Canvas Mid-Semester Report

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Executive Summary:

The Learning Management System (LMS) Team has been asked to pilot the Canvas learning management system during the 2015 spring semester. The pilot group consists of 62 faculty members, 81 individual course sections, and 2415 student enrollments. For the mid-semester report, student and faculty surveys were administered, as well as internal reviews on accessibility and technical/infrastructure. 21% of students involved in the pilot participated in the mid-semester survey. The student survey responses showed generally positive results in usability and functionality. Nearly 70% of students surveyed agreed that Canvas would be a suitable replacement for ANGEL. Over 60% of faculty involved in the pilot participated in the mid-semester survey. Faculty responses were also positive with regard to usability and functionality. Nearly 85% of faculty surveyed agreed that Canvas would be a suitable replacement for ANGEL.

Overall, Canvas is very accessible platform, but there are a few concerns. There are institutional workarounds for some of these issues. The number one identified accessibility issue is MathML support. Instructure (and Unizin) is currently studying this issue and is actively working to resolve all accessibility concerns.

On the technical side, Canvas has over 160 certified third party learning-tool integrations, a simple user interface, and is easily adaptable for instructor use. The administration of the integrations (i.e., licensing and implementation) may be resource intensive at our scale. Also, integrating some systems and/or functionality may be curtailed due to limitations (data requests) with the Canvas application programmable interfaces (APIs). As a hosted cloud-based solution, product innovation occurs much faster. However, we are restricted in our ability to control some feature releases, up-time, and outages. Instructure has been transparent about outages and issues and, guarantees 99.9% up-time in the Service Level Agreement.

As this is the mid-semester report, it is difficult to make a recommendation without feedback from the end of the semester. At this point, all indications point to Canvas as a viable choice for the next Learning Management System at Penn State.

Background:

In October 2014, Blackboard informed Penn State of an end-of-life date for ANGEL, the course management system currently used by the University. As a result of Blackboard's decision, most instances of ANGEL will no longer be supported beginning on October 15, 2016. Penn State has a contract for the course management system through December 2017 and will continue to receive operational support until that time.

The Learning Management System (LMS) Team has been asked to pilot the Canvas learning management system during the 2015 spring semester. Students, faculty, and staff throughout Penn State have been invited to participate in the pilot and will help guide future decisions and recommendations of the LMS Team.

The LMS Team has developed a comprehensive assessment strategy including faculty, staff and student surveys, focus groups and individual interviews. This mid semester report includes the results from selected parts of the mid-semester faculty and student surveys.

This report is meant to highlight the key findings of the five (5) most critical parts of our assessment of Canvas. The first three pieces are based on the feedback received from students and faculty in the mid-semester evaluation.

- *Suitability of Canvas as a replacement for ANGEL*
- *Ease of use*
- *Core functionality*

The final two pieces include an internal evaluation of the Canvas system based on:

- *Accessibility review*
- *Technical/Infrastructure functionality*

Summary of Student survey results

The student response rate for the mid-semester survey was 21.9%. The overall student experience in Canvas has been generally positive thus far. In looking at the previous LMS pilots, none have rated so highly among students. While all core features were viewed positively, the mobile app is one of the highest rated features, and has no comparison among other vendors. The student comments on ease of use, feature set, and suitability as a replacement for ANGEL speak for themselves. Nearly 70% believed Canvas would be a suitable replacement for ANGEL. Below are responses from students.

Suitability of Canvas as a replacement for ANGEL

69% of students agree or strongly agree that Canvas will be a sufficient replacement for ANGEL.

Selected responses from students:

- I absolutely love Canvas! I truly hope that Penn State adopts Canvas as the new academic platform as I truly believe that it will motivate and encourage students to excel in the classroom.
- It was so easy to learn and it's easy to navigate. LOVE having an app. Makes using on phone a million times easier and more convenient.
- I LOVE CANVAS SO MUCH. It is perfect, beautiful, simple, and so effective. It took me seconds to learn and was not confusing at all. If the teacher sets up the

course like IST 331 did then I do not see how it could get confusing. It is perfect and how I envision heaven.

