

# **LMS Evaluation Task Force Recommendation**

## **Executive Summary**

The LMS Evaluation Task Force recommends that St. Edward's University begin the transition to the Canvas LMS in the summer 2015 semester.

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# Introduction

The learning management system or LMS is an integral part of our learning ecosystem that aggregates, connects, and manages many aspects of the course-based learning experience. Any LMS must support a variety of activities for faculty and students including: posting course materials, documents, and other content; course administration and communication; recording and sharing grades; assessing students and their work and offering feedback; submission of assignments; providing opportunities for interaction for all course participants, e.g., through online discussion, collaboration tools like wikis, and sharing of student work.

Our current LMS is Blackboard Learn, which was last reviewed in 2010. Since that time there have been many changes in the LMS marketplace. As Carl Straumsheim explains in “The Post-LMS LMS”,

Instead of bloating their products with as many new features as they can develop, vendors are increasingly letting other ed-tech companies do the work for them, opening their systems to outside developers. The result, should the trend continue, might not be a learning management system, but what analysts call a “learning ecosystem.” (Straumsheim, 2014)

These vendors are taking advantage of the Learning Tools Interoperability (LTI) design standard (<http://www.imsglobal.org/lti/>). Tools designed to this standard will interoperate with each other; this standard allows universities to customize a suite of learning tools to better meet the needs of faculty, staff, and students. In addition, vendors are increasingly offering software as a service (SAS) through either managed or cloud-hosting. In these models, the vendors run the software for the institution. These models are more effective because the vendors have greater expertise in running their own software (since they do it fulltime) than an institution’s IT staff, who may be tasked with supporting a variety of software platforms. This shift in support strategy leads to better reliability for the service (less downtime) and is the preferred strategy for platform support by the St. Edward’s University Office of Information Technology (OIT).

There has also been a change in the web as a whole since the university last reviewed the LMS. In particular, there has been a growth of social media like Facebook and Twitter, increased use of easy audio and video, more intuitive interfaces, and the growth of mobile use for web access. St. Edward's University needs learning tools that both meet students where they are, e.g., with free mobile access and personalized communication choices, and prepares them for learning in a globally-networked world where knowledge is shared and problems are solved across global digital and social networks. It should also empower faculty to achieve learning goals without requiring IT staff to intervene manually, and be easy for IT staff to support.

Our current version of Blackboard is outdated and needs to be either updated to a newer version or replaced by a different learning management system. Currently, St. Edward's University hosts the LMS, Blackboard Learn on our own servers. There have been ongoing support and reliability challenges for supporting Blackboard. While OIT has reduced the amount of downtime that impacts the campus, cloud-hosted solutions promise greater reliability (greater than 99% uptime). Blackboard offers managed hosting and will soon (within two years) offer a cloud-hosted service. They have also announced that they will release a new version with a dramatically changed user interface called Ultra, similar to Canvas by Instructure. Canvas, which is cloud hosted, has been increasingly taking market share from Blackboard (Kroner, 2014). Our current version of Blackboard (April 2014) will soon go out of support, so we will be faced with transitioning users to a new interface. Given that we are facing a change one way or the other, now is the time to review our options so we can make the best choice going forward.

# Task Force

## Charge

The charge of this task force is to consider options for an LMS, examine student, faculty, and IT support staff experiences from pilot courses on different systems, and make a recommendation for an LMS system that will assist in educating students for the opportunities and challenges of the 21<sup>st</sup> century. (See **Appendix: Formal Charge of SEU LMS Evaluation Task Force** for the full, formal charge.)

## Members

The task force, formed at the beginning of the 2014-2015 school year, is headed by co-chairs Rebecca Frost Davis (Director of Instructional and Emerging Technology) and Amy Burnett (Associate Professor, Finance, The Bill Munday School of Business). The task force was comprised of at least one faculty member from each school, along with representatives from the Office of Information Technology (OIT), the library, the registrar, student academic support services and a student representative from student government. Faculty members teach at all levels (undergraduate, graduate, and adult) and in all delivery modes (face-to-face, online, and blended).

The members are:

- Brenda Adrian, Associate Director of Instructional and Emerging Technology
- Paul Bailey, Head of Library Systems, Munday Library Operations
- Michael Disch, Assistant Professor, Psychology, School of Behavioral and Social Sciences
- Patrick Fields, Associate Registrar, Office of the Registrar
- Elijah Gabriel, Student, Student Government Association
- Lisa Goering, Associate Professor, Biological Sciences, School of Natural Sciences
- David Hollier, Associate Professor, Education, School of Education
- Dan McCoy, Assistant to the Dean for Technology, School of Humanities

- Christopher Micklethwait, Visiting Assistant Professor, Writing Center, School of Humanities
- Jack Green Musselman, Associate Professor, Philosophy, School of Humanities
- Angel Tazzer, Faculty Support Manager, Instructional and Emerging Technology
- Nicole Guerrero Trevino, Associate Vice President for Student Academic Support Services & Director of Student Retention
- Danney Ursery, Professor, New College

# Overview of Activities

## Background and Process

The LMS was last reviewed in 2010 by a subcommittee of the Teaching, Learning, and Technology Roundtable (TLTR) when the university was faced with a major update to Blackboard from version 8 to version 9. This subcommittee held vendor demonstrations attended by faculty, surveyed faculty about the LMS, and made a recommendation to move to Blackboard 9 rather than Moodle. That group was convened in October 2010 and made its recommendation in January 2011.

The current task force has taken longer for its consideration to allow for more in-depth exploration of a potential new platform. The impetus to convene an LMS evaluation task force began with a request by the Office of Information Technology (OIT). OIT supports and monitors technology platforms for the university. Based on their knowledge of the LMS marketplace, they recommended an evaluation of our LMS. In response, the Office of Academic Affairs along with the Office of Information Technology jointly charged a task force (representative of all schools and staff impacted by the LMS) to evaluate the LMS. The task force began meeting in the fall 2014 semester and promised a decision by April 24 in the form of this recommendation report. Mary Boyd, Vice President for Academic Affairs, and David Waldron, Vice President for Information Technology will review the recommendation and make the final decision.

## Methods

The task force has met to review information about learning management systems, has gathered data on use of Blackboard and pilot use of Canvas, has hosted demonstrations from vendors and by Canvas pilot faculty, has reviewed existing information about LMS usage at St. Edward's University, has decided on criteria for evaluation based on all of those activities, and will make a recommendation based on those criteria.

## ***LMS Platform Candidates***

Initial meetings reviewed the task force charge, the current shape of the LMS marketplace, and narrowed the choice of LMS to the new version of Blackboard or Canvas by Instructure. Blackboard was chosen as a candidate based on long-time use at St. Edward's University. Canvas was chosen because it is the industry leader for this new type of interface and is rapidly gaining market share from Blackboard (Kroner, 2014). In addition, Blackboard and Canvas are the two LMS platforms that have reached the General Availability Milestone (Internet2, 2015) phase with Internet2 (Internet2 Net+, 2015), a higher education IT consortium of which St. Edward's is a member. Over 250 U.S. universities (252 total), 41 regional and state education networks, and 82 corporate partners (service providers) are members of Internet2. One of the benefits for members is consortium pricing and validating services, with a rigorous process (functional, technical, contractual, legal evaluations). Each General Availability product has been tested, piloted, and proven to be a reliable service. By contrast, Desire2Learn, a third option discussed by the LMS task force, has only reached the Early Adopter Milestone with Internet2.

## ***Pilots***

To understand better how instructors use the LMS and to review Canvas as a potential new option, the task force conducted a university-wide pilot of the Canvas LMS. We also used this opportunity to gather benchmark data from pilot faculty and students about their use of Blackboard. There are two types of courses piloting Canvas in the spring 2015 semester: Ecosystem Pilots and LMS Canvas Pilots.

## ***Ecosystem Pilots***

Since digital tools, networks, and environments are key components of the 21<sup>st</sup> century learning ecosystem, St. Edward's University seeks to integrate best practices and expertise in technology-mediated learning developed over more than 15 years of online learning in higher education with our high-touch, high quality face-to-face instruction. St. Edward's University partnered with iDesignEDU, an external instructional design firm that specializes in design of online courses to access their expertise in online learning, so that we could leap



frog the development of a hybrid pedagogy that takes in the best of high-touch, face-to-face learning and digital learning practices. The Offices of Information Technology and Academic Affairs invited four faculty members to spend the fall 2014 semester working with iDesignEDU to design courses that would be offered in the spring 2015 semester. These courses, whether offered in a traditional face-to-face format or in a hybrid format with a reduced number of course meetings, would have a significant digital element. All four courses were offered in the Canvas learning management system; none of the instructors had used Canvas previously.

<b>Instructor</b>	<b>Course name and number</b>	<b>Course Title</b>	<b>Course delivery type</b>
Liz Johnson	EDUC 2332.01	Educational Technology Integration	Hybrid
Steven Fletcher	EDUC 2332.02	Educational Technology Integration	Face-to-face
David Altounian	BDMM 4336.01	Digital Media Marketing	Hybrid
Ray Sant	FINC 5308.01	Fundamentals of Accounting and Finance	Hybrid

**Table 1: Ecosystem Pilot Classes**

### *LMS Canvas Pilots*

Because OIT had already contracted for use of Canvas to explore learning in the 21<sup>st</sup> century ecosystem, the task force had the opportunity to invite other faculty to try this platform. After the task force was formed, it recruited additional volunteer faculty members to conduct LMS Canvas Pilots (see Table 2 below) during the spring 2015 semester. The first two faculty members in that table tested Canvas in one section of a course and used Blackboard in another section of the same course.

The instructors in the LMS Canvas Pilots did not have any external course design assistance, but our Instructional Technology staff assisted them as needed. All faculty members in both kinds of pilots graciously volunteered not only to use Canvas but also to give the task force feedback through various surveys.

