

EXECUTIVE SUMMARY



In the fall of 2010 Framingham State University embarked on an in-depth review of Learning Management Systems (LMS) for use in supporting faculty in their teaching and providing an online environment to enrich the educational experience at FSU for the next three to five years. The [eLearning Task Force](#), consisting of administrators, faculty, adjunct faculty, and students, met weekly to research, analyze and compare eLearning platform solutions. The committee identified several elements to investigate based on student and faculty surveys including:

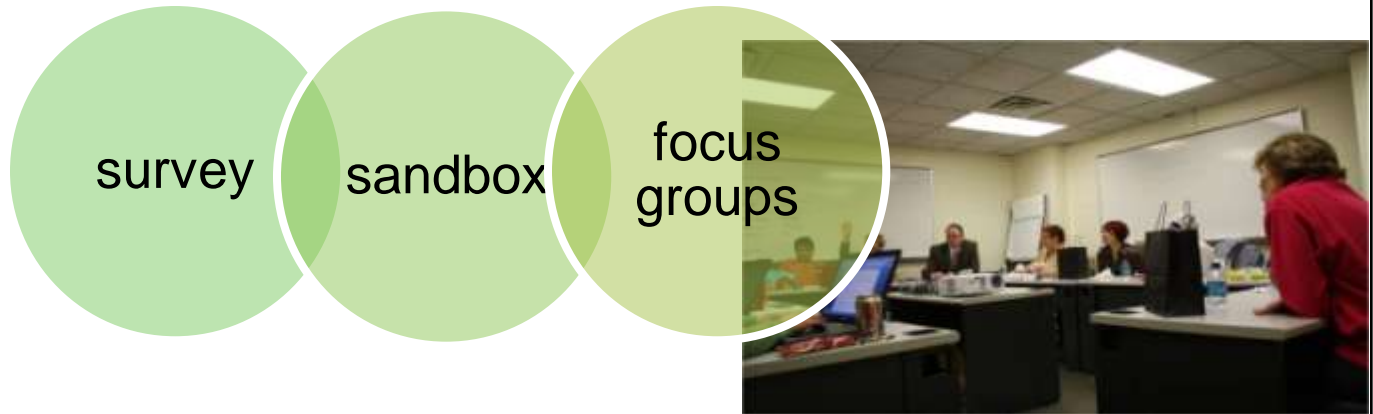
- Anticipated learning/technology changes that would take place at the University over the next 3-5 years
- Peer benchmarking and literature review
- Data collection and analysis of community member satisfaction and comments related to the current LMS system

Actual data collection took place over a 9 month period and included student and faculty surveys, a student and a faculty focus group (led by an outside facilitator), hands-on review of features and functionality and product and supplier presentations. All of this work provided the basis for the [eLearning Task Force recommendation to continue using the Blackboard® eLearning platform and upgrade to version 9.1 by the spring 2012 semester.](#)

The rationale for the recommendation is based on the following:

- Blackboard's® 9.1 (latest) version of software addresses most unmet and anticipated needs as outlined in the committee's [evaluation rubric](#);
- The inadequacy of Blackboard's® ePortfolio solutions can be addressed by replacing this with a solution supplied by a third party product/service provider;
- The extent of converting to a new LMS would result in additional costs, both financial costs and in personnel time: conversion to the new version of Blackboard® would be minimized as compared to a conversion to another product;
- Open standards for interoperability was determined to be more important than Open Source Software and Blackboard is compliant with "Learning Tools Integration" and "Common Cartridge" interoperability Standards";
- The majority of current faculty and students are relatively satisfied with the current Blackboard® system.

The details of the in-depth review process and the findings of the analysis are outlined in the following pages of this document.



INTRODUCTION

Learning in the 21st century is delivered in many ways, learner needs are varied, and technology changes almost instantaneously. One method of delivery of courses is through an LMS (Learning Management System). FSU currently utilizes Blackboard® as its LMS to support online, hybrid and web-enhanced classes.

The quest to provide the highest quality technology services to the university requires that we must periodically investigate new technology options to maximize both the financial and personnel resources of the University. Thus, it was determined that it was timely, especially considering the new products that emerge on a regular basis, to investigate our eLearning course delivery options.

