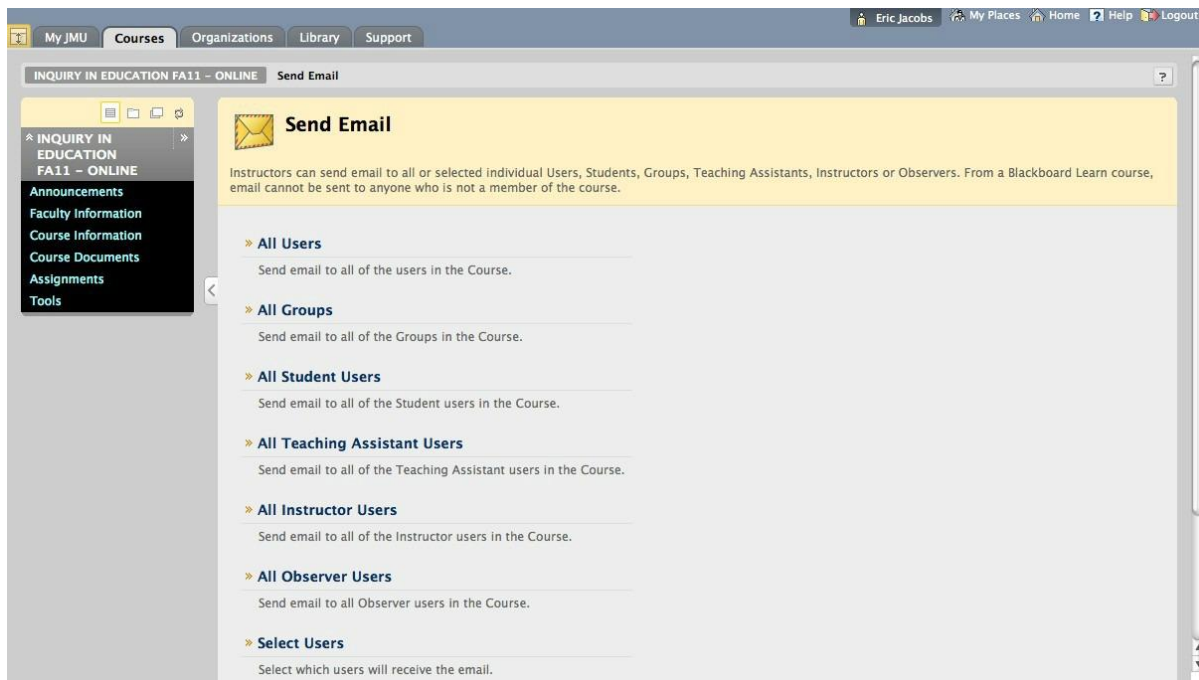
In all, there are twenty-seven tools available to students in Blackboard according to the CIT. However, it is up to the instructor to decide which tools are necessary to the course and then allow access to them.

Overall, Blackboard is a learning management system that is tailored for the education arena. It is built to provide a single web-base place for students and instructors to engage with the curriculum and to provide other course content. The way in which the instructor manages Blackboard will also affect how the students use it and as well as their frequency in the use of it. By employing various tools such as the discussion board, email capabilities, and others, Blackboard is a learning management system that helps extend the classroom into the virtual space. The online environment is also conducive to eliciting student engagement as the LMS hosts files, delivers information and content, and provides other necessary information for students.

The Blackboard software is maintained by Blackboard Inc., however, training and implementation duties belong to the Center for Instructional Technology (CIT) of James Madison University. Usability statistics and other internal data from the system may be obtained from the CIT for further analysis.

Purpose and Audience

The purpose of this evaluation plan is to analyze James Madison University's learning management system. Currently, JMU uses Blackboard 9 as their learning management system. Students at James Madison University have the option of using Blackboard through online and hybrid courses. Over the next four weeks a team of graduate students from the Educational Technology department will evaluate and analyze the functions and usability of Blackboard 9. Over the next several months JMU will be making important decisions regarding their current LMS. This evaluation plan will serve as a tool necessary in their decision making process. It will also help them determine the effectiveness of using Blackboard for JMU course work.

Specific sub-purposes of this evaluation are:

- to determine the needs that students have for a learning management system;
- to identify the technologies that faculty and students are currently using in teaching and learning;
  - to identify how those technologies meet needs that Blackboard does not meet
- to identify the technologies that faculty and students are no longer using in teaching and learning.