Each school had at least one pilot course. All current modes of delivery in different courses—online (1 course), hybrid (2 courses) and face-to-face (15 courses)—were part of the pilot.

The majority of the courses were for traditional undergraduates, while two were graduate courses and one was a New College course.

Instructor	Course name and number	Course Title	Course delivery type
Mike Disch	PSYC 4360.02 (Canvas) .01 (BBD)	History and Systems of Psychology	Face-to-face
Kim Garza	GDES 3335.02 (Canvas) .01 (BBD)	Interaction Design	Face-to-face
Tricia Shepherd	CHEM 2320.02 & .03 (Canvas)	Analytical Chemistry	Face-to-face
Kin Barksdale	COSC 1318.03	Quantitative Applications Software for PC's	Face-to-face
Billy Earnest	COMM 3344.01	Intercultural Communication	Face-to-face
Chris Flynn	CULF 1318.15	Literature and the Human Experience Madness and Civilization	Face-to-face
Carol Gee	MATH 4343	Topology	Face-to-face
Michael Kart	COSC 3327.01	Algorithms and Data Structures	Face-to-face
Richard Kopec	CHEM 1340.02	General Chemistry	Face-to-face
Jason Rosenblum	DMBA 6220.01	Independent Research (7-week class)	Face-to-face
Julie Sievers	CULF 1318.04	American Religion Experience	Face-to-face
Katy Swafford	CNSL6366	Counseling Skills & Techniques II	Face-to-face
Danney Ursery	PHIL 3313A.01	Business Ethics (7-week class)	Online
Mike Weston	COMM 1317.04	Presentational Speaking	Face-to-face

**Table 2: LMS Canvas Pilots**

The task force conducted several surveys of both faculty members and students in the pilot classes. Raw results of these surveys may be found at the end of this document:

- Pre-Pilot Faculty Survey on Use of Blackboard (94% response rate)
- Student Survey (2 versions with a combined 26% response rate; the first version was for a 7-week class ending in March; a slightly revised version was offered to remaining students and the results for common questions were combined for analysis)
- Faculty Survey on Use of Canvas (94% response rate)
- Student Survey on Blackboard for students in Blackboard sections of courses also taught in Canvas (only 5 responses)

### ***Vendor Demonstrations***

The task force also invited Blackboard and Canvas to present their products to the university community. Blackboard gave their presentation on Tuesday 27 January 2015 in Fleck Hall 305 at two different times: 9:30 – 11:00 a.m. and 2:00 – 3:30 pm. Canvas gave the presentation of their product on Wednesday 4 February 2015 in Library 141 also at two different times: 9:30-11:00 a.m. and 1:00-2:30 p.m. These sessions were advertised via the Horizon newsletter, the Instructional Technology blog, and individual school emails. Input was invited from those who attended the demonstrations via paper and online surveys. Each vendor was also asked to do a special session focusing on learning outcomes analytics and retention. Staff members from Student Academic Support Services and Institutional Assessment were invited to attend these sessions.

### ***LMS Usage Data***

Finally, we also collected and analyzed current and recent data on the usage of our current LMS to understand better the features used and needs of faculty using the LMS. This data includes the faculty survey results from the 2010 LMS Review, data from the fall 2013 survey conducted by the task force for Academic Innovation and New Educational Approaches, and an analysis of snapshot usage data extracted from Blackboard for the spring 2015 semester.

### ***Communications***

Task Force activities have been communicated on the Instructional Technology blog (St. Edward's University Instructional Technology, 2015), using the tag, “lms”: <http://sites.stedwards.edu/instructionaltechnology/tag/lms/> . The task force also

encouraged members to communicate to their colleagues. Mike Disch gave an update to the Faculty Senate on Friday 27 March 2015 and Amy Burnett gave an update to the Faculty Collegium on Friday 17 April 2015.

# Criteria for recommendation

The task force developed the following criteria for evaluating the LMS:

- Consistency with SEU educational philosophy and mission
- Capacity to meet needs of the university for course delivery, assessment, and retention
- User community feedback
- Vendor support and reliability
- Cost information
- Integration with technology infrastructure
- Feasibility of migration

Each criterion is further explained below with supporting data and discussion of how the two primary LMS candidates perform on this criterion.

## **Consistency with SEU educational philosophy and mission**

The most important consideration for choosing an LMS is that it must encourage, support and enhance student learning. In Fall 2013, the Task Force for Academic Innovation and New Educational Approaches surveyed St. Edward's University faculty. When asked about using online technology to meet learning goals, at least 75% of survey respondents (n=260) reported use or interest for the following goals:

- Prep for class: Help students prepare for a class meeting
- Self-directed learning: Promote self-directed learning and intentionality in students
- Feedback: Provide feedback on a project
- Create materials: Help students create materials for a project
- Disciplinary skills: Help students master discipline-specific skills and/or knowledge
- Discussion: Provide a space for discussion outside class meetings

These goals indicate that a potential role for the LMS is as an additional tool for students to engage with course material, classmates, and instructor outside of any face-to-face class meeting. To that end, it should be easy to use, accessible, and freely available across multiple platforms and devices.

The LMS should also support the University Essential Learning Outcomes of St. Edward's University, which were defined by the Essential Learning Outcomes academic planning group during the 2013-2014 academic year (Essential Learning Outcomes Academic Planning Group, 2014). In particular, the LMS might be analyzed against the outcomes that address intellectual and applied skills. These outcomes specify that the learner will:

- Communicate effectively through oral, written, and visual forms.
- Demonstrate information, quantitative, and visual literacies in a variety of contexts.
- Use critical, creative, and collaborative thinking to solve problems and achieve common goals.

Both Blackboard and Canvas function across multiple computer platforms and devices. They differ, however, with respect to mobile access, since the Canvas mobile app is free while the Blackboard mobile app costs \$1.99. The majority (over 50%) of student and faculty users rated most features on both platforms as easy to use. For more detailed analysis of ease of use by feature, see below.

In terms of support for intellectual and applied skills, Canvas seems to support better integration of multimodal communication (oral, written, and visual forms) than Blackboard. For example, 100% of pilot users were satisfied or very satisfied with Canvas' ability to embed audio and video versus 33% of pilot users for Blackboard. Blackboard's tool for creating video requires use of YouTube and creation of a separate YouTube account, which is an additional hurdle for someone who just wants to do a quick video providing feedback. By contrast, the Canvas content editor is available across all features, such as assignments, pages, announcements, discussions, grade feedback, etc. This commonality allows all users (both students and faculty) to embed multimedia content easily and to

record audio and video on the fly. The seamless integration of audio and video content strongly supports multimodal communication, which in turn enhances multimodal literacy. All pilot faculty members were satisfied or very satisfied with the content editor while 87% found it easy or very easy to use.

Both platforms offer features that support collaboration, including the ability to create groups of students and wikis for student collaboration. When asked to rate these features, pilot faculty rated Canvas higher than Blackboard, though it should be noted that a minority of pilot faculty used these features in Canvas. For groups, 88% of pilot users were satisfied versus 33% for Blackboard; for wikis 100% were satisfied versus 71% for Blackboard. See the table below.

LMS	Groups			Wikis		
	Use	Satisfaction	Ease of Use	Use	Satisfaction	Ease of Use
Blackboard	59%	33%	100%	47%	71%	80%
Canvas	41%	88%	100%	29%	100%	100%

**Table 3: Groups and Wikis**

One feature that is absent from Canvas is the ability to create blogs or journals. This feature can be used to allow students to reflect on their work, which in turns helps them develop self-direction and agency, or confidence in their own ability to achieve. Blackboard has a built-in tool for blogs and journals which is used by a minority of faculty. Only 29% (5 of 18) pilot faculty report using blogs and journals for Blackboard. Our snapshot of course data extracted from Blackboard found even lower usage: 23 courses (2% of those available) using blogs and 47 (5% of those available) using journals. Nevertheless, there is a need for some sort of feature to meet this need, which has potential for growth.

Instructional technology and pilot faculty have found a range of solutions to achieve this functionality. Instructors can use the built in e-portfolio in this role. They can also create assignments or discussions to substitute for this functionality (as one pilot faculty member did), or use a third-party tool, like Campus Press (CampusPress, 2015) (formerly edublogs) the blogging tool at [sites.stedwards.edu](http://sites.stedwards.edu) supported by St. Edward’s University. Unfortunately, at the beginning of the pilot, these solutions were unknown, so most pilot faculty were not able to test them.

The e-portfolio, in particular, does seem, however, to have potential as a separate tool that students could use to aggregate work across the curriculum, which would support both integrative learning and the development of agency.

Overall both Blackboard and Canvas offer features consistent with the SEU philosophy and mission, but Canvas excels slightly in offering a free mobile app and in support for multimodal communication and collaboration. It is our belief that adoption of Canvas may lead to increased usage of these features by SEU students and faculty.

### **Capacity to meet needs of the university for course delivery, assessment, and retention**

The SEU learning community needs an LMS that supports all programs and course presentation methods, both current and future. We have to consider the needs of traditional undergraduate, graduate, and New College students and instructors. We should also have an LMS that supports efficiently all modes of course instruction: face-to-face, hybrid, online.

To that end, we tested Canvas in all types of classes and at all levels. Of course, we already use Blackboard in all types of classes and at all levels.

For mission and accreditation purposes, we have to assess whether our students achieve the specified learning outcomes. We need an LMS that makes the progress and success in achieving our outcomes not only more transparent, but also easier to report. Currently, data from the LMS is used only indirectly to support assessment of learning outcomes to the Office of Institutional Assessment. That is, faculty may use LMS functionality like rubrics to assess student learning outcomes and report that assessment to their department, which will in turn report the data to the Office of Institutional Assessment.