PROJECT CHARGE AND TIMELINE

The University eLearning Task Force was formed in the fall of 2010 and charged with making a recommendation for the adoption or upgrade of a Learning Management System (LMS) which meets the needs of the learning community, supports student success, and integrates with our Banner Student Information System (SIS) by April, 2011. The committee¹ consisted of administrators, faculty, adjunct faculty, and students. The committee met for 2 hours every week during a 9 month period from September 2010 through April 2011.

The scope of the project was to recommend one of three possible scenarios.

1. Upgrade our current infrastructure to the most current stable release
2. Adopt a hybrid solution where a portion of the tool set is supported by a new platform
3. Migrate to a new platform

The outcome of the team's nine month engagement is to recommend that the University adopt Blackboard as its eLearning Platform for the next three to five years.

¹ Committee members are listed on the project site <http://elearning.fscmedia.com>

University eLearning Task Force Project Timeline

August – September 2010 Project Prep Work	Project Kick- off October 20, 2010	October – November 2010 Needs Analysis	December – January 2011 Evaluation Phase	February – April 2011 Final Review Process and Recommendati ons	May – July 2011 Implementatio n Upgrade/Plan
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NEEDS ANALYSIS

The project kicked-off on October 20, 2010 with a presentation of the project goals and objectives. The task force conducted an extensive review process, over a period of nine months, to identify user needs and outline system requirements for the purpose of forming a recommendation.

During the Needs Analysis and Evaluation phases of the project the team reviewed what is happening in higher education - in general - and at our sister institutions. Of more significance was a review of the Framingham State University eLearning environment as it relates to the faculty and student experience. These assessments took the form of benchmarking studies, surveys, vendor run webinars, hands-on use of the solutions in a vendor sandbox, and focus groups. Although the collection methods varied, a common thread emerged.

The LMS Committee determined several elements to consider in its investigation. These included the following:

- Assessment of needs not currently met by the current LMS;
- Anticipated changes that would take place at the University to determine the available systems that could meet those anticipated changes;
- Current usage of Blackboard® and satisfaction with the current system.
- Peer benchmarking and literature review;
- Data collection and analysis of community member satisfaction and comments related to the current LMS system;
- Product and Supplier Presentations of other LMS and Open Source Software;
- Technology laboratory for user experiences with other systems/products;
- Cost comparisons.

DATA COLLECTION AND ANALYSIS

Actual data collection took place throughout the 9-month period and included:

- Student Survey;
- Faculty Survey;
- Student Focus Group (led by outside facilitator);
- Faculty Focus Group (led by outside facilitator);
- Hands-on Review of Features and Functionality;
- Product and Supplier Presentations, through video and live formats;

Analysis of the data included both statistical and qualitative analysis of comments sections of surveys; facilitator analysis, summary, and presentation of focus group results; feedback survey from those who experimented with the various LMS systems available in the technology lab; and assessment of the written and live presentations of the products.

In addition, the committee assessed the one-time and recurring costs associated with each of the vendor products and additionally conducted reference checks on the product vendors.

WHAT DID WE LEARN?

Course Design is at the core of most remarks. Both faculty and students are looking for a system which is less “clicky”, supports collaboration, and is easy to use. In general, the faculty is more wary of change than the students. Comments that the institution may move away from the current solution or even upgrade Blackboard are met with reservation. *The message from the faculty survey and focus group was not to force a change unless “it’s worth it”.* Faculty are most concerned with the time it will take to migrate their courses and to learn how to use a new system.

In comparison, *students are more adaptable to alternative solutions.* Finding a platform which looks similar to Facebook is of interest, but again, ease of use is of most importance.

FACULTY: I would want to know that the new system offered significant improvements over Blackboard before making any decisions to change. A new LMS will require significant expenditure of faculty and staff time and should therefore represent a dramatic improvement in features and ease of use.

STUDENT: Blackboard seems a little outdated. The look and setup, with individual links in the left-hand sidebar and old school discussion boards make it seem archaic. Blackboard is exactly the same as it was five years ago when I used it to take an online course in high school.

FOCUS GROUP COMMENTS : “The features and functions available in the next platform are not what will sway the user community. Application design is the critical factor. If the new [or upgraded] LMS is designed in a way that improves usability and reduces explicit training required, reactions will be quite positive.”

HOW WAS THE DATA COLLECTED?

