Recommendations on Learning Management Systems at Rice

ITC Academic Technologies Subcommittee

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Rice has been supporting OwlSpace as the course learning management system (LMS) at Rice for approximately the last decade. Sakai, the open source project on which OwlSpace is based, is no longer an actively supported project, so it was felt that it was important to investigate alternatives to Sakai moving forward.

The Academic Technologies Subcommittee of the University Information Technology Committee actively investigated the replacement of Sakai with Canvas as the supported LMS at Rice.

Canvas is a cloud-based LMS offered by Instructure. A version of Canvas is available as open source software, so it is also possible for Universities to run their own installation of Canvas locally.

Note that the committee did not concern itself with the use of OwlSpace as a project collaboration site. The committee solely looked into the replacement of OwlSpace with another learning management system. OIT should continue to maintain OwlSpace as a project collaboration system until such time there is an alternative solution for project collaboration.

1 Pilot Program

Prior to the inception of the ITC-AT subcommittee, a pilot of Canvas was begun in Summer of 2015. The pilot has continued through the Spring semester of 2016, with the following number of courses in the pilot:

- Summer 2015: 4 courses
- Fall 2015: 14 courses
- Spring 2016: 42+ courses

Participants in the pilot (both students and faculty) were surveyed about their experiences using Canvas.

The faculty within the pilot overwhelmingly felt that Rice should move from OwlSpace to Canvas. While faculty members found many small issues with Canvas, no serious issues were reported. Among the small issues, some fraction of them could be resolved with further training on how to use Canvas.

The student reactions to Canvas were a little more mixed. The main complaint, however, was that they were forced to use two learning management systems — OwlSpace and Canvas — during the same semester. This will obviously be resolved after the campus completely moves to the new system.

2 Other Universities

Other Universities have faced similar decisions in picking an LMS, and some have performed comprehensive comparisons among the top competing learning management systems (Canvas, BlackBoard, and Desire2Learn). It was therefore deemed unnecessary to repeat these studies.

The committee looked carefully at one such comparison performed by Indiana University. Their report draws no conclusions, rather it only attempts to perform a fair comparison among the options. The data in the report strongly indicates that at the time the study was performed, Canvas provided the best feature set to meet the needs of most Rice courses. While there were some features available in the competing systems that were not in Canvas, we systematically looked at those features and determined that Canvas has since added them.

Furthermore, we looked at the OwlSpace features that have been most commonly used by Rice faculty. We compared these features to the available features in other systems and found that Canvas currently provides these features in some form.

The current trend appears to be that Universities are moving towards the use of Canvas. Concretely, Canvas is the LMS that offers the most and best features of the currently available top contenders. These studies were consistent with the findings of the faculty within the Rice pilot, as well.

Anecdotal evidence suggests that most Universities who have gone through this process in recent years have selected Canvas. Similarly, anecdotal evidence based upon conversations with campus administrators also suggests that other Universities are happy with this decision. The ITC-AT subcommittee was not aware of any instances where the decision to move to Canvas was later regretted.
3 Faculty Discussions

The committee discussed OwlSpace and Canvas with a representative set of faculty from across the University. We specifically targeted faculty who teach large courses, who use few features of OwlSpace, who use most features of OwlSpace, and who fall somewhere in between.

The discussions with faculty were far ranging. There were many issues discussed. However, there appear to be no barriers to adoption to Canvas from these discussions. While there are many points of concern, a lot of them can be addressed by providing sufficient training to faculty on how to use Canvas. The remainder of the issues are small issues with particular courses. It should be noted that there are many issues with the use of OwlSpace for particular courses, as well, and no LMS can ever perfectly meet the needs of every course.

Based upon discussions within the committee, it was felt that there were no large issues that would argue against the adoption of Canvas, with one exception: e-mail. Many of the faculty make heavy use of the e-mail capabilities within OwlSpace, including the e-mail archive. Based on the experiences of the faculty in the pilot, the Canvas mail capabilities are more limited. This has arisen as the one major deficiency of Canvas for use as an LMS at Rice.

4 Online Education

Canvas offers additional opportunities for online education beyond what is easily possible with OwlSpace. Based upon experiences of faculty involved in online education, Canvas offers better organization and capabilities for fully online courses than OwlSpace. Specifically, it offers organizational features that are a better match to those found in current MOOC providers, it provides better LTI integration with third party tools, and it more easily allows the integration of disparate materials into online lessons.

It is also possible (with effort) to migrate courses back and forth between Canvas and Coursera or EdX and some faculty have already copied courses from Coursera/EdX to Canvas. This potentially unifies some of the University’s MOOC and on-campus offerings and makes it possible for Rice to host their own versions of these online courses independent of existing MOOC providers.

5 Recommendations

Based on the information that the ITC-AT subcommittee was able to collect, we unanimously recommend that the Office of Information Technology transition from OwlSpace to Canvas as the supported LMS for all courses in the University.

In support of this transition, we further recommend:

1. OIT should aggressively advertise the introduction of Canvas and the available support for using Canvas. OIT should consider going through the Faculty Senate, the Department Chairs, and placing clear notices within OwlSpace.

2. OIT should establish a clear process whereby faculty can explicitly request that older courses be migrated to Canvas. This process should be established as soon as possible.

3. During the transition, OIT should not allow any new courses to be created in OwlSpace (so only courses that have previously used OwlSpace could do so again) and OIT should prioritize the migration of requested courses in order to enable faculty to switch to Canvas as soon as possible.

4. OIT should work to deploy a viable class e-mail and e-mail archiving system that is available for all courses, as this is one major feature that many of the pilot users deemed inadequate within Canvas was the e-mail capabilities.

5. OIT should carefully consider all of the feedback from faculty and students in the pilot program as well as from faculty discussions with the committee members.

6. OIT should maintain student access to courses during the transition for a period of four years to enable students to look back at the content of courses that they took at Rice. This access could either be through OwlSpace or by migrating the appropriate sets of courses to Canvas before shutting down OwlSpace.
7. OIT should archive all courses that are in OwlSpace. This archive does not need to be immediately available on the web, but rather these courses should be accessible for education or research purposes to those who request them with appropriate authorization.

8. OIT should continue the practice of automatically creating and populating courses in Canvas in the same way that they do for OwlSpace.

9. OIT should provide training and support for faculty to both migrate and create courses on Canvas. This support should include, but not necessarily be limited to:
   - Introductory courses and/or videos introducing faculty to Canvas.
   - Deeper courses and/or videos that allow faculty to learn about more sophisticated uses of Canvas.
   - Available staff to meet one-on-one with faculty to address specific needs and/or concerns.

10. OIT should consider working with the Center for Teaching Excellence to provide additional support and training for different pedagogical strategies that can be used with/enabled by Canvas.

11. OIT should facilitate and encourage the faculty who participated in the pilot to be available to others as a resource, so that the faculty can learn from the lessons that other faculty took away from piloting Canvas.

   Note again that these recommendations do not cover the use of OwlSpace as a project collaboration site. OIT should continue to maintain OwlSpace in that capacity until such time there is an alternative solution for project collaboration.