We did see an increase in use of rubrics among pilot instructors; 59% reported using rubrics in Canvas as opposed to only 47% in Blackboard previously. It is common to see increased usage of features when transitioning between platforms, simply because it prompts users to reexamine their practice and is an opportunity to discover available features. Approximately 78% of those who used



rubrics in Canvas were satisfied or very satisfied versus 43% of those who used rubrics in Blackboard. On the other hand, users found the Blackboard rubrics easier to use with 83% of users ranking rubrics in Blackboard as easy or very easy while only 50% of users ranked them easy or very easy in Canvas. It may well be that the lack of familiarity with the Canvas rubric detracted from ease of use. It may also be true that those users new to using a rubric in an LMS found rubrics more difficult to use in general.

Both Blackboard and Canvas offer additional functionality that allows an institution to aggregate data across a department or the entire university for assessment of learning outcomes. Such use requires cooperation by all participating faculty members. In particular, instructors would need to code outcomes to various assessment instruments in the LMS, e.g., quizzes or assignment rubrics. We do not currently use this functionality in Blackboard because it would require purchasing additional licensing from Blackboard that has not seemed warranted due to lack of demand. Canvas, however, includes this functionality as part of their standard package. With growing emphasis on learning outcomes assessment in higher education in general, upcoming SACS accreditation, and program accreditation needs, (e.g., in Education, Business, and Counseling), a couple of experiments are being conducted to explore this functionality. One ecosystem pilot faculty member coded learning outcomes to quiz items. This feature did not function as expected because quizzes were generated on a randomized basis from a question bank so that student quiz attempts were not equal in respect to outcomes measured. This coding also took substantial labor (40-50 hours by a student assistant).

A more promising approach seems to be use of a standard rubric across a program. Courses currently being developed in conjunction with iDesignEDU for the newly revised MBA program will use standard rubrics for certain assignment types, such as discussions. The standardization will allow for the collection of program-wide data that can, in turn, be used to support AACSB accreditation. The LMS administrator can make these rubrics generally available so that individual faculty members do not have to create the rubrics in each course. This feature in Canvas shows potential, and we recommend increased experimentation. While

we do not have definite data to compare Blackboard and Canvas for outcomes assessment in terms of performance, the difference in price (additional cost versus free, respectively), gives Canvas the edge.

We also have an increasing emphasis on student retention, so an LMS that makes it easier to discover when students are not engaging as they should in their classes is preferable. If we have an LMS that gives us better and more efficient insight into student engagement, then we can intervene sooner and perhaps affect retention positively. Student retention also becomes more important as we continue to increase our class sizes. We explored whether each LMS platform interoperated with MapWorks, our retention tool. Unfortunately, neither platform does, but MapWorks reports that interoperability with LMS in general is on their roadmap for future development. We recommend that we follow this development for potential future implementation.

Both LMS vendors do offer integrated student analytics at both the course and university level. Again, this is part of the standard package for Canvas, but an additional module (for an additional fee) for Blackboard. We did not evaluate use of these features since we had this set of tools for Canvas only.

We do have comparison data for individual faculty use of features that support retention. Both platforms offer student tracking to monitor student use of the LMS, e.g., the last log-in, number of page views, number of submissions, late submissions, and course messages. More pilot faculty reported using this tracking feature in Canvas (82% versus 53%), with greater satisfaction (92% versus 25% of users) and greater ease of use (69% versus 33% of users) than with Blackboard. Canvas also offers an attendance tracking feature that was used by 41% of pilot faculty with 100% of users reporting they were satisfied or very satisfied and 100% of users finding it easy or very easy to use. Data from this tool can be exported and, with some manipulation via excel pivot tables, used to generate attendance reports required of faculty for university retention efforts.

<b>Platform</b>	<b>Use</b>	<b>Satisfaction</b>	<b>Ease of Use</b>
Blackboard	53%	25%	33%
Canvas	82%	92%	69%

**Table 4: Comparison of Student Tracking Feature for Blackboard and Canvas**

Based on use of tools for the individual instructor, Canvas holds more promise for supporting university retention efforts.

Overall, both platforms support the variety of course delivery options used by the university and both offer course-level tools for outcomes assessment and retention. The Canvas tools were rated mostly higher (except for ease of use of rubrics). Furthermore, Canvas includes tools that could potentially be used at the university level for assessment and retention, while Blackboard does not.

## **User community feedback**

We believe that our user community should use the LMS for its purposes in ways that enhance learning. Through our surveys, we discovered which features students and instructors used, how satisfied they were with those features, and how easy to use they found those features.

### ***Students***

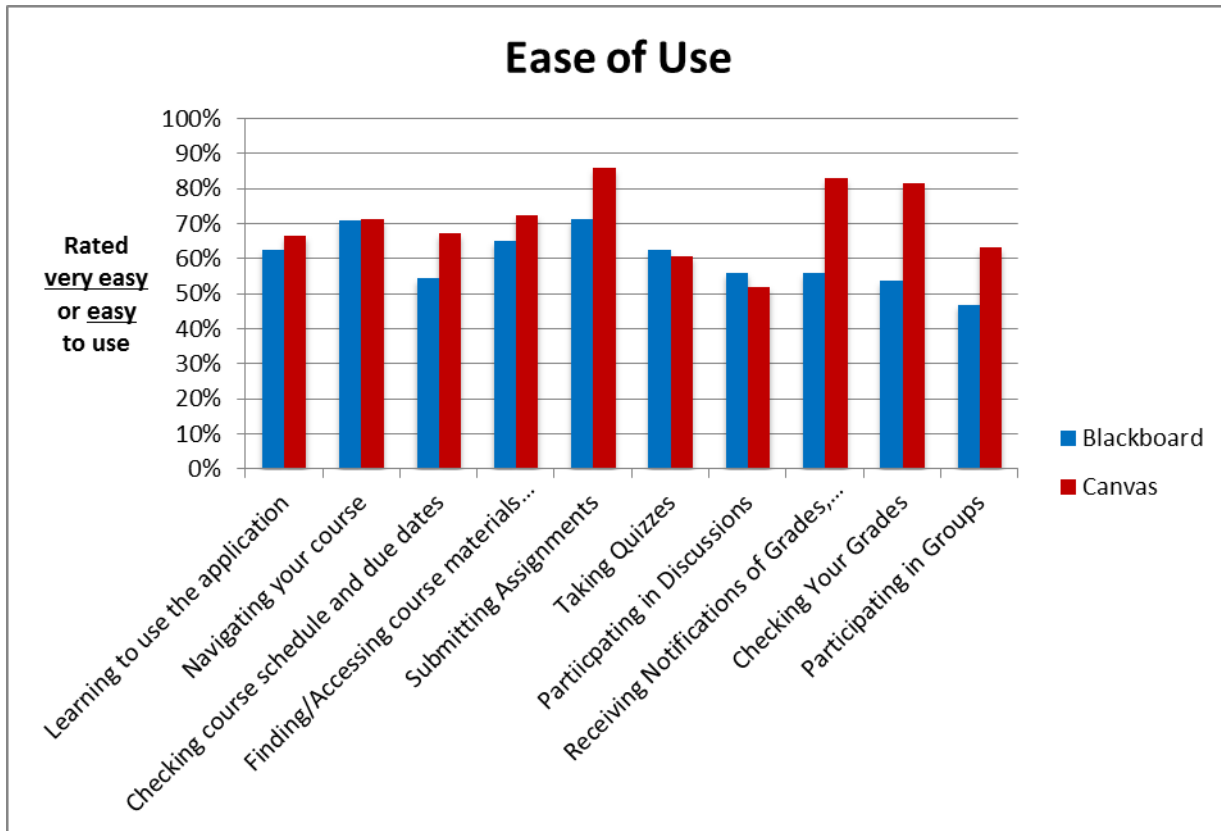
Approximately 476 students are participating in the Canvas pilot courses. We surveyed these students on their priorities for using the learning management system, as well as for evaluation of ease of use for specific features in both Blackboard and Canvas and their overall preference for Blackboard or Canvas. Two versions of the student survey were used because one 7-week pilot course concluded before the student survey was finalized.

There were 126 total responses for a response rate of 26%. In addition, we attempted to gather additional data on LMS priorities and Blackboard use from a control group for those courses that had one section taught in Canvas and one in Blackboard. Unfortunately, only 5 students responded to this survey. Results for all three surveys have been aggregated where possible and are provided in the appendix.

Students were asked to rank the importance of features of the LMS from one to seven. The top four features were:

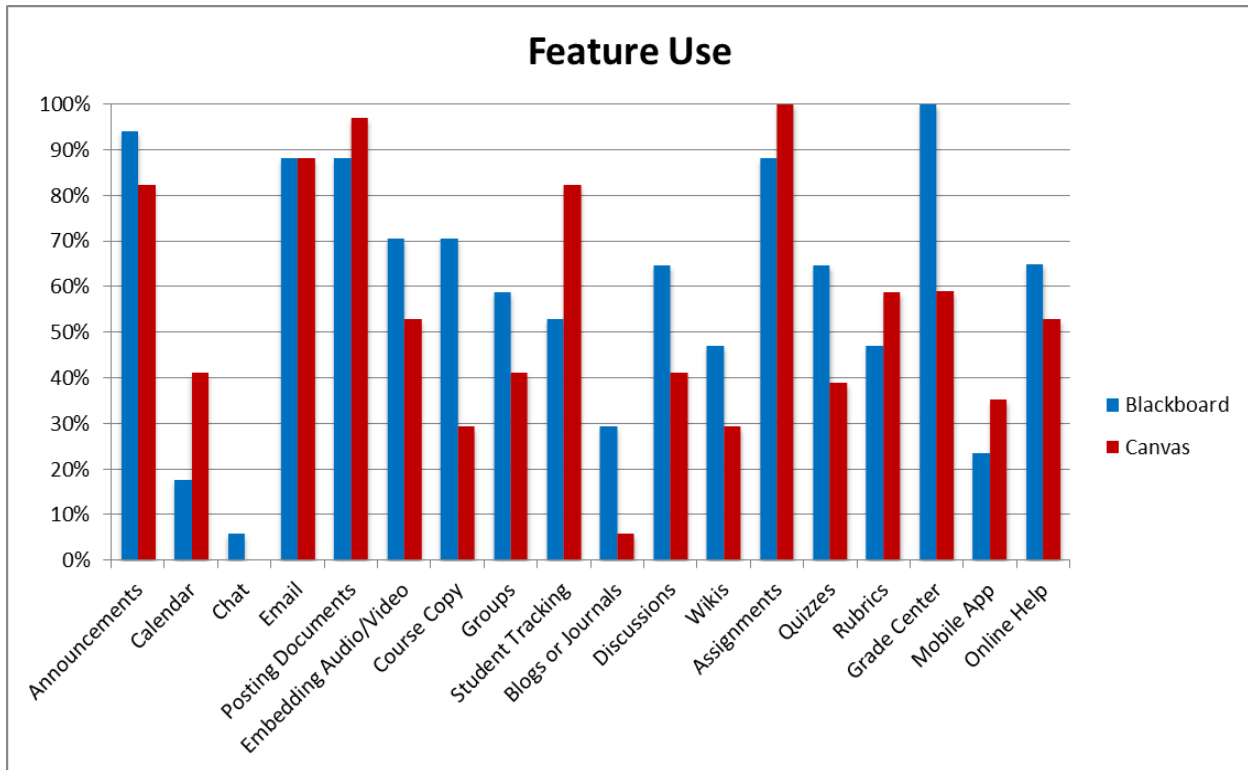
1. Ease of Use
2. Ability to find documents, assignments, etc.
3. Notifications
4. Reliability

We then used these priorities to evaluate survey data on various LMS features. For every feature surveyed, the majority of students who used it found it easy or very easy to use. Figure 1 displays the percentage of students who rated each feature as “easy to use” or “very easy to use”. For most features, a slightly higher percentage (ranging from 3-28 percentage points of difference) of students rated ease of use of Canvas as higher than that of Blackboard. The exceptions were **Taking Quizzes** (63% rated as easy in Blackboard versus 61% in Canvas) and **Participating in Discussions** (56% rated as easy in Blackboard versus 52% in Canvas). On ability to find documents, 72% rated **Finding/Accessing course materials (readings, links, videos, assignments)** in Canvas as easy or very easy versus 65% in Blackboard. On notifications, 83% rated **Receiving Notifications of Grades, Assignments, Announcements** in Canvas as easy or very easy versus 56% in Blackboard. Students were not asked to rate reliability, so we cannot comment on their evaluation of each platform.



**Figure 1: Student Ease of Use**

When asked directly about their preference for Canvas versus Blackboard, 53% of students responding prefer Canvas, 27% consider the two systems about the same, and 24% prefer Blackboard. Overall, data from student surveys indicates a preference for Canvas over Blackboard. See the section Appendix: Data at the end of this document for all graphs.



**Figure 2: Instructor Feature Use**

**Instructors**

For pilot instructors, the survey data gives us information about which features are used most frequently in each LMS. **Figure 2: Instructor Feature Use** above shows relative use of all compared features in each LMS. Although one instructor reported using the **Chat** feature in Blackboard, there were no responses on feature satisfaction or ease of use for either system. Likewise, because Canvas does not have **Blogs or Journals** as a named feature, while there was one response for use of that feature in Canvas, there was no data for feature satisfaction or ease of use. From the data on usage, we extracted information for the most used features in each LMS. **Table 5: Most Used Features** lists the top five features by use (in descending order) of pilot instructors in each system. The difference in features appearing in the top 5 is that the **Grade Center** was used more in Blackboard, while **Student Tracking** was used more in Canvas. From the survey data comments, it appears that instructors were reluctant to use the **Grade Center** in Canvas because it is such an important feature and they were not as familiar with it in Canvas as they are in Blackboard.

<b>Blackboard</b>	<b>Canvas</b>
Grade Center	Assignments
Announcements	Posting Documents
Email	Email
Posting Documents	Announcements
Assignments	Student Tracking

**Table 5: Most Used Features in Each LMS**

We have comparison data from two previous faculty surveys that sheds light on preferred LMS features. The 2010 LMS review included a survey about the LMS that received responses from 85 faculty members. When asked to rank currently available features, the top five features (in descending order) rated as “very important” or “important” were

- Email within LMS
- Accessibility
- Class list
- Announcements
- Gradebook

Email, announcements, and gradebook are the features common to the data from 2010 and 2015.

The Fall 2013 survey conducted by the Task Force for Academic Innovation and New Educational Approaches asked faculty members about their use of online technologies in their courses. For the following uses (listed in descending order by combined use and interest in use), at least 75% of respondents (n=255) reported use or interest in using online technologies:

- Materials: Posting course materials to a website (e.g., Blackboard, Moodle, Google sites), cloud service (e.g., Google Docs, DropBox), or other server (e.g, P: drive)
- Share course documents and materials: Blackboard, course website
- Classroom Presentations: (PowerPoint, Prezi, Keynote, Google Presentation, Slideshare)

- Multimedia: Audio or video materials
- Assignments turned in online: Blackboard, Turnitin, Dropbox
- Share Course Grades (for assignments, tests, etc.) with students: Blackboard Grade Center
- Feedback to students via annotation: annotation tools (e.g., MS Word Track Changes, TurnItIn GradeMark, Commenting on PDFs, Google Docs)
- Collaboration: Online collaboration tools (e.g., Google Docs, Wikis)
- Student use of computers, smartphones, tablets in classroom: (Going online, taking notes)

Two of those uses are not strictly relevant to the LMS (classroom presentations and student use of computers or mobile devices in the classroom), but the others indicate potential uses for the LMS. Once again we see the use of posting documents, assignments, and grade center. Additional features of interest are multimedia, feedback, and collaboration. We compared instructor evaluation of features in Blackboard and Canvas for multimedia and collaboration above under the criterion Consistency with SEU educational philosophy and mission.

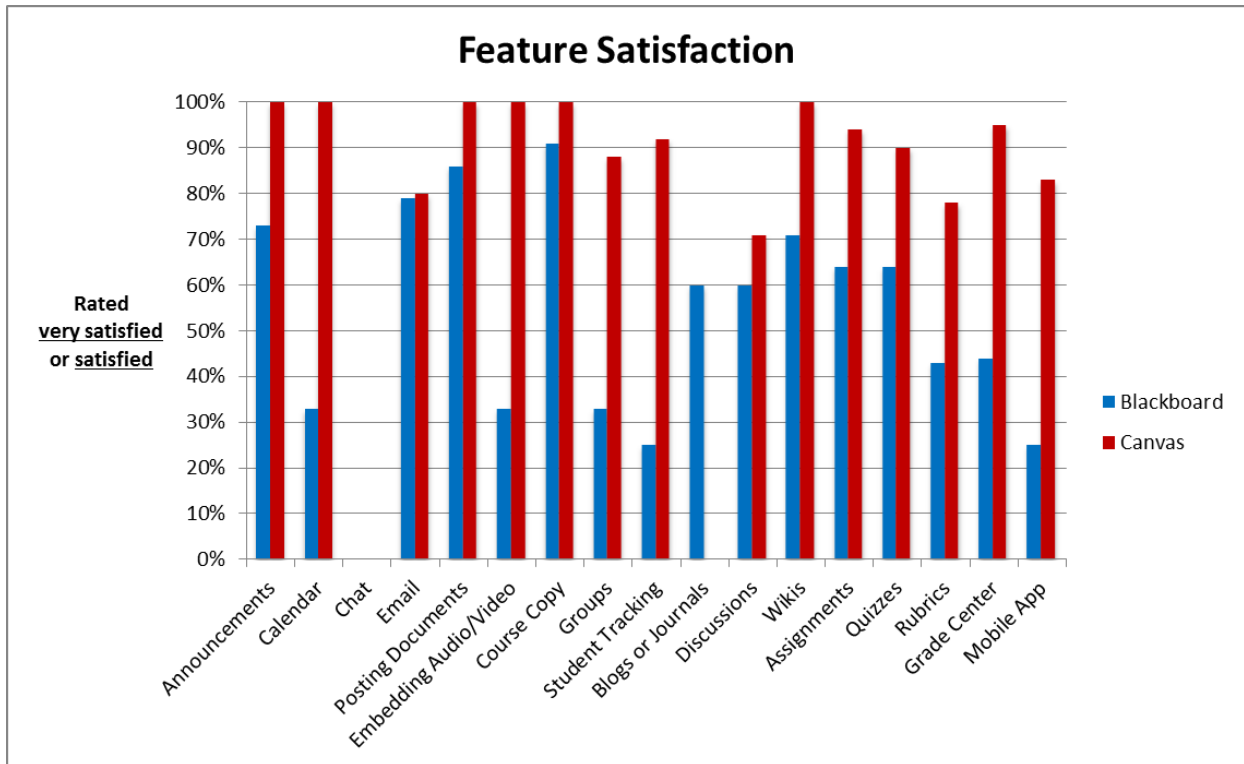
In this section, we compare feature satisfaction and ease of use, with specific focus on comparing the remaining features repeatedly identified as most used or important by faculty members. All of these features relate to course communication and administration:

- Announcements
- Assignments
- Email
- Gradebook
- Posting Documents/Materials

As seen in **Figure 3: Instructor Satisfaction** below, instructors were far more satisfied with Canvas for every feature that they used with the exception of **Email**, where they were only slightly more satisfied, **Chat** (unused in each system), and **Blogs and Journals**, a feature not present in Canvas as discussed above. These overall feature satisfaction numbers present a compelling argument for moving to



Canvas. Turning to our list of prioritized features, all pilot instructors were “satisfied” or “very satisfied” for two of them in Canvas: **Announcements** and **Posting Documents**. The percentages of pilot instructors rating the other three features in Canvas as “satisfied” or “very satisfied” are 95% for **Grade Center**, 94% for **Assignments**, and 80% for **Email**.