Audience

The primary stakeholders of this evaluation will be Andrea Adams, Assistant Director of

Faculty Development and eLearning programs and her team of colleagues. Dr. Michele

Estes, James Madison University Assistant Professor, and the graduate students of the

Fall 2011 Evaluation of E-Learning course will serve as secondary stakeholders. The

designers and implementers of this evaluation include: Eric Jacobs, Michael May, Jason

Poole and Jessica Robinson. Additionally, the general student population at James

Madison University are also stakeholders as the decisions made in response to this

evaluation will affect them.

Decisions to be addressed by evaluation

The data collected will be used to inform the Center for Instructional Technology at JMU

as they evaluate the current learning management system in place at the university.

Potential decisions arising from this evaluation include:

- ○ To what degree does Blackboard meet the expectations and learning

  needs of undergraduate and graduate students at JMU?

- ○ Do graduate and undergraduate students feel that Blackboard is a viable

  solution as a learning management system for JMU over the next 5 years?

- ○ To what degree do the features in Blackboard meet the technological

  needs of the students at JMU?

Evaluation questions

Needs related questions:

- What are students needs in regards to using a learning management system in their coursework?

- What expectations do students have about learning management systems?

Technology related questions:

- What technologies are students using both in Blackboard and in their day to day lives?

- Do students feel that the technology in Blackboard is beneficial to their learning?

Features related questions:

- What features of Blackboard do students find obsolete or in need of updating?

- What features in Blackboard do students engage with most often?

- What features in Blackboard do students feel are the most beneficial?

Methods

The methods of evaluation for this project are as follows:

- Cross-sectional survey - To evaluate Blackboard features a cross-sectional survey will be distributed to a purposive sample of the 10 JMU courses most active in using Blackboard. To determine which courses are most active LMS activity data, collected by the Center for Instructional Technology at JMU, was obtained and parsed. To prevent bias in results

the 10 courses selected will be split using the activity data to identify 5

undergraduate and 5 graduate courses. These 10 courses are distributed

across multiple subjects and include approximately 10% of the student

population. By using only the most active courses, data will be obtained

from those users most likely to have had meaningful user experience with

Blackboard.

- Census Survey - To gain data on the population of JMU students a census

  survey, one that is distributed to the entire target population, will be

  administered. This surveys purpose is to gain data on technology use

  among the population, this includes data on the use of web and

  communication based technology and also technology hardware. Data

  will also be collected on student satisfaction with Blackboard as an LMS.

  This survey will be distributed to all enrolled students at JMU through the

  use of the bulk-email system provided by JMU and will abide by the

  University Policy Committee's criteria for use of bulk e-mail.

- Interviews - Interviews will be administered to a sampling of Blackboard

  users to obtain an in depth understanding of students' LMS needs. The

  sampling will consist of at least two graduate and two undergraduate

  students currently enrolled in courses utilizing Blackboard. The sample

  will be drawn from the Learning, Technology and Leadership Education

  Department in the College of Education at JMU. By drawing the sample

from this particular subset of students the data will give us both the

understanding of students use and interaction with Blackboard while also

allowing insight into pedagogical aspects of the LMS. This samples

background in education gives a unique insight into the instructional

effectiveness of the LMS from a user perspective. Interviews will be

conducted remotely using an Elluminate virtual classroom allowing the

interviewer to administer follow up questions for clarity and depth.

Methods	Needs	Features	Technology Use
Cross-sectional survey	X	X	
Census Survey			X
Interview	X	X	X

Sample

Information from Undergraduate and Graduate students will be gathered into three

different size and type of samples. The first sample will include every student enrolled

at James Madison University. Every student at James Madison University will receive

an email containing an invitation to participate in a survey and the link to the survey.

Close to 20,000 students will be invited to complete the survey with an expected return

of approximately 2% of the population.

The second sample will consist of five undergraduate and five graduate classes that

represent the classes with the highest usage of Blackboard, the learning management

system currently in use at James Madison University. The usage data was provided by

Andrea Adams of the CIT. Considering that in the fall of 2010 there were 19,434

students enrolled in undergraduate, graduate and doctoral programs, the goal is to keep

the sample size to 10% of the total student population with an expected return of 50%.