Ease of Use

76.5 % agree or strongly agree that Canvas was easy to use
69.3 % agree or strongly agree that Canvas was easy to navigate
80.9% agree or strongly agree that Canvas was reliable and stable when accessing the course
77.9% agree or strongly agree that Canvas was relatively easy to learn

Selected responses from students:

- I love the User Interface and the look and feel. It is very professional and easy to use. I absolutely love the calendar and agenda integration. The grade book is amazing too!
- The mobile app is very useful. I really like the calendar feature, especially because it syncs with my Google calendar. The format for online quizzes is vastly superior to Angel, as is the Grades feature.
- Weekly updates/reminders and receiving messages through my email. Helps me stay on top of things.
- The grades were very easy to determine, and that it automatically calculated the grades without the ones that were incomplete was great!
- You can view the power points directly on canvas without downloading them. I also like the announcements page and corresponding emails.

Core Functionality

Students were impressed with the core functionality in Canvas. Of the tools surveyed, the twelve tools used most frequently are included here. Satisfaction with the functionality of these tools exceeds 60%, with the Gradebook exceeding 80%

Over 80% of students were satisfied with:
Grades

Over 70% of students were satisfied with:

Announcements	**Assignments**	**Calendar**
Notifications	**Quizzes**	**To-Do List**
Modules	**Inline Grading on Submissions**	

Over 60% of students were satisfied with:
Conversations/Email Messages
Discussions

Less than 50% of students were satisfied with:
Files

Selected responses from students:

- Conferences needs some tweaking
- I wish it did not have email. I now have three (3) spots to check my email at Penn State.
- The only thing that needs improved is the app should be conference friendly
- I don't like the announcements being mixed in with other incoming mail, they should be separate notifications. The calendar is not very interactive, but I do like that you can sync it to Google calendar. Again, getting to your group requires clicking on too many links, and the notifications are very specific, its a tad overwhelming.

Summary of Faculty survey results

The faculty response rate for the mid-semester survey was 62.7%. The overall faculty experience in Canvas, much like the student experience, has been excellent. In looking at the previous LMS pilots, none have rated so highly among faculty. While all core features were viewed positively, Speed Grader is one of the highest rated features, and has no comparison among other vendors. Nearly 85% believed Canvas would be a suitable replacement for ANGEL. Below are responses from faculty.

Suitability of Canvas as a replacement for ANGEL

84% of faculty agree or strongly agree that Canvas will be a sufficient replacement for ANGEL.

Selected responses from faculty:

- I hope that we adopt this. For my needs, Canvas works substantially better than ANGEL. In fact, I tried to use some similar course set ups in ANGEL and found it to be challenging. The Modules/Pages/Files stuff in Canvas has been great for setting up a logical course. The other tool that makes me not want to leave CANVAS is the SpeedGrader. Combined with a nice Rubric, grading lab projects has been a breeze! I WANT SPEEDGRADER!!!
- Sadly I wasn't blown away by Canvas. Part of this I think was the limited roll-out -- I was initially excited by the system because of many features which were turned off in the pilot.
- I don't want to go back to ANGEL now that I'm in Canvas.
- The navigation can be a bit tricky at times, but I think that is mostly just a familiarity issue. I also don't like that the email system doesn't have WSIWYG functions, makes some of my emails look unprofessional. Additionally, the

discussions are not well threaded. It is unclear when a student is replying to another student. Crocodoc was a major letdown; it is far less effective than Word or other commenting.

Ease of Use

82% agree or strongly agree that Canvas was easy to use
73% agree or strongly agree that Canvas was easy to navigate
92% agree or strongly agree that Canvas was reliable and stable when accessing the course
82% agree or strongly agree that Canvas was relatively easy to learn

Selected responses from faculty:

- Canvas has been an absolute joy to use and has made my life as an instructor so much more manageable and efficient. I really hope PSU adopts Canvas. My students have responded well to Canvas and I feel it has improved the learning experience that I am able to offer them.
- I really enjoy the ease of use of Canvas. I realize that it may not have all the features that Angel has, but it is so easy to use and intuitive. Also, I really like the SpeedGrader. The use of Modules and the SpeedGrader have helped me include more items on my course site.
- Please move from ANGEL to Canvas. I really like Canvas. The user interface is easy to understand and use.
- I love that it is a web editor. Having the ability to make a syllabus in the language and logic of the web is well suited to the sensibilities and expectations of students.