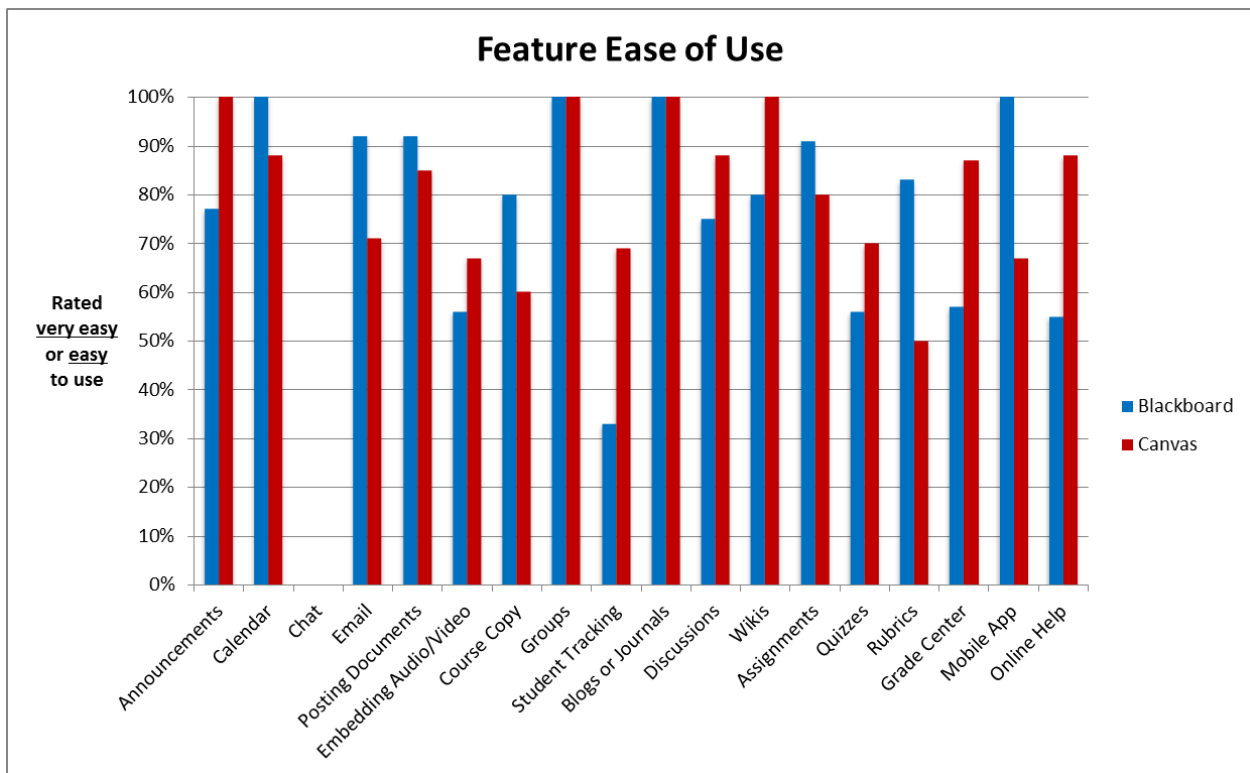


**Figure 3: Instructor Satisfaction**

From **Figure 4: Instructor Ease of Use** you can see that Canvas does not fare as well when comparing pilot instructor ratings for ease of use. Since instructors are so familiar with Blackboard and unfamiliar with Canvas, that result is not surprising. Still, some features were rated as “easy” or “very easy” by a greater percentage of instructors in Canvas vs. Blackboard. How do our top 5 features compare? A greater percentage of pilot instructors rate **Announcements** (100% vs. 77%) and **Grade Center** (87% vs. 57%) as “easy” or “very easy” in Canvas when compared with Blackboard. But a smaller percentage of pilot instructors rate **Email** (71% vs. 92%), **Posting Documents** (85% vs. 92%), and **Assignments** (80% vs. 91%) as “easy” or “very easy” in Canvas when compared with Blackboard. Still, the percentage of instructors rating these features in Canvas as “easy” or

“very easy” is greater than 70%. Due to the high satisfaction rate for these features, we find it likely that instructors will find them easy to use upon repeated use.

In addition, Canvas does empower users by providing a solid network of support. One of the easiest features to use in Canvas was the **Online Help** feature (see **Figure 4: Instructor Ease of Use**). Almost 90% of the pilot faculty who used it found the Canvas Online Help feature easy to use, while only about 55% of the faculty found the Blackboard Online Help feature easy to use. This online help is important because it can empower faculty to use more features in Canvas without necessarily having to seek help from IT staff.

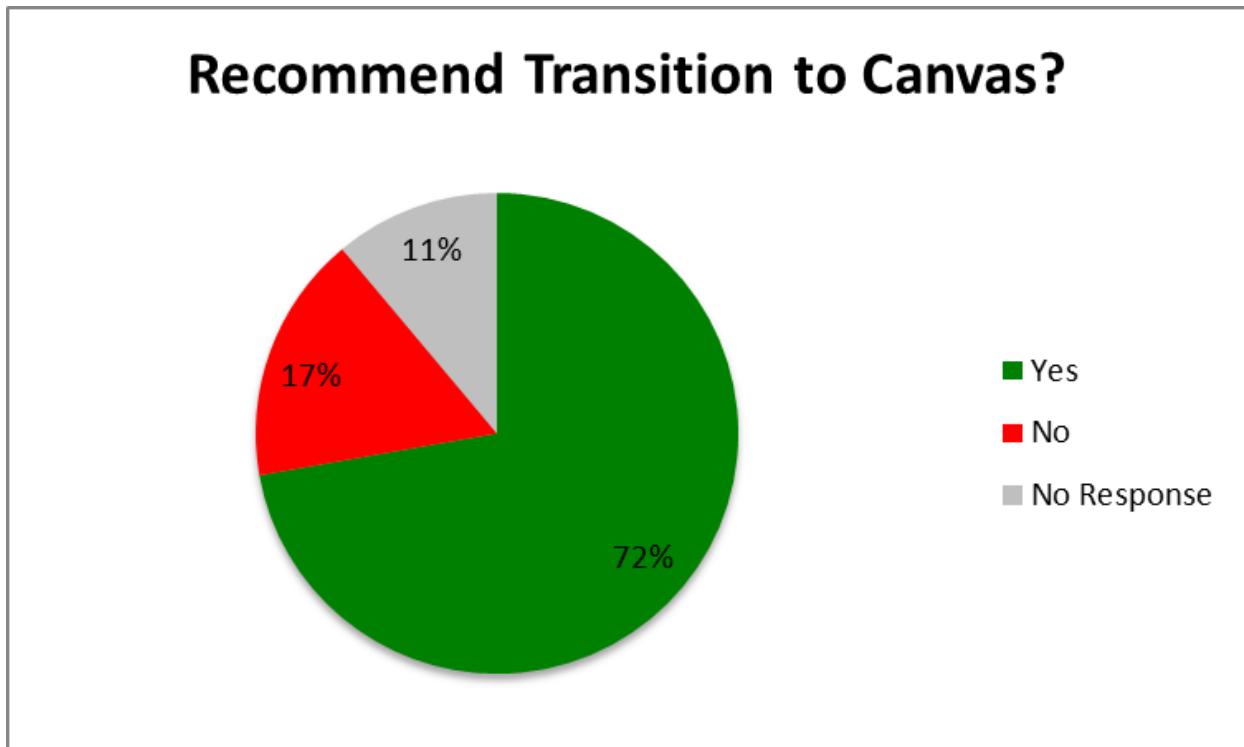


**Figure 4: Instructor Ease of Use**

***Pilot Faculty Recommendation***

Our final survey of pilot faculty asked, “Based on your experience in the pilot do you recommend transitioning from Blackboard to Canvas?” There were 16 responses, with 72% of all pilot instructors recommending a transition to Canvas.

Only 17% or 3 recommended staying with Blackboard, while 2 pilot instructors did not respond.



**Figure 5: Recommendation of Pilot Faculty**

***Other considerations for the user community***

In addition to those features evaluated directly by pilot faculty, the task force identified other features that are desirable in the LMS. First, it is important that third party applications integrate with whichever platform we choose. All of the tools currently integrated with Blackboard will integrate with Canvas. In particular, pilot instructors successfully used Turnitin and Pearson’s MyLab in Canvas. In addition, since Canvas complies with the Learning Tools Interoperability (LTI) standard, any tool that complies with that standard should integrate with Canvas. A full list of LTI compliant tools is available here: <http://developers.imglobal.org/catalog.html>.

We also think it is important to include somehow the presence of the library and other academic support services into the LMS. With help from Canvas, we can add a tab with links to the Library and Student Academic Support Services.

Building on the first step, we can then work with the community to see what type of deeper integration is desired. In part, this integration depends on external tools, like the library catalog, conforming to the LTI standard.

## **Vendor support and reliability**

Another important factor in choosing a learning management system is the reliability of the vendor and the support it offers. Our membership in the Internet2 Community provides assistance in making that determination. As stated on their webpage (Internet2, 2015):

Before Internet2 NET+ services are offered to the research and education (R&E) community, they are put through a series of increasingly rigorous tests, bringing them closer and closer to production. Those that pass the tests are made available to all eligible institutions. Each service has its own lifecycle, and these NET+ service phases mark the progress of each service from idea through availability, and on to possible retirement.