Benchmarking studies, user surveys and webinars were administered in the fall 2010 semester. A hands-on vendor sandbox and focus groups followed in the early part of the spring 2011 semester. Collectively, the information gathered informed the Task Force evaluation rubric, vendor user stories, RFP and ultimately the Task Force recommendation. A summary of the work is outlined in the following pages and posted to the Task Force eLearning Project site <http://elearning.framingham.edu>.

BENCHMARKING

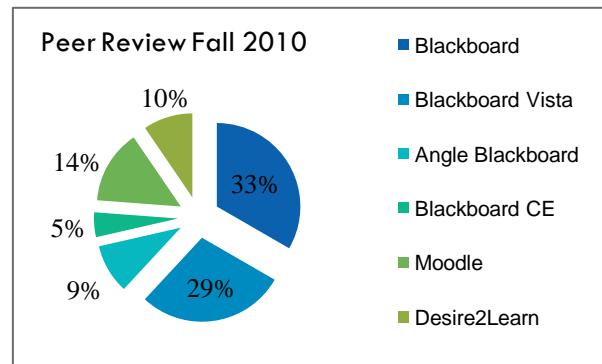
The Benchmarking study was conducted following the first Task Force meeting to identify which eLearning Platforms were in use by our sister schools and peer institutions². The research revealed that two peer universities were using Moodle, three others were using Desire2Learn, and that the remaining schools were using some form of Blackboard.

Of possible significance is that, the number of schools using a form of Blackboard WebCT (Blackboard Vista, Blackboard CE) was on par with the number of schools using core Blackboard³ or Blackboard 9.

The committee also looked at Hosting practices among the state and community colleges as part of the Benchmarking process. The information revealed a split preference with 13 campuses favor hosting versus 9 campuses which prefer to house the LMS servers on their campuses. Of the state schools, 3 campuses host (Framingham State, Westfield and Worcester) with Blackboard or UMass Online and the other two campuses (Bridgewater and Fitchburg) support the system locally⁴.

Nationally, the numbers are similar. In recent years, a number of schools have conducted their own review and either moved to an open source platform using Moodle and Sakai as the eLearning tool, or transitioned to Desire2Learn. According to the [2010 Campus Computing Survey](#) Blackboard's market share dropped from 71% in 2006 to 57% in 2010.

"The percentage of campuses that use Desire2Learn as the campus-standard LMS is up five-fold, from 2.0 percent in 2006 to 10.1 percent in 2010. Moodle, an Open Source LMS, also registered big gains during this period, rising from 4.2 percent in 2006 to 16.4 percent in



² A list of the peer institutions is listed as Appendix A

³ Framingham State currently runs Blackboard Academic Suite version 8

⁴ A breakdown of the hosting practices of these schools is listed at the end of this document as Appendix B

fall 2010 The numbers for Sakai, another Open Source LMS deployed primarily in research universities, have grown from 3.0 percent in 2006 to 4.6 percent in 2010.”⁵

Note: At the time this report was written, a fair number of the state schools were in the process of undergoing a review of their eLearning solution either independently or in collaboration with UMass Online or Massachusetts College of Liberal Arts (MCLA). Recommendations from these committees are imminent.

FACULTY AND STUDENT SURVEY

Understanding the needs of the user community was one of the first tasks the Task Force tackled. The focus of both assessments was on the teaching and learning environment. The committee made a conscious decision not to survey staff, as their input would not drive the recommendation. Separate assessments were created using the tool Survey Monkey. Respondents were entered in a raffle to win a FlipCam and in addition, faculty received a coupon for a cup of coffee in the cafeteria to encourage participation.

Overall response to the questionnaire was positive; 105 faculty answered the faculty survey questions and the committee received 548 student responses.⁶

QUALITATIVE DATA ANALYSIS

STUDENTS: Comments provided by students on open-response sections of questions on the LMS survey: (a) specified particular capability needs they sought in an LMS, including links to social media, in-depth tutorials, 24-hour hotline, easy layout, and system integrity; (b) provided both positive and negative statements related to the current Blackboard LMS; (c) utilized the space as a “soap-box” for a variety of concerns unrelated to the LMS discussion, including resource needs, space, faculty use of the LMS, and computer issues; (d) expressed thanks for being included in the discussion.

FACULTY: Comments provided by faculty on open-response sections of questions on the LMS survey: (a) specified particular LMS capability needs primarily related to ease of use, strong technical support, and one-screen capability; (b) strong support for the current system, but also specific aspects of the current system that need improvement; (c) additional thoughts that emphasized that the decision to change systems must be based on improved student learning, a new LMS must show significant improvement, and concern over the conversion and new training process.

