Cornell Academic Learning Management System Evaluation Project

Final Report
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The Academic LMS Evaluation Project is a capital project sponsored by Professor Julia Thom-Levy PhD, Vice Provost for Academic Innovation.

Project Leadership Team:
- Executive Sponsor and Academic Liaison - Julia Thom-Levy
- Project Director - Todd Maniscalco
- Project Manager - JP Brannan
- Communications Lead - Rob Vanderlan
- Technical Lead - Marina Tokman
- Business Analyst - Chloë DeShong

Instructional Technologists:
- Patrick Graham
- Marina Tokman
- John Udall

Instructional Designers:
- Elizabeth Balko
- Amy Cheatle
- Benjamin Moss

Primary authors of the evaluation report:
- Chloë DeShong
- Rob Vanderlan
- JP Brannan

Contributing authors:
- Todd Maniscalco
- Marina Tokman
- John Udall

Executive Summary

From December 2016 – February 2018 staff members in the Center for Teaching Innovation (CTI) and Cornell Information Technologies (CIT) conducted a thorough evaluation of Cornell's options for an academic Learning Management System (LMS). Cornell's current contract with Blackboard Inc. will come up for renewal in June 2018 and an evaluation of Cornell's main academic LMS had not been performed in ten years. The market for LMS products is extremely competitive, with the market leaders competing for market share based largely on regular improvements and innovation. At Cornell, most schools and colleges use Blackboard to some degree though eCornell and the ILR school's executive education programs use another product, Canvas. Cornell Weill Medicine also uses Canvas, and the College of Veterinary Medicine has indicated that it may also switch to Canvas in the near future. In the Computer Science and CIS programs, some faculty use an internally-developed system instead of Blackboard. The project team's charge was to provide university leadership with objective data that will allow Cornell's leaders to make an informed decision in line with Cornell's overall priorities.

Cornell's evaluation considered the three top contenders, Blackboard, Canvas, and Brightspace from multiple perspectives. Groups of campus stakeholders were interviewed to identify requirements for LMS software. 2,566 faculty members were surveyed (and over 700 responded) regarding their current LMS experiences and needs. Survey responses were analyzed collectively and across a series of demographic variables. Student round table sessions were conducted, and the student body was surveyed via Blackboard. Over 50 faculty members were interviewed individually. Finally, a one-semester pilot of the possible alternative systems was conducted including 32 courses and 1,712 students. Each of these sources provided information about teaching and learning experiences at Cornell that will be useful beyond the scope of this evaluation.

The evaluation also included an investigation of anticipated future teaching needs. The project team reviewed the LMS choices made by Cornell's peer institutions. Most peer institutions identified either use Canvas or are in the process of switching to it. In addition, standard analyses of technology, security, and financial costs were conducted. The results are summarized in this report, with full details available in the appendices.

Though there are some strong individual opinions in favor of specific alternatives, taken as a whole the university faculty indicated that they were generally satisfied with the current system but are open to new opportunities if there is an improvement. Students participating surveys or focus groups did not express a strong preference for any specific system but emphasized the need for one standard system across Cornell. Technical analysis did not find any major differences among the competitors, though each product has its own particular strengths and weaknesses. The one-time cost of switching systems is a critical item for consideration. In addition to these considerations, a decision to switch systems may represent an opportunity for Cornell to invigorate campus interest in innovations in teaching and learning. A change would be an opportunity to re-open conversations with Cornell units that have already decided against using the current central tool set. Additionally, all three contenders can be extended via custom API-based integrations, and Canvas is also an open-source application, which would give interested Cornell faculty the ability to submit custom-developed plugins for inclusion in the Canvas product itself. The possibilities presented by a renewed campus conversation in this area may

stimulate faculty interest and innovation that will move Cornell's teaching and learning environment forward.

Summarizing the results, each LMS is considered in turn.

Blackboard Learn meets the needs of most Cornell faculty who currently use it for their courses. It has a robust set of tools, most faculty express satisfaction with it, and staying with Blackboard would not require the costs associated with transition. On the other hand, the Blackboard user experience is overdue for updating; many faculty commented on the outdated design and do not find it easy or intuitive to use. Staying with Blackboard will not bring more of the Cornell campus together in a single system and it will make it more difficult to engage faculty in renewed consideration of teaching and learning.

Note: Blackboard Ultra was not ready to be tested as part of this evaluation and is not under consideration at this point, but could be considered in the future if Cornell remained with Blackboard.

Brightspace offers a clean, modern, customizable interface. Engineered with course design in mind, it is equipped with the necessary tools to meet most faculty needs. It is less expensive than the other systems, though the cost of conversion to a new LMS would outweigh any savings from the lower price. Migrating courses from Blackboard to Brightspace is relatively easy. On the other hand, building courses in Brightspace proved a significant adjustment for faculty, and faculty found the gradebook functionality particularly frustrating. Pilot faculty, on the whole, did not prefer Brightspace to Blackboard. Few peers use Brightspace.

Canvas would work well for most Cornell faculty. It has a clean, modern interface that most pilot faculty found easy to use. Six out of ten pilot faculty would prefer to use Canvas; most of those that would not were advanced Blackboard users who depend on specific tools. Switching to Canvas would provide an opportunity to engage the Cornell faculty in a consideration of their teaching and encourage innovation. Furthermore, Canvas is the LMS used by most of our peers. Combined with Canvas's emphasis on easily integrating third-party tools, open source framework, and community-driven development, Canvas provides the agility to develop and implement tools to meet specific Cornell needs. Canvas also offers the possibility to unite more of the Cornell community in using a single LMS, and enable sharing of teaching resources already created on Canvas. On the other hand, transitioning to a new LMS requires significant conversion costs. In addition to the costs of running two systems during the transition, this includes faculty time in learning the new system, and the additional support resources needed to make the transition worthwhile.