As stated previously, both Blackboard and Canvas have achieved General Availability Milestones with Internet2. It is important to note, however, that the Blackboard product evaluated by Internet2 is not the self-hosted version we have at St. Edward's University, but rather a managed hosting option. The definition given for a General Availability Milestone is

The NET+ service is open to eligible universities. Quarterly Advisory Board meetings continue to inform the service roadmap. (Internet2, 2015)

Thus, the services that have achieved this milestone have been tested, piloted and proven to be reliable. Our task force decided not to consider D2L, a third possible LMS, because although it is an Internet2 service, it has achieved only the Early Adopter Milestone, that is

Universities begin using the NET+ service and continue working with Internet2 and the service provider to develop it further. (Internet2, 2015)

In other words, both Blackboard and Canvas are more mature products while D2L is still being tested for reliability.

The Office of Information Technology (OIT) also shared information with the task force about their experiences with each vendor. One of the major differences in Blackboard and Canvas is that the latter is a cloud-hosted service. That Blackboard is not yet cloud-hosted requires SEU OIT personnel to maintain the service on our local servers. Our OIT personnel have to manage both planned and unplanned service outages, such as upgrades (planned) and server or software issues (unplanned). Although the reliability of Blackboard is fairly good, Canvas is hosted entirely in the cloud, thus alleviating the burden of OIT to support the system. An advantage to local server hosting is that SEU has better control over when to go to a new system, but Canvas does allow for some delay on our part if we decide not to integrate a new feature in the middle of a semester, for example.

According to the Digital Infrastructure group, which presented to the task force on Friday 20 February 2015, "Of all apps supported (by the Digital Infrastructure group), Blackboard is perhaps one of the most visible and certainly most problematic." There have been repeated issues with inconsistencies in solving problems with Blackboard, along with a serious lack of continuity in support in one particular instance. Blackboard has also had consistent irregularities in implementation of new modules (building blocks).

The latest upgrade of Blackboard on SEU servers required 80-100 OIT person-hours of planning and testing. We do not have a dedicated Blackboard person because when we are not in an upgrade cycle, it does not require a lot of attention. In other words, maintaining the "back end" is not always a full-time job but sometimes it is much more than a full-time job.

There is a set of known issues that must be taken care of via testing with Blackboard. SEU is limited to major upgrades only during the Christmas break window because of the overlap in the schedules for courses in different programs. In addition to major upgrades, there are cumulative updates. For example, in February of 2015, Blackboard had initiated the *third* cumulative update since the December 2014 major upgrade. At the same time, such major upgrades

represent a challenge for users who must adapt to sometimes dramatic changes in the tools available or changed in Blackboard. Most cloud-hosted applications roll out changes incrementally, which minimizes the impact on the user.

According to Digital Infrastructure Staff, our experience with Blackboard as a vendor has been that they promise things, but do not always deliver those things either at all or as promised. We pay an additional fee to Blackboard for premium support because often the first solution given by their front-line support does not work upon implementation. Thus, it is often true that we must request an escalation in support help.

While a cloud solution promises to solve some of these support issues, the cloud version of Blackboard does not apparently exist, at least as of the time of their demonstration on campus on the 27<sup>th</sup> of January 2015. The company planned to build a new facility and hire people, but did not have a place or a staff at that time. Canvas, on the other hand, began as a cloud service in 2011 (Instructure, 2015). As stated previously, cloud hosting with Canvas has been proven; Canvas has many major partners and many major universities using their LMS (Instructure, 2015)

Canvas has a clear advantage on this criterion. Choosing to move to Canvas as our LMS will likely free time for OIT to focus on other mission critical initiatives, while staying with Blackboard will likely lead to continued additional support issues.

## **Cost information**

The choice of an LMS, given that we already have one in place, is certainly a capital budgeting replacement decision that should be made considering all costs: initial investments (savings) in capital assets and working capital, as well as operating costs (savings), both direct and indirect. That said, the task force was provided only relative information on costs for Blackboard and Canvas.

Blackboard does not provide an entire system at one cost, while Canvas does. Although Canvas would cost slightly more, the pricing difference between our current version of Blackboard and Canvas is small (less than \$3000 per year),. The

advantage of that slightly higher cost is, however, that Canvas would provide its entire system AND the support service that comes with cloud-hosting. Blackboard charges for additional modules, like university-wide outcomes assessment and analytics, separately over and above the basic package cost. A good analogy is the pricing for cable television versus a service like Netflix: to obtain premium channels on cable (Blackboard), there is an extra charge while Netflix (Canvas) has a fixed monthly charge with all content available to subscribers.

Because Canvas is not only an Internet2 Net+ member, but also an InCommon Participant (InCommon, 2015), there are “No year-over-year escalation in fees” (Internet2, 2015). Blackboard is an Internet2 Net+ member, but not an InCommon Participant (Internet2 Net+, 2015). Thus, its pricing is perhaps not as predictable as that of Canvas. In addition, since St. Edward’s University is now an Internet2 member, we would receive a discount on Canvas. To receive a discount from Blackboard, SEU would have to move to managed hosting by Blackboard, more costly than cloud-hosted Canvas. In other words, Canvas is the better option given the pricing issues and comparisons.

Furthermore, as discussed in the previous section, cloud-hosting will save staff time for digital infrastructure staff. This saved time will be used for other mission-critical initiatives, resulting in yet another benefit for the institution.

## **Integration with technology infrastructure**

It is important that our learning management system integrate with other technology infrastructure on campus. Canvas and Blackboard both integrate with Banner and identity management. Since we have already completed this integration to run the Canvas pilots, there is no further integration necessary and, therefore, no future barrier to implementing Canvas. Both systems also comply with the LTI standard. While both systems are relatively equal in this regard, we did have to pay Blackboard Consulting an additional fee to integrate with Banner, whereas Canvas included that service in its standard price. The initial fee in Canvas is a sunk cost since we already paid that fee and it will not be refunded regardless of which system we choose.

## Feasibility of migration

A final consideration for choosing a new learning management system is the feasibility of migrating from the old system to a new one. If Blackboard is chosen as the LMS going forward, then SEU will continue as we have in the past with updates to our self-hosted Blackboard by OIT in December as appropriate. As for moving to the cloud-hosted version of Blackboard, there is not enough information at this time to plan for that possibility. The best estimate is that a cloud-hosted version is at least two years out given the uncertainty associated with their cloud version. Since the system does not yet exist, we have not been able to plan for what such a migration would look like.

Based on data from the Canvas pilots, however, Instructional Technology has developed a potential plan for migrating from Blackboard to Canvas. Such a transition would impact faculty members who have years of courses archived in Blackboard that they regularly copy for use in new semesters. In addition, our pilots did show that some faculty had trouble adjusting to the design philosophy of Canvas, which is based more on current web design than the concept of being a file repository. Those pilot instructors who used more features in Blackboard had a greater challenge in adapting to Canvas because they had to find more features in Canvas with equivalent functionality. To mitigate the impact of a migration, the office of Instructional Technology has developed a thorough migration plan. (Please see the Appendix: Feasible Migration Plan for Canvas on page 39.)

Slightly more than 80% of all faculty members currently use Blackboard, so Instructional Technology must reach out to 485 faculty members (both contract and contingent) and train approximately 400 of them in the use of Canvas. We will do this by reaching out to targeted groups, utilizing faculty early adopters as peer mentors, and offering multiple modes of instruction and support.

The strategy for migrating all courses from the Blackboard to the Canvas LMS is based on three key principles:



- **Faculty Choice:** Every instructor can choose when to transition over a three-semester period. This option will allow faculty members to pick their time depending on workload, transition by their peers or program, interest in Canvas, along with other factors.
- **Targeted outreach:** While every instructor has a choice, OIT will also use its knowledge of LMS usage to recommend appropriate migration timing to departments, programs, courses, and even specific faculty members. For example, we will encourage faculty teaching first-year courses to move early so that first-year students have to experience only one LMS at SEU.  
**Diverse training options:** Instructors can also choose their training option, ranging from just-in-time do-it-yourself to open office hours in the Faculty Resource Center to multi-level workshops offered by Instructional Technology staff.

# Summary of evaluation criteria

In this section we provide a summary of our conclusions for each of the evaluation criteria:

- Consistency with SEU educational philosophy and mission
  - Overall both Blackboard and Canvas offer features consistent with the SEU philosophy and mission, but Canvas excels slightly in offering a free mobile app and in support for multimodal communication and collaboration. It is our belief that adoption of Canvas might lead to increased usage of these features by SEU students and faculty
- Capacity to meet needs of the university for course delivery, assessment, and retention
  - While we do not have definite data to compare Blackboard and Canvas for outcomes assessment in terms of performance, the difference in price (additional cost versus free, respectively), gives Canvas the edge.
  - Based on use of tools for the individual instructor Canvas holds promise for supporting university retention efforts.
- User community feedback
  - Students overwhelmingly prefer Canvas by a factor of over 2 (54% for Canvas versus 24% for Blackboard). In addition, ease of use was rated generally higher in Canvas than Blackboard, the ability to find documents and assignments was higher in Canvas by a large margin, and receiving notifications was rated much higher in Canvas.
  - For instructors, there was rather overwhelming feature satisfaction in Canvas even though feature use was higher for Blackboard than Canvas. Feature ease of use was somewhat mixed. In the final survey of pilot faculty members, 72% recommended a transition to Canvas.
- Vendor support and reliability
  - Canvas appears to provide much better support and reliability than does Blackboard. Because it is a cloud service, they must maintain

their operation for the many universities that use it. Blackboard as a cloud service is still in very early development stages.

