

# Recommendation to Adopt the Canvas Learning Management System for UNC Charlotte

*Report Submitted by the Learning Management Evaluation Committee, March 2016*

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## Executive Summary

In supporting the instructional mission of the university, the learning management system (LMS) plays a vital role. Approximately 87% of the 1,550 faculty use the current LMS to support their face-to-face, online, and hybrid courses, and nearly 100% of our 28,062 students take at least one course that uses the LMS. Therefore, our campus requires a learning management system that is reliable, easy to use, and able to accommodate our growing and changing needs. These considerations are what led to an evaluation of our current learning management system, Moodle, and all viable alternatives, to make sure we have the correct enterprise level academic technology in place.

Because learning management systems are continuously evolving, the rapid progression of this technology means that universities typically make significant changes about every four-to-seven years. Our campus has undertaken this kind of LMS change several times in the past. Since 2002, we have gone through WebCT followed by Blackboard Vista and then Moodle. No LMS lasts forever, and we are now at the point of recommending a switch from Moodle to the Canvas LMS for various reasons.

The Learning Management System Evaluation Committee engaged in a number of investigative and exploratory tasks over the course of this academic year. The committee's deliberations indicated that the Canvas LMS potentially offers significant improvements over Moodle, as recognized by faculty, students, and staff. These advantages include increased reliability, greater ease of use, user-friendliness for mobile devices, reduced support problems, plus the flexibility and adaptability in meeting the growing needs of faculty and students. Given these considerations, the LMS Evaluation Committee recommends that we adopt Canvas as the campus LMS beginning in the 2016-2017 academic year and that our Center for Teaching and Learning immediately begin assisting faculty with this migration. The committee also recommends that we continue to run Moodle for a one-year overlap period, until May 2017, to give faculty ample time to transition to the new system.

## Background & Context

The 2015-2016 academic year marks our seventh year as a Moodle campus. The Moodle product itself is now nearly 14 years old, and it has been showing signs of its age, such as a lack of innovative development to keep up with our university's growing need for new integrations, new product extensions, mobile device compatibility, and so forth. We have also experienced an increased number of technical problems with Moodle, which have broadly impacted faculty and students. Over the past two or three years, these problems have become more frequent, with every product update. Due to the way Moodle does upgrades, in large batches at a single point in time, this can impact features of Moodle such as the gradebook or any number of our plug-ins, which can cause widespread problems throughout the campus.

Since the advent of Moodle, newer learning management systems have been developed with usability and large educational institutions in mind, to meet the modern demands of the academy. They support a broader range of plug-ins and product extensions; they offer up-to-date mobile apps for faculty and students; and they can scale up system resources during peak times of the semester. Some of these newer systems have a more contemporary and user-centered product development and support model, implementing small fixes and improvements continuously without extended campus downtimes being necessary.

Therefore, given our current situation and the new offerings now available, a Learning Management System Evaluation Committee convened in September 2015 to examine Moodle and the viable alternatives to determine whether a new system was needed.

## Learning Management System Evaluation Committee

The committee included 35 faculty, staff, and students, listed below. There was a broad disciplinary representation as well as varying levels of online and face-to-face teaching experiences with learning management systems. The committee was co-chaired by Dr. Garvey Pyke, Director of the Center for Teaching and Learning, and Dr. Drew Polly, Associate Professor in the College of Education and Chair of the Faculty ITS Advisory Committee (FITSAC).

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## Committee Activities

The committee met bi-weekly throughout the Fall 2015 and Spring 2016 semesters to discuss, analyze, and undertake the following activities:

- Collected and analyzed data from campus surveys regarding Moodle satisfaction to UNC Charlotte faculty (n=469) and students (n=1158)
- Reviewed Moodle usage data, including downtimes and problem reports
- Solicited input from faculty colleagues at departmental and college meetings
- Examined LMS feature sets and evaluation rubrics to determine which LMS alternatives would meet the institutional criteria for size, scale, integrations, et al.
- Participated in demonstration sessions from representatives from Canvas, Brightspace, and Blackboard
- Tested each LMS, when provided with trial accounts
- Consulted the findings of other large universities' experiences with Moodle, Canvas, Blackboard, and Brightspace
- Decided to conduct a pilot test of the Canvas LMS during the Spring 2016 semester
- Determined scope and size of Canvas Pilot and evaluation measures
- Evaluated Canvas by soliciting faculty and student feedback at multiple points

These activities were required in order to make a well informed recommendation to the campus about the future of the LMS.

