Canvas LMS Pilot & Evaluation
Recommendations for Adoption

UW Information Technology

Introduction
University of Washington Information Technology (UW-IT) conducted a pilot of the Canvas Learning Management System provided by Instructure during the Autumn 2011 and Winter 2012 quarters. Data about the experience of using Canvas and how it affected teaching and learning was gathered from participating students and faculty via surveys and interviews. Data about support needs and engineering concerns were also noted as the pilot was conducted. Based on this data and UW-IT’s experience of supporting both the software and the pilot participants, the project team presents the following recommendations for a future campus adoption of the Canvas LMS. A detailed report of the user research will be provided separately.

Recommendations

1. Continue with the Canvas Cloud service.

We strongly recommend continuing to use the cloud-based solution for Canvas rather than locally hosting a more limited version of the Canvas LMS. Continuing with the Canvas cloud service would provide a better product to our campus clients, and faster. Instructure continues to develop and release features to Canvas on a two-week development cycle. Frequent release of bug fixes also accompanies such rapid development. Keeping a UW local instance of Canvas up to date with such a quickly evolving product would require significant engineering and quality assurance efforts, and create delay in access to new features for our faculty and students. In addition, continuing with the hosted service frees up UW-IT engineers to focus on the considerable amount of integration and migration work, instead of ramping up the core product. As Canvas matures as software over the next several years, it would be useful to reconsider the local instance option.

2. Complete key integrations with other UW systems.

Key integrations need to be accomplished for the Canvas LMS to be a feature complete service for our clients. These include the following:

- **Scalable user and course provisioning system (SIS integration).** UW-IT staff provided software during the pilot to provision course enrollment and additional user information into the Canvas system. While this limited software achieved desired ends, identifying courses to subscribe was...
a manual and labor-intensive process. Enhancements to the UW-IT provisioning software should be made for a production roll-out to take advantage of UW-IT and Instructure technology improvements, enhance the timeliness of enrollment updates, and reduce the support burden by automating course subscriptions into Canvas.

- **Integration with GradePage to support online grade submission.** Use of the Canvas native grade book was limited during the pilot, because instructors had to manually transcribe student grades into GradePage for final grade submission.

- **Changes to the student Web service to fully support course provisioning.** The SWS does not currently provide all of the data about courses necessary to accurately automate course provisioning. The data is present in SDB, and could be made available in the SWS as well.

- **Non-UW authentication.** Many campus partners offer training to non-matriculated students, who do not obtain UW NetIDs. Additional engineering, in collaboration with Instructure, to enable full federated authentication using Shibboleth should be completed in order to support these partners’ usage of Canvas.

Additional integrations, such as the MyUW class schedule or Tegrity, can be added to the Canvas service iteratively, as campus adoption increases. These integration efforts should be prioritized, and the work organized in phases, in order to meet the highest priority needs first.

3. **Conduct a data-informed, phased roll-out, with ongoing assessment.**

The inherent limitations of any pilot mean that many course types and use cases could not be adequately or thoroughly explored, so conclusive recommendations about how to roll-out successfully to every course context are not possible. In addition, UW-IT’s capacity to provide training and support and to partner with local support staff to do the same needs to be developed and refined; this capacity can be grown in parallel with adoption by our campus clients. For these reasons, we recommend the following:

- Beginning with adoption by groups of faculty in single departments or schools, as much as possible focusing on class types and use cases that the pilot data indicate are likely to experience immediate benefits from using Canvas.

- Recommending minimal training, either through an in-person workshop conducted by UW-IT or local support staff, or a series of online modules in Canvas (see below for details).

- Providing guidance to departments, colleges, or schools that are considering adoption based on our data about the benefits of Canvas as used at UW.

- Partnering with other departments or programs to learn more from their adoption process. For example, we know that Canvas benefits courses that involve a great deal of grading, particularly writing-intensive courses taught in person. There are also strong indications that Canvas can enhance efficiency in large lecture courses. We do not know, and would like to partner with adopters to better understand, how to use Canvas effectively for online courses. Since we have not tested Canvas in STEM classes or non-English language classes at UW, we would like to partner with adopters to better understand those use cases as well.
A periodic assessment to capture successes, obstacles, and best practices would benefit all. We recommend that UW-IT continue to engage the services of the Office of Educational Assessment to conduct an annual assessment of the Canvas LMS service.

4. **Provide tiered training for all instructors.**

Like other technologies, Canvas was effective as a teaching tool when instructors used Canvas effectively. The pilot clearly demonstrated that instructors need to understand the framework of the LMS, especially how to use a few key features, in order to experience the benefits of using the Canvas LMS. We recommend that minimal training, in the form of an in-person workshop or online modules, be completed by instructors adopting Canvas. The training should be multi-level, and organized as follows:

**A) Understanding Canvas conceptually.** Qualitative data suggest that instructors are more likely to succeed if they understand the structure of Canvas before starting their course. Some participants had never used an LMS before, and so did not make use of Canvas in an effective manner, nor take advantage of the innovations in teaching and learning it can support.

**B) Starter kit: Using Canvas to improve efficiency in teaching.** Data indicate that the consolidated assignment structure, if used well, benefits both instructors and students. Most notably, the tool saves faculty time. Hence, faculty could begin training by learning detailed use of the following features:

- Integrated calendar: Course planning including assignment due dates
- Assignments: How to post assignment descriptions and collect online submissions through Canvas.
- Assignment grading: Using SpeedGrader, rubrics, and audio/video feedback.
- Canvas grade book: Grades posted from SpeedGrader

**C) Advanced: Using Canvas to encourage student communication and collaboration.** Canvas was designed to enhance communication with students. In the pilot, instructors found challenges with communication tools such as the discussion board and notifications, which might have been due to lack of familiarity with tool settings and details. With ongoing enhancements of these tools, and adequate training, faculty may see improved student engagement.

- Discussion board: One highlight of Canvas is that discussion board submissions can be integrated with SpeedGrader. (This feature depends upon upcoming enhancements to be successful).
- Communication and collaboration features (audio/video/text chat, conferencing, student groups, wiki, peer review): These features in Canvas enabled innovation in teaching practices among pilot participants
5. Provide additional engineering and support staff.

We recommend adding an additional engineer to accomplish integration work and provide 3rd tier support for the Canvas LMS. In addition, we recommend adding a professional staff instructional technologist to provide training and support; maintaining the two graduate assistants in order to retain their expertise and rapidly scale our training and support capacity; adding five additional graduate assistants for support and training; cross-training undergraduate help desk consultants to also support Canvas; and, extending help desk hours into the evenings and weekends.

6. Establish policies for access, data retention, and grading policy.

An body of faculty and relevant administrative officials should establish and enumerate policies, in agreement with current University grading, security, and data retention policies, about default grading schemes, administrative access and permissions, a calendar by which courses are made available in the Canvas LMS, how long courses remain available, how long course data is retained, and how and when data is removed from the system.

7. Develop content migration strategies.

Many campus partners have a large amount of course content and other resources in existing LMSs or other related content systems. UW-IT should develop best practices for content migration from Blackboard, Moodle, and Catalyst Tools, and consult with campus partners as they plan migration of their course content to the Canvas LMS.

8. Continue efforts to improve Canvas features and usability.

The pilot identified several challenges experienced by faculty and students; UW-IT has already been conveying information about challenges and desired improvements to Instructure representatives. We recommend continuing these efforts to obtain improvement in the following areas: overall usability, grade book, discussion board, and notifications, and enhancement of quizzing functionality.