- Cost information
  - Canvas has a better pricing model for SEU than does Blackboard. Canvas is one product that everyone who pays for it receives, while Blackboard has various additional costs associated with support and extra features that SEU might require.
- Integration with technology infrastructure
  - Both systems work with Banner and comply with LTI but Blackboard has charged additional consulting fees for integration with Banner, while that integration is included in the price for Canvas.
- Feasibility of migration
  - Although there would not be a migration issue with Blackboard immediately, there most likely would be one within a year given that Blackboard does not support more than three versions prior to the current version. The other issue with Blackboard and migration is that there is no certainty that Blackboard will have a cloud product in the near future that has the functionality of the version SEU now uses. There is also uncertainty about the functionality of Blackboard in the cloud versus Canvas in the cloud.
  - Instructional Technology has developed a feasible plan for migrating to Canvas over three semesters to accommodate faculty workload and preference.

## **Final recommendation**

After much deliberation, discussion and consideration of data and information, the SEU LMS Task Force recommends that we switch to Canvas starting in the summer 2015 semester.

# **Appendix: Formal Charge of SEU LMS Evaluation Task Force**

## **Overview**

The vision statement for Strategic Plan 2015 states that “St. Edward’s University will educate students for the opportunities and challenges of a 21<sup>st</sup> century world.” Our graduates must be able to collaborate, communicate, create, and compete in the cloud for their community and career. To develop these abilities they require a learning ecosystem that gives them authentic, scaffolded experience in all these activities and across global and digital networks. As St. Edward’s University develops its 21<sup>st</sup> century learning ecosystem to support this goal we need to look closely at the current systems used to support learning on campus.

The Learning Management System (LMS) is an important piece of that ecosystem that aggregates, connects, and manages many aspects of the learning experience. A new system must support a variety of activities for faculty and students including, posting course materials, documents, and other content; course administration and communication; recording and sharing grades; assessing students and their work and offering feedback; submission of assignments; providing opportunities for interaction for all course participants, e.g., through online discussion, collaboration tools like wikis, and sharing of student work. Our current Learning Management System is Blackboard 9.1, which was last reviewed in 2010. Since that time there have been many changes in the LMS market. Our current version of Blackboard is outdated and needs to be either updated to a newer version or replaced by a different learning management system.

## **LMS Evaluation Task Force**

We are establishing an LMS Evaluation Task Force comprised of faculty, staff and students to consider options for an LMS, examine experiences from pilot courses on different systems, and make a recommendation for an LMS system that will assist in educating students for the opportunities and challenges of the 21<sup>st</sup>

century. The task force will recommend a product that can be used in support of the range of technology-enhanced learning at the university, from basic course communication and administration to online, hybrid, blended, flipped, and other digital pedagogies. In addition, the system should offer an enterprise-level solution that can provide optimal performance and stability for a university of our size and integrate with existing information technology infrastructure.

The membership of this task force will include faculty from all schools, including faculty who teach at the graduate and undergraduate level. We need participation from faculty who teach fully online, blended and face-to-face courses. In addition we need faculty representatives across different ranks, and including both contract and contingent faculty representation. Working with the deans, we have identified representatives from all schools for this task force.

In addition to faculty representation from each school, there will be representatives from the Teaching, Learning and Technology Roundtable (TLTR), the Faculty Senate, the Center for Teaching Excellence, the Library, student government, the Registrar's office and the Office of Information Technology.

## **Timeline**

To ensure a successful process and subsequent implementation, the timeline will allow time for consideration and review of different LMS options and well as pilot course implementation. The expectation is that the task force will evaluate options in the fall 2014 semester, implement pilots in the spring 2015 semester and present a recommendation by May of 2015. Transition to a new or updated LMS would take place over the 2015-2016 academic year (with old and new systems running in tandem) and should be completed by spring 2016.

# Appendix: Feasible Migration Plan for Canvas

## Overview

Given that slightly more than 80% of all faculty members currently use Blackboard, OIT is aware that it needs to reach out to 485 faculty members (both contract and contingent) and train approximately 400 of them in the use of Canvas. We will do this by reaching out to targeted groups, utilizing faculty early adopters as peer mentors, and offering multiple modes of instruction and support.

The strategy for migrating all courses from the Blackboard to the Canvas LMS is based on three key principles:

- **Faculty Choice:** Every instructor can choose when to transition over a three-semester period. This option will allow faculty members to pick their time depending on workload, transition by their peers or program, interest in Canvas, along with other factors.
- **Targeted outreach:** While every instructor has a choice, OIT will also use its knowledge of LMS usage to recommend appropriate migration timing to departments, programs, courses, and even specific faculty members. For example, we will encourage faculty teaching first-year courses to move early so that first-year students have to experience only one LMS at SEU.
- **Diverse training options:** Instructors can also choose their training option, ranging from just-in-time do-it-yourself to open office hours in the Faculty Resource Center to multi-level workshops offered by Instructional Technology staff.

<b>Spring 2015</b>	Canvas Pilot (18 courses offered in Canvas)
<b>Summer 2015</b>	Courses offered in both Canvas and Blackboard.
<b>Fall 2015</b>	Courses offered in both Canvas and Blackboard with 30% of faculty using Canvas.
<b>Spring 2016</b>	Courses offered in both Canvas and Blackboard with 60% of faculty using Canvas.
<b>Summer 2016</b>	Courses offered only in Canvas. Blackboard will be available for archives and grade challenges.
<b>Fall 2016</b>	Courses offered only in Canvas. Blackboard will be available for archives and grade challenges.
<b>Summer 2017</b>	Blackboard decommissioned

**Table 6: Timeline and Targets for Transition**

***Faculty choice***

In examining the migration plan of several other universities (Northwestern, Colorado State, Oregon State, etc.) a one-year migration plan is common when transitioning to Canvas. For SEU, that would mean that faculty will have the option to move to Canvas beginning with the summer 2015 semesters. All courses for summer and fall 2015 semesters are fully provisioned in Canvas with instructors and enrollments. We will continue offering classes in Blackboard through the spring 2016 semester. By summer of 2016, all courses will be offered only in Canvas. Our goal is to have 10% of summer 2015 courses taught using Canvas, 30% of courses in fall 2015 and 60% of courses in spring 2016. The faculty members who have not yet transitioned at that point will be trained in Canvas during the spring 2016 semester to enable all courses in summer 2016 and fall 2016 to be taught in Canvas.

***Targeted outreach***

To meet the goal for fall 2015 we will target specific faculty groups, meet with department and program chairs, and utilize the faculty members who have piloted courses in Canvas as product champions. We will develop a communication plan to insure that all faculty members are aware of the upcoming change and the opportunities for training. We will use data from the



registrar's office and communication with academic departments to accommodate faculty with appropriate and timely training.

***Specific faculty to be targeted for early adoption***

- Canvas Pilot faculty
- MBA Transitional faculty
- Innovation Fellows from 2014 and 2015

***Specific programs and departments to be targeted for Fall 2015 adoption***

- Courses recommended to freshmen
  - Freshmen Studies with 16 faculty and linked Freshmen Writing Sections with 46 faculty
  - Math courses, including Basic Math, Math for Liberal Arts, College Algebra, Pre-calculus and Calculus I
  - General Education courses
  - Intro classes in majors
- Capstone courses
- Presentational Speaking
- Visual Studies
- Master of Arts and Counseling
- New College
- Cultural Foundation courses
- Online classes
- Blended Classes

***Contingent faculty***

Since the majority of our instructors are contingent or adjunct faculty, they represent a challenge for any LMS transition. One of our task force members, Chris Micklethwait, was chosen to represent contingent faculty, and we are also working with the new Contingent Faculty Committee to better understand the needs of these instructors. We will work with department chairs to identify and offer training to contingent faculty as part of moving entire programs or classes to Canvas, e.g., Freshmen Studies Writing Sections. The New Adjunct Orientation, offered every semester, will also include training in Canvas. We will also work on identifying the many adjunct faculty members who already teach in Canvas at

another institution. To meet the scheduling challenges for adjunct faculty we will offer training and one-on-one support during early evening hours.

### ***Diverse training options***

Training for Canvas will be made available in multiple forms: face-to-face group trainings, online course materials in Canvas including videos, and individual consultations with OIT staff. Our focus will be on introducing Canvas as part of the ecosystem of learning including its integration with Box and Panopto (a tool for easy video presentation creation). Based on past patterns of LMS usage at St. Edward's University, we will emphasize the aspects of Canvas that promote organization of content delivery and student interaction and communication. An introduction to the extensive online community of support available in Canvas will be included and emphasized in all trainings.

We will build on our experience training faculty in the pilot courses and on the feedback we have received from those faculty members. For example, the majority of pilot faculty (over 50%) found Canvas course setup to be easy, but we found that heavy users of Blackboard sometimes had trouble with the transition to Canvas because they were so used to the "Blackboard way" of doing things. They might assume that because they know how a feature worked in Blackboard, the same will be true in Canvas. Based on our pilot experiences, we are developing a list of potential pitfalls and will work to make sure heavy Blackboard users are cognizant of the differences in Canvas and are comfortable in the new environment. We will check in with our list of known heavy Blackboard users repeatedly to ease their transition.

### ***Face-to-face training***

We will offer three focused 90-minute workshops and one additional workshop based on demand:

- **Introduction to Canvas:** The Introduction class will be an overview of Canvas appropriate for all faculty members who plan on using the LMS.
- **Building Course Content and Communicating in Canvas:** The Building class will give faculty an opportunity to begin hands-on development of their course materials in Canvas.

- **Assessment and Grading in Canvas:** The Assessment class will be appropriate for any faculty planning on recording grades in Canvas.
- **Advanced Features in Canvas:** We will optionally offer a course that goes over advanced and new features in Canvas. This course will include training in such features as built-in web conferencing, developing randomized quizzes, assessing learning outcomes, integrating third party tools and built in video and audio tools. In our experience, the Canvas Guides offers excellent resources for faculty who want to take Canvas further and many prefer to work on their own, so we may not need to offer this workshop.