## Canvas Pilot Test

### Facts and Figures of the Pilot

During the Spring 2016 semester, a group of pilot faculty signed up to teach their courses using Canvas for the entire semester. Included in the pilot were:

- 51 faculty
- 30+ different disciplines
- 108 courses
- 3200+ students
- 14 were fully online courses
- 13 were hybrid courses

There was a mix of undergraduate and graduate courses, including multiple large enrollment courses.

The Center for Teaching and Learning staff worked with the Canvas team and others in ITS to complete technical buildout, such as NinerNET and Banner integrations, so that the pilot experience would have high fidelity with how the system would behave in full implementation, rather than a diminished or trial version. Faculty had the opportunity to attend Canvas training offered by CTL, prior to the start of the semester. Out of the 51 faculty in the pilot, 26 unique faculty attended one of two workshops: 24 went to a basic, 75-minute workshop and another 7 dropped in for an unstructured “open swim” session. The pilot faculty and students also had 24-hour technical support available directly from a Canvas in the form of a toll-free telephone line, web chat, and online help forms.

### Evaluation of Canvas

At the end of the January, faculty were surveyed about their initial impressions of Canvas and how it performed for the beginning of the semester. This included questions about migrating Moodle content, course set up, and other early feedback measures. Overall, faculty rated Canvas as better than Moodle in nearly every category (see Appendix D), with 62% in favor of recommending that Canvas replace Moodle, 5% against, and 33% unsure. Students were likewise asked for their initial impressions of Canvas. Their impressions were also favorable, although not as strong as the pilot instructors’ (see Appendix E), with 50% in favor of recommending that Canvas replace Moodle, 20% against, and 30% unsure.

A second round of evaluations was conducted at the end of February and beginning of March, or the approximate mid-term point of the semester, for pilot faculty and students (see Appendices F & G). Results were consistent with what the initial evaluation showed. Faculty support to replace Moodle with Canvas was 74% in favor, 7% against, and 19% had no preference between the two systems. Students replied 49% in favor, 25% against, and 26% with no preference. Further data collection will occur at the end of the semester to help guide the campus-wide implementation of Canvas.

## Conclusions & Recommendations

### Adoption of Canvas for 2016-2017

On March 4, 2016, members of the committee voted unanimously to recommend the adoption of Canvas as the campus LMS, due to the number of potential benefits, particularly with respect to reliability, adaptability, ease of use, and relevance to UNC Charlotte's instructional mission. Therefore, the adoption of Canvas should be initiated immediately, in preparation for full implementation for the 2016-2017 academic year.

### One-Year Extension of Moodle

In conjunction with the formal transition to Canvas, the committee also recommends that the university should keep Moodle available for use in courses for one more year, until May 15, 2017, to provide ample transition time for faculty to move all of their course materials to Canvas. However, with the ongoing technical difficulties associated with Moodle itself, the committee strongly encourages faculty to migrate to Canvas sooner rather than later.

### Timeline for Transition to Canvas

The transition to Canvas should begin immediately. The ideal timeline would reflect the following:

- Canvas should be made available to the entire university community as soon as possible, ideally no later than early April, for faculty to begin building their Fall 2016 courses.
- Training from CTL and online resources for faculty migration would begin with Canvas availability to all faculty.
- Faculty teaching in Summer 2016 may use Canvas for their courses, if they so desire.
- The last courses that can be taught in Moodle will be Spring 2017 courses.