⁵ Source: <http://www.campuscomputing.net/summary/2010-campus-computing-survey>

⁶ Copies of the assessments are posted on the Task Force project site <http://elearning.fscmedia.com>

QUANTITATIVE DATA ANALYSIS

Faculty and student surveys revealed no real surprises. Faculty emphasized that the decision to change systems must be based on improved student learning, a new LMS must show significant improvement, and concern over the conversion and new training process.

Students appreciated being part of the process providing both positive and negative statements related to the current Blackboard LMS. Specific needs identified included links to social media, in-depth tutorials, 24-hour hotline, easy layout, and system integrity.

SURVEY QUANTITATIVE DATA

	Faculty	Student	
Total Response	105	548	
Respondent Demographics	Even between Day and Graduate and Continuing Education Faculty	63% Undergraduate 28% Graduate 9% Continuing Ed	50% Under 22 25% Between 22-35 25% Over 35
Experience with a LMS	75% of the Faculty responded that they had taught online or hybrid. 99% have used Blackboard as an LMS, a few had used Web CT and Moodle before	43% had taken an Online Course 75% have used Blackboard in their Face-to-Face Classes <i>65% responded that they prefer to take courses that use BB some of the time</i>	
Most Valuable Tools	Discussion Board Email to Students Web 2.0 Tools	Surveys, Test, Quizzes Multimedia Content Discussion Board	
Least Valuable Tools		Clickers Chat	Unable to comment on Elluminate, ePortfolios and EReserve
Uses		View Course Syllabus before Class begins Access to Course Content and Resources Ability to Download Material after the course is over	
Browser used most often		Split between Internet Explorer and Firefox	

Communication Preferences		60% responded their computer 40% responded handouts in the classroom
Technical Support		Walk into the Helpdesk Email the Helpdesk Call the 24/7 Support Line
Electronics Used		90% Laptop and phone

WEBINAR DEMONSTRATIONS

It was also important to the team to understand the possibilities within an eLearning system apart from Blackboard. Ten vendor and open source solutions were identified by the team for review. The Education Technology Office hosted webinars in the Leonhard Lab – HHG07 - during the month of December. Notice of these events was shared with the learning community, although very few faculty attended the sessions apart from members of the eLearning team. After each session participants were asked to answer an anonymous poll question – *Should we add the vendor to our short list?* Members also had an opportunity to add comments.

As the vendor demos continued, critical success factors emerged. Ease of use was just as important as the ability to manage copyrighted material, the need for a robust text editor and integration with Banner.

LMS Solution	Yes	No	Maybe	Total
Blackboard NG	8	2	1	11
Brain Honey	3	1	4	8
Timecruiser (CampusCruiser)	7	2	1	10
Canvas Instructure	6	1	3	10
Desire2Learn	3	1	2	6
Epsilen	5	1	5	11
Moodle	2	1	1	4
Pearson LearningStudio (formerly eCollege)	1	1	1	3
plugjam from CommonNeed	0	3	2	5
Sakai	4	1	1	6

SANDBOX EXPERIENCE

In February the user community was invited to escape the snow and play in our vendor sandbox – complete with beach umbrellas. Links to each vendor solutions were setup on the lab computers. Feedback was collected on a paper survey and participants were asked to cast their “shovel” vote on a scale of 0 to 3.

0 = NA, 1= Limited Functionality, 2 = Acceptable, and 3 = Recommended.



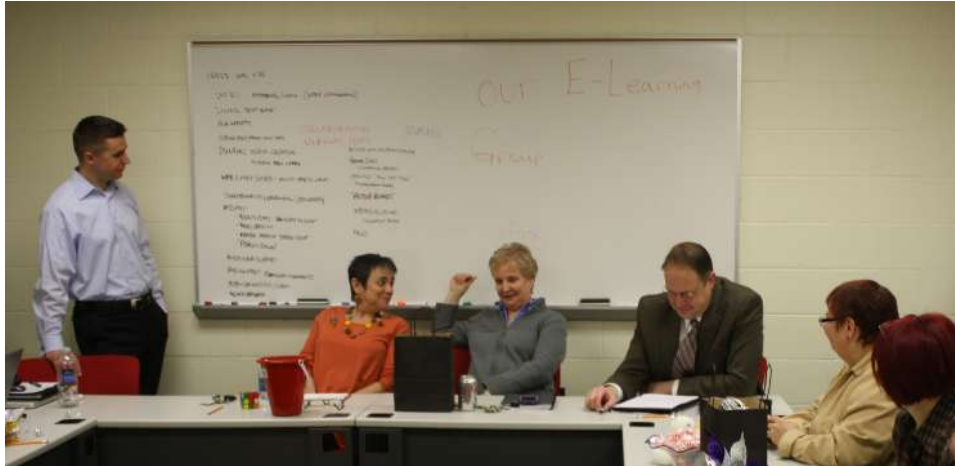
Once again comments centered around functionality. How many clicks did it take to complete a function? How easy was it to navigate the system? Is the system intuitive and easy to use. All of these features influenced the vendor ratings.

