



Evaluation of the Pilot of the Canvas Learning Management System Implemented in Academic Year 2012-2013

Executive Summary

August 2013

Key Faculty Findings

- Ninety-five percent of faculty respondents found Canvas LMS either moderately easy or very easy to use; 60% found it highly useful for their teaching and 30% moderately useful for their teaching.
- When asked to rate their satisfaction with 31 different teaching tasks in Canvas, the average faculty respondent rating for 29 of the 31 tasks was a 3 or higher on a 4-point scale (with 3 being a rating of moderately satisfied). Of the features used by 50% or more of the faculty respondents, the most highly rated were
 - Creating web pages,
 - Annotating assignment submissions with Crocodoc (tool that allows viewing/editing of documents online), and
 - Organizing course content and activities into a series of modules or lessons.

Faculty respondents were least satisfied with Canvas's capabilities for sending and receiving messages or notifications to and from students and groups, and support for importing or exporting course content.

- The highest rated statement about faculty members' expectations for Canvas was *I expected Canvas to facilitate my communication with my students*. The lowest rated faculty statement was *I expected Canvas to help my students to prepare for exams/tests*.
- The highest rated statements about faculty members' experience with Canvas were *The teaching center on my campus has been available for assistance in using Canvas* and *I have enjoyed using Canvas in my course(s)*. The lowest rated statement was *Canvas increased my effectiveness as a teacher*.
- When asked what they liked most about Canvas, the most frequent answer provided by faculty respondents was SpeedGrader (a tool that streamlines grading and providing feedback on assignments, quizzes, and discussion posts). Also mentioned as positive features were ease-of-use, the Modules tool, and the mobile platform.
- When asked what they liked least about Canvas, the most frequent answers provided by faculty respondents were the Messages tool (Canvas's internal email system), difficulty moving content from Oncourse to Canvas, and technical issues while conducting online discussions.

Key Student Findings

- The highest rated features by students in terms of ease-of-use were Grades and Syllabus. The lowest rated features were Collaborations (e.g., using Google Docs, Etherpad, or similar online

tools) and Groups (e.g., group workspace for communication and collaboration).

- The highest rated features by students in terms of usefulness were Grades and Assignments. The lowest rated features were Collaborations and Calendar
- When asked what they most liked about Canvas, the most frequent student responses were
 - Overall ease-of-use, the clean layout, and the modern user interface;
 - Ability to see their grades on an assignment (and how peers did on that assignment);
 - Tracking grades across assignments, and receiving automated updates when grades were posted by the instructor; and
 - Viewing upcoming modules, assignments, and due dates enabled them to keep up with course requirements.
- When asked what they liked least about Canvas, the most frequent student responses were
 - Difficulty navigating within and across features in Canvas;
 - Difficulty following discussion threads and using the features in the Discussions tool;
 - Confusing and repetitive message systems across the gradebook, assignment feedback, discussions, and announcements features; and
 - Using two different LMS platforms (Canvas and Oncourse) in the same semester.

Summary of Faculty Phone Interviews

- Eight out of the ten faculty members interviewed had positive feedback about Canvas and overall were very satisfied with its features and utility. Most of the faculty members found Canvas to be intuitive and easy to use to organize and manage their courses.
- Features that faculty interview participants found particularly useful were the ability to
 - Organize course content and activities into a series of modules or lessons (Modules);
 - Post assignments, manage submissions, and grade assignments (Assignments and SpeedGrader);
 - Assign peer reviews on assignment submissions (Assignments);
 - Create and use rubrics to grade assignments (Assignments);
 - Administer online quizzes and tests (Quizzes);
 - Create groups for group assignments, discussions, and projects; and
 - Facilitate graded and ungraded discussions (Discussions).
- Although most faculty members interviewed preferred the features in Canvas LMS to similar features in Oncourse LMS, there were some elements of Canvas that faculty members felt could be improved. In general, the interface in Canvas LMS was described as intuitive, but visually unattractive. Navigating from one feature to another (and within a feature) in Canvas was described as awkward; usually it was quicker to go to the homepage/front page of Canvas and start over.



**Evaluation of the Pilot of the Canvas Learning Management System
Implemented in Academic Year 2012-2013
Summary of Survey, Phone Interview, and Focus Group Data
May 11, 2013**

The Center for Evaluation and Education Policy (CEEP) in partnership with the Office of the Vice President for Information Technology (OVPIT) at Indiana University (IU) conducted an evaluation of the Canvas Learning Management System Pilot (Canvas LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU Bloomington, IUPUI, IU East, IPFW, IU Kokomo, IU Northwest, IU South Bend, IU Southeast). This aggregate report for OVPIT summarizes the findings of the evaluation activities conducted between September 2012 and May 2013.

The purpose of the evaluation was to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and OVPIT collected a variety of data from faculty members (total n=29) who used Canvas LMS in their courses during the Spring 2013 semester and from students (total n=734) enrolled in those courses. The evaluation data collection included online surveys of faculty members and students, phone interviews with faculty members, and focus groups with students aimed at capturing stakeholders' experiences with Canvas LMS and their perceptions of its quality and utility.

Dr. Mary Piontek, Senior Research Associate at CEEP, oversaw the design and implementation of the evaluation; created the materials for the Institutional Review Board (IRB) application and submitted the IRB application; conducted the faculty and student survey, faculty phone interview, and focus group data collection activities; completed the analyses of the survey, interview, and focus group data; and created this report on behalf of CEEP.