Our plan is to offer these workshops beginning in May and continuing throughout the summer, fall and spring semesters. In addition, we will offer training to affinity groups of faculty such as the Innovation Fellows, Freshmen Studies faculty, and MBA faculty. The **Introduction to Canvas** course will also be offered as part of the new faculty training during adjunct and contracted faculty orientations. In the weeks before the beginning of the fall semester we will increase trainings and offer multiple opportunities for individual or group consultations.

### ***Online training***

We will offer an online course in, of course, Canvas that will include links to the training schedule, all instructional materials from the workshops, curated content around specific topics, short training videos from Instructure, examples classes, and extensive resources. The course will also exemplify best practices in building a Canvas course, utilizing pages and modules for course organization. The course will include detailed instructions for exporting course materials from Blackboard and importing those materials into Canvas. Specific documentation around the differences between Blackboard and Canvas will also be included.

### ***Individual consultations***

Instructional Technology staff will schedule open consultation times with faculty directly after workshops, during regular working hours and extended times in the early evening. In addition, faculty will be able to schedule consultations directly with any of the Instructional Technology staff.

### ***Student training***

One module of the Online Canvas course will be devoted to student training. Our pilot courses helped us identify potential problem areas for students, such as how to use the discussions, how to navigate courses and the meaning of terms new with Canvas, e.g., modules and pages.

Pages, videos and FAQs will be created for students that faculty can import into their Canvas courses. Links to Canvas will be provided directly from **myHilltop**. The pages, videos and FAQs can also be linked to communication pieces available outside of Canvas.

We will move the **Freshmen and Transfer Orientation to Technology** course to Canvas. We are also working with the Orientation Planning Group to build a more general Orientation class in Canvas.

### ***Non-course uses***

Blackboard is currently used by many faculty and staff committees on campus. During the transition to Canvas we will work with those committees to determine the best application for their needs. For some groups, Box may meet their needs and for others Canvas courses will be created. Instructional Technology will be working with other academic support groups on campus to determine if Canvas should also host some information on those services.

### ***Content migration***

Canvas has a tool for content migration that could automatically copy select Blackboard classes to Canvas. We can do this for faculty but strongly recommend that they import their own courses. During our testing and piloting phase we discovered that automatically copying all content from Blackboard may result in more content than is needed. For example, a text description accompanying a file in Blackboard will create a separate page in Canvas. Canvas provides a method for faculty to select specific items from the Blackboard import so they can make sure only relevant content is moved to Canvas. A faculty member can choose to import all files and assignments or just selected files and assignments.

The migration of course materials from Blackboard to Canvas is simple and we will provide instructions and guidance. The process will involve exporting the course from Blackboard to Box and then importing that same file into Canvas. Using this method allows for storing course materials in Box for future use, thus assuring that no content is lost.

### ***Decommissioning Blackboard***

As part of the overall communication to faculty, we will include instructions on archiving or exporting course materials to Box. We will encourage all faculty members to archive all classes, not just the classes they are teaching in the next year. We will include instructions on importing all or selections from those archives into Canvas courses.

Blackboard will not be provisioned with new classes starting in the summer 2016 semesters. From summer 2016 through summer 2017, Blackboard will be available as an archive of classes and for potential grade challenges. Updates to Blackboard will be applied only as needed for security purposes. All faculty members will need to archive or export needed course materials before Blackboard is fully decommissioned in the summer of 2017.

# Appendix: Data

## *Student data*

Item	percent rated	percent rated	Canvas
	easy/very easy in Blackboard	easy/very easy in Canvas	differs from Blackboard
Learning to use the application	63%	67%	4%
Navigating your course	71%	71%	0%
Checking course schedule and due dates	54%	67%	13%
Finding/Accessing course materials (readings, links, videos, assignments)	65%	72%	7%
Submitting Assignments	71%	86%	15%
Taking Quizzes	63%	61%	-2%
Participating in Discussions	56%	52%	-4%
Receiving Notifications of Grades, Assignments, Announcements	56%	83%	27%
Checking Your Grades	54%	82%	28%
Participating in Groups	47%	63%	16%

## Instructor data

Canvas Feature	N/A	percent used (of 17)	percent satisfied/very satisfied	percent easy/very easy	Blackboard Feature	sum use	percent used	percent satisfied/very satisfied	percent easy/very easy
Announcements	3	82%	100%	100%	Announcements	16	94%	73%	77%
Calendar	10	41%	100%	88%	Calendar	3	18%	33%	100%
Chat	17	0%	n/a	0%	Chat	1	6%	0%	0%
Email	2	88%	80%	71%	Email	15	88%	79%	92%
Notifications	5	71%	75%	83%					
Adaptive (Timed or Conditional)									
Release of content	13	24%	80%	67%					
Creating content pages	1	94%	93%	88%					
Drag and drop capabilities	1	94%	100%	100%					
File Management	0	100%	100%	82%					
Content Editor	1	94%	100%	87%					
Average: File Management + Content editor	0.5	97%	100%	85%	Posting Documents	15	88%	86%	92%
Integrating audio/video	8	53%	100%	67%	Embedding Audio/Video	12	71%	33%	56%
Math editor	16	6%	100%	100%					
Modules	4	76%	91%	77%					
Ability for faculty to add TA/Instructors to course	12	29%	100%	100%					
Content Sharing between course sections	14	18%	100%	67%					
Course Content Import function	12	29%	100%	60%	Course Copy	12	71%	91%	80%
Design/structure flexibility	1	94%	87%	63%					
Group Management (creation)	10	41%	88%	100%	Groups	10	59%	33%	100%
Navigation	0	100%	94%	63%					
Reporting/Student Tracking	3	82%	92%	69%	Student Tracking (number of times in class, in specific content areas)	9	53%	25%	33%
User List/Class roster	2	88%	93%	79%					
Blogs/Journals for students	16	6%	0%	100%	Blogs or Journals	5	29%	60%	100%
Discussions/Forums	10	41%	71%	88%	Discussions	11	65%	60%	75%
Wikis for student collaboration	12	29%	100%	100%	Wikis	8	47%	71%	80%
Assignment creation	0	100%	94%	80%	Submit Assignments in Blackboard	15	88%	64%	91%
Attendance tracking	10	41%	100%	100%					
Group assessments	15	12%	50%	100%					
Quizzes - creation	10	41%	86%	38%					
Quizzes - Delivery (including randomization, scheduling)	10	41%	83%	71%					
Quizzes - item analysis of results	11	35%	100%	100%					
Quiz - average	10.3333333	39%	90%	70%	Quizzes	11	65%	64%	56%
Rubrics	7	59%	78%	50%	Rubrics	8	47%	43%	83%
Assignment Grading using SpeedGrader	3	82%	100%	85%					
Ability to exempt assignments	10	41%	86%	60%					
Feedback mechanisms (text, audio, video)	6	65%	100%	91%					
Flexibility	3	82%	79%	82%					
Grade History	6	65%	100%	100%					
Import/Export from Excel	13	24%	100%	75%					
Grading - average	7	59%	95%	87%	Grade Center	17	100%	44%	57%
Student view of grades & feedback	4	76%	100%	100%					
Weighting	8	53%	88%	86%					
Graded discussions	11	35%	83%	80%					
Graded blogs, wikis, journals	15	12%	50%	67%					
App (iOS or Android)	11	35%	83%	67%	Mobile App	4	24%	25%	100%
Website on mobile devices	13	24%	100%	100%					
Training Materials from vendor	8	53%	100%	88%	Online Help	11	65%		55%
Support community	11	35%	100%	83%					
					Tumitin	10	59%	50%	63%

**1. Based on your experience in the pilot do you recommend transitioning from Blackboard to Canvas?**

Answer	Response	%
Yes	13	81%
No	3	19%
<b>Total</b>	<b>16</b>	<b>100%</b>

# Bibliography

CampusPress. (2015). *CampusPress*. Retrieved April 23, 2015, from CampusPress:  
<http://www.campuspress.com/>

Essential Learning Outcomes Academic Planning Group. (2014, April 1). *Essential Learning Outcomes*. Retrieved from General Education Curriculum Renewal: <http://sites.stedwards.edu/seugened/essential-learning-outcomes/>

InCommon. (2015, April 11). *What is InCommon?* Retrieved from InCommon:  
<https://www.internet2.edu/media/medialibrary/2013/08/01/IS-InCommon.pdf>

Instructure. (2015, April 18). *Canvas*. Retrieved from Canvas:  
<http://www.canvaslms.com/>

Instructure. (2015, April 18). *Canvas Higher Ed*. Retrieved from Stories:  
<http://www.canvaslms.com/higher-education/stories>

Internet2. (2015, April 11). *Internet2 Net+ Fees*. Retrieved from Internet2 Net:  
<http://www.internet2.edu/products-services/cloud-services-applications/canvas/#service-fees>

Internet2. (2015, April 18). *Service Phases*. Retrieved from Internet2:  
<http://www.internet2.edu/products-services/cloud-services-applications/service-phases/>

Internet2 Net+. (2015, April 11). *Cloud Services and Applications*. Retrieved from Internet2 Net+: <http://www.internet2.edu/cloud-services/>

Kroner, G. (2014, September 23). *LMS Data – The First Year Update*. Retrieved April 20, 2014, from edutechnica: , George. (2014, September 23). *LMS Data – The First Year Update* | edutechnica. Retrieved from <http://edutechnica.com/2014/09/23/lms-data-the-first-year-update/>



St. Edward's University Instructional Technology. (2015, April 17). *St. Edwards University Instructional Technology Blog*. Retrieved from Instructional Technology: <http://sites.stedwards.edu/instructionaltechnology/tag/lms/>

Straumsheim, C. (2014, July 18). *The POst-LMS LMS*. Retrieved April 19, 2015, from Inside Higher Ed: <https://www.insidehighered.com/news/2014/07/18/analysts-see-changes-ahead-lms-market-after-summer-light-news>