	Faculty	Student	Total*
Blackboard 9	11	8	19
Brain Honey	5	17	22
Canvas	3	6	9
Desire2Learn	11	17	28
Pearson LearningStudio		11	11
rSmart	2	4	6
Moodle	3	6	9
Campus Cruiser	2	13	15

*Total number of shovel votes – not individual voters

FOCUS GROUPS

Greg Devine, a consultant from Global Synergies was hired to run Focus Group sessions. It was important to the team to have an impartial voice leading the discussion. Four sessions were planned to allow both faculty and students to share their thoughts regarding the learning platform. A few team members also attended these sessions to observe and take notes.



The ground rules were simple...

- These are 90-minute sessions – *in reality the student session ran for only 60 minutes.*
- Participants were told not to use the term Blackboard but to think about the future and focus on the functionality you'll need to operate in the next generation of online learning.
- Faculty and students were asked to share their opinions freely. The objective was to combine experience and opinions to educate the decision making process.
- The goal was only to inform the administration of the needs and expectations of the user community.

Faculty and Students were asked to consider ... What is Important in an LMS

- How do you currently use your online classroom?
- What are some of the best parts about the current software?
- What changes do you anticipate in online learning within the next 12-24 months?
- Where should we be focusing our efforts?
- What about hybrid versus online classes?
- What are some of the characteristics of this future LMS?

It was also important to the team to measure the ... Willingness to Change

- LMS conversions carry the following changes. Given these, how willing would you be to convert to a new LMS?
- Learning new software
- Converting your courses
- IT learning curve
- What suggestions would you make to IT as they're planning a conversion [noting that no conversion is guaranteed]?
- Ultimately, for your to switch, what would it take?

A summary results interpreted by the consultant are listed here.

After meeting with the four groups, several trends emerged. While each set of individuals presented their insight and experiences uniquely, a common set of issues/suggestions emerged. My impression of each of these is addressed below. Prior to the LMS-specific information there were a number of administrative observations that are worth discussing.

As the transition to a new LMS is discussed, the bulk of the concerns/ideas focused on support and support materials. And while the specific LMS selected will impact specific support/material requirements, a high degree of service will be expected. A small team currently provides these services. This team will require significant staff augmentation during the transition period [as the period is defined by the committee]. Regardless of the LMS, all of the parties we spoke with will expect a greater level of service than the current personnel have bandwidth to provide.

This observation is not meant to require hiring full-time employees. There are a number of creative ways to staff this transition, using volunteers, part timers, consultants, internal subject matter experts, targeted teams, etc. That said, it should be noted that the Distance Education department has built a great deal of credibility and trust among the community. With each team meeting, there were several references to the services this team provides; from training to self-help tools; and how helpful they were. This should be carefully leveraged throughout the process.

In the end, it is my opinion that the features and functions available in the next platform are not what will sway the user community. In fact, the capabilities of a given platform appear to be lower on users' collective priority lists. Application design is the critical factor. More specifically, I mean that if the new LMS is designed in a way that improves usability and reduces explicit training required, reactions will be quite positive.

This line of discussion took place throughout the focus groups. It was not always addressed in explicit terms, but the tenor consistently pointed to vendor design decisions [information organization, layout, screen elements, etc]. It is my suggestions that this be a critical factor in the committee's decision-making process.

THE PROCUREMENT PROCESS

On February 18th the RFP was publically released according to the RFP Timeline listed below.

An evaluation rubric⁷ based on the assessment process formed the basis for the proposal and the review process. On April 11 and 12th the two vendor finalists – Blackboard and Desire2Learn were invited to campus to present their solution and on April 13th a recommendation was presented to the University Technology Council.