The last sample will consist of of two undergraduate students and two graduate

students of JMU's LTLE program. These four individuals were chosen because of their

background expertise in the field educational technology. Each member of the

evaluation team will interview one person using Elluminate to record the session for

later retrieval and accurate.

Tools and Instrumentation

Appendix A includes a sample census survey targeted to all eligible students at James

Madison University. The survey will be conducted with the software program Qualtrics.

The purpose of census survey is to gauge an overall perspective from the students

regarding their expectations, technology uses, and general interactions with Blackboard.

This tool will provide a more of a broad view of how students use and perceive

Blackboard rather than engaging in specific feedback about the software's features and

uses.

Appendix B includes the cross-sectional survey of users with high interactions using the

Blackboard software. The users with high interactions are determined from the data

provided by Andrea Adams of the Center for Instructional Technology. Courses listed in

the data set are indicated by the number of clicks made in Blackboard from the

beginning of the fall semester in 2011 and through the first three weeks of September

2011 at James Madison University. Determined by the number clicks and the average

amount of clicks per student, the data shows which courses have the highest

interactions within Blackboard. Selecting a sample of five graduate and five

undergraduate courses with the highest clicks per student, this survey will be given to

the instructor of those courses for participation. This survey will be conducted with the

software program Qualtrics. The purpose of this survey is to gain feedback from

targeted users of classes with the highest interactions inside Blackboard. Questions are

not as general as the census survey and function primarily to measure the target

population's perspective of Blackboards features such as the discussion board, email

tool and many others. This survey is much more focused in how students will rate the

importance of specific features available in Blackboard.

Appendix C includes a protocol for the user interviews. This includes the questions of

how the interview will be conducted. The purpose of the interviews is to determine how

current, experienced users (undergraduate and graduate) of Blackboard engage with

the technology in general and also provide a detailed review of how they interact with

the features and tools offered. The interviews will be the most elaborate and focused

type of feedback for the evaluation plan.

Limitations

There are several constraints on this evaluation to be considered. The first is that the

amount of responses for the two surveys will not be known beforehand. The feedback is

estimated to be within an acceptable range of around 2% return for the census and

approximately 50% return for the cross sectional survey. Second, the time constraints of

the semester may impede the amount of survey responses received and the interview

process for more potential candidates in the interview sample. However, as the budget

for the participants' time is forty hours, fours interviews with undergraduate and

graduate students will suffice as a targeted sample. These two constraints blend

together to push the team into a distance based, intelligently designed formula for

reaching a targeted population in each method of evaluation.

Logistics and Timeline

The team of evaluators consist of the following group members:

- Eric Jacobs
- Mike May
- Jason Poole
- Jessica Robinson

The team of evaluators is overseen by Dr. Michele Estes of the Educational Technology

program at James Madison University and in conjunction with Andrea Adams. Andrea is

the Assistant Dir. of Faculty Development & eLearning Programs at James Madison

University.

The final evaluation plan will be put into effect by October 26, 2011. In terms of

obtaining qualitative data from students about Blackboard, each survey and the

interviews will have varying deadlines. The entire student population at James Madison

University will be invited to participate in a brief census survey which will close on

November 23, 2011. A cross-sectional survey will be targeted to the top ten courses

that are the heaviest users and this will close on November 30, 2011. Finally, the four

interviews consisting of four enrolled graduate and undergraduate students to provide

feedback about Blackboard will be conducted and processed by November 30, 2011.

As data is collected in Qualtrics, an ongoing formative review log will be kept by the

reviewers to suggest changes from incoming information received. The formative review

log will be available by November 16, 2011. A brief evaluation report including issues,

data collection analysis, evidence and recommendations will be produced by December

7, 2011. On December 17, 2011 a final presentation and reflection of the process will be

given to the client Andrea Adams, of the Center for Instructional Technology.

Budget

Note:The following budget is entirely hypothetical and wishful. No wages or incentives

will be disbursed.

Item	Rate	Amount
Evaluators: · Eric Jacobs · Michael May · Jason Poole · Jessica Robinson	Planning (20 hours) Conducting (5 hours) Analyzing (10 hours) Reporting (10 hours) 40 hours total x $75/hour	$3375
Student Incentives	$500 ipad x 2 students (one from census survey and one from	$1000

	cross sectional survey)	
		Total: $4375

References

Blackboard. Retrieved from http://www.blackboard.com/.