### Migration of Moodle Content to Canvas

The LMS Evaluation Committee recommends that the university contracts Canvas to conduct a bulk, automated migration of Moodle courses from the current production version of Moodle, which includes Fall 2015 and Spring 2016 courses. For many courses, especially the more complex ones, there could be significant revisions and cleanup required after such a migration, since the two products are different, but this may help many faculty get started in Canvas more easily. Some faculty may wish to migrate their courses manually or rebuild them, to better control how they appear in Canvas. Older courses from previous versions of Moodle, prior to Fall 2015, would need to be manually imported into Canvas by individuals wishing to do so. The Center for Teaching and Learning will offer sessions to help with these activities and also reach out to faculty who have complex courses, such as those who have done Large Course Redesign projects, to assist with their migration.

### 24/7 Technical Support Available

The committee recommends that the university purchases the Tier 1 level of 24-hour technical support--i.e., toll-free telephone line, web chat, and online help forms, all available 24 hours per day, 7 days per week--from Canvas during the the 2016-2017 academic year. This should help with the transition for both faculty and students. The committee recommends an analysis at the end of the year to determine whether this service should be continued into another academic year.

## Faculty Professional Development & Orientation to Canvas

The committee requests that the Center for Teaching and Learning would immediately offer a host of workshops and instructional events to get faculty started with Canvas during the remainder of the Spring semester and extend through the Summer and into the Fall. CTL should also develop intermediate and advanced workshops as needed, in conjunction with online training materials provided by Canvas. It is also recommended that the contract with Canvas should include faculty access to webinars on how to use the new LMS, offered directly from the vendor. The pilot faculty who attended them found helpful in getting started with building their Canvas courses, and this would help with the migration efforts.

### Caveats

There are two products currently integrated into the Moodle environment that are not integrated with Canvas. The first is the web conferencing solution, Saba, used by about 100 faculty. This solution does not integrate directly with Canvas; however, Canvas does include a simple, built-in web conferencing tool, BigBlueButton. Those needing a more full-featured web conferencing solution can continue to use Saba and provide links to sessions manually within their Canvas courses. In the meantime, the campus is exploring a replacement for Saba that would better serve all of the web conferencing needs at UNC Charlotte.

The second product that is not yet integrated with Canvas is Mahara, the eportfolio tool that acts as an extension of Moodle. Canvas has a built-in e-portfolio tool that can be used in courses immediately, but some faculty and students may wish for additional features found in Mahara. Since each instance of Mahara can only integrate with one LMS at a time, the Center for Teaching and Learning is currently developing a solution for enabling Mahara users to use it with Canvas (e.g., install a new, Canvas-only Mahara site prior to the start of the Fall 2016 semester and retire the Moodle-only Mahara site when Moodle is retired in May 2017).

## Appendix A: Summary Points

### **Importance of LMS to Campus**

- Approximately 87% of faculty use the LMS to support their face-to-face, online, and hybrid courses, and nearly 100% of students take at least one course that uses the LMS
- LMS must be reliable, easy to use, and able to accommodate our growing and changing needs
- Three systems since 2002: WebCT, Blackboard Vista, Moodle
- Moodle development has lagged, causing widespread problems

### **LMS Committee**

- 35 faculty, students, and staff
- Met regularly from September 2015 to March 2016
- Explored all viable options
- Unanimously decided to pilot Canvas this spring with a go/no-go decision by mid-term

### **Canvas Pilot - Facts and Figures**

- 51 faculty
- 30+ different disciplines
- 108 courses
- 3200+ students
- 14 were fully online courses
- 13 were hybrid courses

### **Canvas Pilot - Faculty Feedback**

- 74% in favor of recommending Canvas; 7% against; 19% have no preference between systems
- Rated higher than Moodle:
  - System Reliability - 89% better than Moodle [0% worse, 11% about the same]
  - Ease of Use - 59% better than Moodle [9% worse, 32% about the same]
  - Feature Set - 54% better than Moodle [10% worse, 37% about the same]
  - File Organization - 67% better than Moodle [7% worse, 27% about the same]
  - Support Documentation - 66% better than Moodle [2% worse, 32% about the same]
  - Mobile Device Compatibility - 81% better than Moodle [3% worse, 16% about the same]
- Faculty like: Speedgrader app, more flexible than Moodle, toll-free 24/7 helpline

### **Canvas Pilot - Student Feedback**

- 49% in favor of recommending Canvas; 25% against; 26% have no preference between systems
- Ratings of reliability, ease of use, et al., the averages were 48% better than Moodle, 16% worse, and 36% about the same