Core Functionality

Faculty were also impressed with the core functionality in Canvas. Of the tools surveyed, the twenty tools used most frequently are included here. Satisfaction with the functionality of these tools overall exceeds 65%, with the most exceeding 75-80%

89% believed Canvas allowed them to manage course content effectively.
77% agreed Canvas helped communicate with students effectively.
81% agreed Canvas allowed for the easy management of grades.
87% agreed Canvas helped to easily track grades.

Over 80% of faculty were satisfied with:
Calendar   Eternal Links   Modules

Over 70% were satisfied with:

Course Analytics	Rubrics	Course Set-up Checklist
Discussions	Quizzes	Announcements
Classlist/Roster	Notifications	Speed-Grader
Assignments	Files	Grades

Over 60% were satisfied with:

Canvas Documentation	**Profile**
Conversations/Email	

Summary of results from the Accessibility Review

Canvas offers a mix of accessible and inaccessible practices. The system makes heavy use of ARIA (Accessible Rich Internet Applications), which we commend, but in some cases it is used in place of proper semantic markup. Instructure has implemented HTML5 throughout the system. The use of regions is a major benefit to the structure of the system and to helping assistive technology users in understanding the structure and layout. While there are accessibility issues in Canvas, none are so severe that any consideration would be given to finding an alternative solution. The Penn State Accessibility Team is pleased with the responsiveness and the work that Instructure is doing to remediate and fix the accessibility issues outlined below.

- **MathML Support** - Instructure has agreed to support MathML. Previously, they had a work-around for math equations. Support has not been enabled yet, and there is no promised release date.
- **Video player** - Instructure representatives say that the video player has been updated and controls are accessible.
- **Quiz section** - Some improvements have been made, but issues remain. Questions and answers are still read multiple times in some configurations of browsers and screen readers. Work is in progress.
- **Course files view e-Portfolios** - This issue is being worked on. A possible solution is due to be included in the next beta version of Canvas.
- **Missing labels and descriptors** - The actual remediation of this issue is trivial. There is still some conversation about what role ARIA should play in the overall remediation (we prefer HTML solutions over ARIA solutions when available). Ticket is not yet closed.
- **Chat** - Recently submitted ticket identifying issue. The next beta release of Canvas will have some improvements, but bookmarking and navigation issues will remain. Instructure has not yet begun work to remediate these issues.
- **WYSIWYG editor** - Instructure claims they have fixed the issues with keyboard navigation. They are awaiting our retest of the editor for future direction.
- **Collaborative tools** - Instructure is limited in their ability to negotiate accessibility improvements with collaboration tool vendors; but they are raising these issues. They note that Google Docs has seen significant improvements recently.
- **Language tags not supported** - This has been fixed.

Tickets have been submitted through our internal system and on to Instructure. We have been working with Instructure on these issues, and are now involved with the ATHENS Canvas interest group, who is a group focused on the accessibility of Canvas. We are also working with Unizin and other institutions that are either using, or interested in using Canvas to maintain a collective voice on the accessibility of the platform.

Summary of results from Technical/Infrastructure Functionality

Pros:

- Canvas has an extensive list of API's, and leverages IMS LTI to allow Penn State to integrate and extend the system.
- Canvas has a clean user interface, and is a much simpler LMS, which is less complicated for end users.
- Canvas is mostly open source, so the underlying source code is available, should we want to fix bugs and contribute them back to the trunk.
- 160+ LTI integrations - easier to integrate 3rd party learning tools.
- Scheduled release cycles don't require downtime.
- Near 24/7 uptime.

Cons:

- Canvas has a throttle on API access, so unless this can be resolved, we may be limited on our integrations, reporting, and customizations.
- There is an unknown impact on cloud performance and future pricing with data retention and litigation hold requirements.
- Canvas administrative tools and reporting aren't designed to support a highly complex organization at scale.
- Canvas rights aren't granular, and course rights may be superseded by account rights.
- We cannot control release cycles, or customize the core baseline code for PSU's specific requirements.
- 160+ LTI integrations - may be difficult (resource intensive) to manage as to what gets licensed and implemented.