RFP Timeline

Date	Event
February 18, 2011	RFP released to vendors
February 28, 2011	Vendor Letter of Intent
March 18, 2011	Written proposals are due from vendors
March 21, 2011	Vendor site visit requests
March 28, 2011	Site visits scheduled
April 8, 2011	Vendor selected
April 18, 2011	Proposal award notification – extended to May 2, 2011
May 1, 2011	Implementation project launched
June 2012	Project Completed

The initial vote was too close to call. Ultimately the committee agreed, following in-depth discussion and a review of the options to *recommend that the University adopt Blackboard as its eLearning Platform for the next three to five years.*

⁷ The Evaluation rubric and vendor script are posted to the project eLearning Web site at <http://elearning.fscmedia.com>.

Work will begin over the summer to build a communication plan and build user documentation so that the Education Technology Office may train both faculty and students in fall 2011. The goal is to upgrade to version 9.1 at the end of the fall semester. Project details will be posted to the eLearning WordPress site.

APPENDIX A: LIST OF PEER INSTITUTIONS AND ASPIRATIONAL SCHOOLS

Peer Group Matrix	eLearning Platform	Implemented
Bridgewater State University	Blackboard & Moodle	2008-2009
Fitchburg State University	Blackboard	
MCLA	Blackboard Vista (Hosts with UmassOnline)	Evaluation 2010-2011
Salem State University	Blackboard Vista (Hosts with UmassOnline)	Evaluation 2010-2011
Westfield State University	Blackboard Vista (Hosts with UmassOnline)	Evaluation 2010-2011
Worcester State University	Blackboard	
California State University- San Marcos *	Moodle	2010
East Stroudsburg Univ of Pennsylvania *	Desire2Learn	2010
New Jersey City University	Blackboard CE	2009
Northeastern Illinois University	Blackboard	
Southern University at New Orleans	Blackboard	
SUNY- Potsdam	Blackboard	
Western Connecticut State University	Blackboard Vista	
Eastern Connecticut State University *	WebCT Vista (Blackboard)	
Rhode Island College	Blackboard Learn 9.1	
Salisbury University	Blackboard Learn 9.1	2010-11
Shippensburg Univ of Pennsylvania	Desire2Learn	2010
SUNY at Fredonia *	Angel (Blackboard)	2011-12

SUNY College at Brockport *	Angel (Blackboard)	
SUNY College at Cortland	Blackboard 9.1	
The College of New Jersey *	NA	
University of Massachusetts-Dartmouth *	Blackboard Vista Enterprise v 8.0.1	
Georgia College and State University*	Blackboard	
Grand Valley State University *	Blackboard Learn 9.1	2010
Rowan University *	Blackboard CE	
Sonoma State University *	Moodle	2011
Winthrop University *	WebCT Vista (Blackboard)	
Univ of Wisconsin Steven's Point *	Desire2Learn	

***Aspirational Schools**

APPENDIX B: HOSTING PRACTICES AS OF FALL 2010

Name	LMS *	Local/Hosted
Berkshire Community College	Moodle	Hosted Moodleroom
Bunker Hill Community College	Bb Vista	Hosted UMOL
Bristol Community College	Angel	Hosted Bb
Bridgewater State University	Blackboard	Local
Bridgewater State University	Moodle	Local
Fitchburg State University	Blackboard	Local
Framingham State University	Blackboard	Hosted Bb
Greenfield Community College	Bb Learn	Local
Greenfield Community College	Moodle	Local
Holyoke Community College	WebCT	Local
Massachusetts College of Art and Design	Bb Vista	Hosted UMOL
Massasoit Community College	WebCT	Local
MassBay Community College	Blackboard	Local
Massachusetts College of Liberal Arts	Bb Vista	Hosted UMOL
Middlesex Community College	Blackboard	Hosted Bb
Mount Wachusett Community College	Blackboard	Hosted Bb
Northern Essex Community College	Blackboard	Local
North Shore Community College	Angel	Local
Quinsigamond Community College	Bb Vista	Hosted UMOL
Roxbury Community College	Moodle	Local
Springfield Technical Community College	Blackboard	Hosted Bb

Springfield Technical Community College	Blackboard	Hosted Bb
Westfield State University	Bb Vista	Hosted UMOL
Worcester State University	Blackboard	Hosted Bb