### **Recommendation: Switch to Canvas as Campus LMS**

- Ideally, Canvas available to campus by early April for course development for Fall term
- Summer courses available to be taught in Canvas if desired
- Moodle will still be available for one year, until May 15, 2017
- 24/7 toll-free phone help and online chat available

- Webinars, workshops, consultations for faculty will be aligned with April rollout of Canvas

## Appendix B: Moodle Satisfaction Survey - Faculty

- n=469
- Confidence interval approx.  $\pm 3\%$  at 95% confidence level
- All percentages rounded
- Sent to all faculty on 9/28/15
- **NOTE:** 453 out of the 469 responses were made prior to the widespread Moodle problems that started in late October

How satisfactory has YOUR overall experience been with Moodle?

Very Unsatisfactory	Somewhat Unsatisfactory	Neutral	Somewhat Satisfactory	Very Satisfactory
8%	18%	9%	40%	25%
26%			65%	

How interested would you be in exploring alternatives to Moodle?

(0=not interested at all; 5=extremely interested)

0	1	2	3	4	5
24%	12%	11%	14%	16%	23%
36%		25%		39%	
47%			53%		

How willing would you be to switch from Moodle to another learning management system? (0=not willing at all; 5=extremely willing)

0	1	2	3	4	5
21%	13%	15%	14%	17%	19%
34%		29%		36%	
49%			50%		



## Appendix C: Moodle Satisfaction Survey - Student

- n=1158
- Confidence interval approx.  $\pm 3\%$  at 95% confidence level
- All percentages rounded
- Sent to all students on 10/21/15

How satisfactory has your overall experience been with Moodle?

Very Unsatisfactory	Somewhat Unsatisfactory	Neutral	Somewhat Satisfactory	Very Satisfactory
8%	15%	13%	40%	25%
23%			65%	

How interested would you be in exploring alternatives to Moodle?

(0=not interested at all; 5=extremely interested)

0	1	2	3	4	5
15%	13%	14%	20%	20%	18%
28%		34%		38%	
42%			58%		

How willing would you be to switch from Moodle to another learning management system? (0=not willing at all; 5=extremely willing)

0	1	2	3	4	5
16%	15%	15%	19%	17%	18%
31%		34%		35%	
46%			54%		

## Appendix D: Canvas Pilot - Initial Faculty Evaluation

- 82% response rate (42/51)
- Confidence interval approx. between  $\pm 3\%$  and  $\pm 6\%$ , depending on question (at 95% confidence level)
- Conducted Jan 25-29, 2016

Please rate your experiences:

	<b>Better than Moodle</b>	<b>About the Same</b>	<b>Worse than Moodle</b>
<b>Overall ease of use</b>	62%	31%	7%
<b>System reliability</b>	90%	10%	0%
<b>Mobile device compatibility</b>	85%	15%	0%
<b>Setting up my course</b>	48%	36%	17%
<b>Feature set</b>	59%	32%	8%
<b>File organization</b>	60%	31%	10%
<b>Support documentation</b>	72%	21%	8%

Would you recommend Canvas as a replacement for Moodle?

<b>Yes</b>	62%
<b>No</b>	5%
<b>Unsure</b>	33%

## Appendix E: Canvas Pilot - Initial Student Evaluation

- 12% response rate (n=467)
- Confidence interval approx. between  $\pm 2\%$  and  $\pm 4\%$ , depending on question (at 95% confidence level)
- Conducted Jan 25-29, 2016

Please rate your experiences:

	<b>Better than Moodle</b>	<b>About the Same</b>	<b>Worse than Moodle</b>
<b>Overall ease of use</b>	49%	30%	21%
<b>System reliability</b>	60%	32%	8%
<b>Mobile device compatibility</b>	48%	37%	14%
<b>Feature set</b>	50%	36%	14%
<b>Support documentation</b>	42%	45%	13%

Would you recommend Canvas as a replacement for Moodle?

<b>Yes</b>	50%
<b>No</b>	20%
<b>Unsure</b>	30%

## Appendix F: Canvas Pilot - Midterm Faculty Evaluation

- 88% response rate (45/51)
- Confidence interval approx. between  $\pm 3\%$  and  $\pm 5\%$ , depending on question (at 95% confidence level)
- Conducted Feb 24 - March 1, 2016

Please rate your experiences:

	Better than Moodle	About the Same	Worse than Moodle
<b>Overall ease of use</b>	59%	32%	9%
<b>System reliability</b>	89%	11%	0%
<b>Mobile device compatibility</b>	81%	17%	3%
<b>Feature set</b>	54%	37%	10%
<b>File organization</b>	67%	27%	7%
<b>Support documentation</b>	66%	32%	2%

Would you recommend Canvas as a replacement for Moodle?

<b>Yes</b>	74%
<b>No</b>	7%
<b>No Preference</b>	19%

Which one of the following statements most closely resembles your beliefs about Canvas vs. Moodle?

<b>Canvas is unequivocally better than Moodle.</b>	18%
<b>It will take me some time to learn Canvas more thoroughly, but I think it's better than Moodle, overall.</b>	36%
<b>Canvas is an acceptable replacement.</b>	30%
<b>Canvas and Moodle are about the same, as far as I can tell.</b>	7%
<b>Canvas is an unacceptable replacement.</b>	5%
<b>It will take me some time to learn Canvas more thoroughly, but I think it's worse than Moodle, overall.</b>	5%
<b>Canvas is unequivocally worse than Moodle.</b>	0%

## Appendix G: Canvas Pilot - Midterm Student Evaluation

- 14% response rate (n=513)
- Confidence interval approx. between  $\pm 2\%$  and  $\pm 4\%$ , depending on question (at 95% confidence level)
- Conducted Feb 24 - March 2, 2016

Please rate your experiences:

	Better than Moodle	About the Same	Worse than Moodle
<b>Overall ease of use</b>	45%	31%	24%
<b>System reliability</b>	55%	36%	10%
<b>Mobile device compatibility</b>	49%	37%	14%
<b>Feature set</b>	49%	35%	17%
<b>Support documentation</b>	42%	44%	14%

Would you recommend Canvas as a replacement for Moodle? \*\*

<b>Yes</b>	49%
<b>No</b>	25%
<b>No preference</b>	26%

\*\*We also asked students to identify if they had disabilities, and of those students who did so:

Would you recommend Canvas as a replacement for Moodle?

<b>Yes</b>	52%
<b>No</b>	21%
<b>No preference</b>	25%

## Appendix H: Accessibility Review by the Office of Disability Services

The Canvas learning management system was tested and reviewed by the Office of Disability Services and found to be highly accessible. The following are highlights in regards of the accessibility of Canvas:

1. Canvas was evaluated using JAWS 16, MAGic 13, Internet Explorer 11, Firefox on Windows computer, Voiceover and Safari on Mac computer and found to be highly accessible.
2. 52% of students who participated in Canvas pilot and with disabilities have recommended Canvas as replacement for Moodle.
3. At least one student who is blind provided verbal feedback that Canvas is easier to use, navigate and accessible. He said that he enjoyed using Canvas with his mobile device.
4. Canvas has provided their Voluntary Product Accessibility Template (VPAT). The VPAT shows how Canvas has met Section 508 of the Rehabilitation Act and (Web Content Accessibility Guidelines) WCAG 2.0 AA standards.
5. Canvas is a WebAIM certified. WebAIM (Web Accessibility In Mind) is a non-profit organization and a third party authority in web accessibility. WebAIM certification indicates that Canvas was evaluated and it is accessible and meets the WCAG version 2, level A and level AA as of May 5, 2015.
6. The Office of Disability Services has also checked the opinion of other universities' Disability and Accessibility services by reaching out to a variety of listservs and found positive feedback.

Because we found Canvas to be accessible, we are in support of the adoption of Canvas and as a replacement of Moodle. Nevertheless, the accessibility of the content should be maintained by faculty and instructional designers. Moreover, Canvas can be expanded by using external tools, extensions, plugins and custom interfaces. The accessibility of these additions need to be evaluated on a case-by-case basis as we grow and extend the LMS.