An exempt research study application was submitted on March 3, 2013 to the Institutional Review Board at Indiana University Bloomington. The application received approval on March 14, 2013. The calendar of activities for the evaluation included the following tasks:

- September 2012-February 2013: Completion of evaluation design and all associated documents, instruments, and materials necessary for implementation;
- February-March 2013: Submission of IRB application (and materials) for exempt review at Indiana University;
- March-May 2013: Student and faculty surveys distributed, faculty interviews conducted, and student focus groups conducted; and
- May 2013: Survey data analysis and report completed for OVPIT.

Summary of Faculty Survey

In March 2013 the twenty-nine faculty members who piloted the Canvas LMS in their courses during the Spring 2013 semester across Indiana University campuses were sent a customized link to an electronic survey (using Qualtrics software) via email to their university email address by Dr. Mary Piontek at CEEP. The faculty members were invited to voluntarily participate in the survey data collection on March 19th, with follow-up emails sent on March 31st, April 19th, and April 26th to all non-respondents. The survey was closed at 5pm (EDT) on May 2, 2013. Twenty-two faculty members responded to the survey (76% = 22/29).

The survey included closed-ended and open-ended questions related to the faculty members' experiences with Canvas LMS and their perceptions of its quality and utility. The survey took approximately 20 minutes to complete. No individual received compensation for participating in the survey. Respondents could skip any items on the survey and could terminate their participation at any time. Only individuals 18 years of age or older (as of the date of opening the survey link) were allowed to participate. See Appendix A, Faculty Survey: Canvas Pilot Spring 2013 Semester, for a copy of the survey questions.

All survey responses are confidential and are reported in the aggregate. Individual comments are not reported with any combination of demographics that allows for identification of individuals.

Ten respondents identified themselves as female and eleven as male. One respondent did not identify a gender. Table 1 provides the years of experience as a faculty member/instructor in higher education, with all respondents having at least two or more years of experience. Table 2 provides the campus affiliation of the respondents, with IUPUI and IU Bloomington having the most respondents.

Table 1: Years as Faculty Member/Instructor in Higher Education

Years as a Faculty Member/Instructor	Female	Male	Total N	%
1 year or less	0	0	0	0%
2-5 years	4	2	6	27%
6-10 years	3	3	7	32%
11-20 years	2	3	5	23%
21-30 years	1	2	3	13%
More than 30 years	0	1	1	5%
Total	10	11	22	100%

Table 2: Campus Affiliation

Campus Affiliation	Female	Male	Total N	%
IU Bloomington	1	5	7	32%
IUPUI	5	4	9	41%
IU East	1	0	1	4%
IPFW	0	0	0	0%
IU Kokomo	0	1	1	4%
IU Northwest	2	1	3	14%
IU South Bend	1	0	1	4%
IU Southeast	0	0	0	0%
Total	10	11	22	100%

During the Spring 2013 semester Canvas LMS was scheduled to be piloted in 35 courses; respondents to the faculty survey represented twenty-two courses. Those courses included the academic areas of business, computer science/computer information technology, economics, engineering, English, law, liberal arts, nursing, and political science [Note: the list of the courses that the faculty respondents taught

are not included in this report to provide anonymity to respondents]. Fifty percent (11) of the courses were structured as online with no face-to-face interaction (see Table 3).

Eighty-six percent (19) of respondents described themselves as being very comfortable in using different types of technology (See Table 4). Respondents used a variety of technology devices to interact with Canvas LMS including most often a tablet (77%), laptop/netbook computer (73%), and mobile phone with web access (59%) (see Table 5).

Table 3: Course Format

Course Format	Total N	%
Face-to-face	5	23%
In a hybrid format using a blend of face-to-face and online interaction	5	23%
Online with face-to-face interaction only for exams	0	0%
Only online with no face-to-face interaction	11	50%
Other	1	4%
Total	22	100%

Table 4: Level of Comfort with Technology

Level of Comfort in Using Different Types of Technology	Female	Male	Total N	%
Very Uncomfortable	1	1	2	9%
Somewhat Uncomfortable	0	0	0	0%
Somewhat Comfortable	1	0	1	5%
Very Comfortable	8	10	19	86%
Total	10	11	22	100%

Table 5: Devices Used to Interact with Canvas LMS

Mobile Devices(s) Used to Interact with Canvas	Total N	% N/22
Mobile phone without web access	0	0%
Mobile phone with web access	13	59%
Portable media player without web access (e.g., mp3 player)	0	0%
Portable media player with web access (e.g., iPod Touch)	1	4%
Ebook reader (e.g., Kindle)	3	14%
Tablet (e.g., iPad)	17	77%
Laptop/Netbook computer	16	73%
Other device	0	0%

The faculty respondents were also asked to rate their level of satisfaction with carrying out common teaching and course management tasks using specific tools and features in the Canvas LMS (see Table 6). Not all tasks were equally used across the courses; the less often used tasks included presenting the course in a language other than English (no users); assigning peer reviews on assignment submissions (three users); allowing students to create their own groups for any purpose (three users), keeping a faculty journal (three users), and having students create web pages (four users). The more frequently used tasks included creating a course syllabus (20 users); uploading, organizing, and sharing course materials (20 users); posting assignments, managing submissions, and grading assignments (19 users); and sending and receiving messages or notifications to and from students and groups (19 users).

Tasks used by at least 50% of respondents had means in the moderately satisfied to highly satisfied range (mean range 2.84-3.69). The highest rated task in this group on a scale of 1 to 4 (not at all satisfied to highly satisfied) was *creating web pages (Pages)* with a mean of 3.69. The lowest rated task used by

more than half of the respondents was *sending and receiving messages or notifications to and from students and groups (Inbox/Conversations)* with a mean of 2.84.

Table 6: Level of Satisfaction with Canvas LMS Tasks

For those tasks which you used Canvas in your course(s) during the Spring 2013 semester, please rate your level of satisfaction with their functionality.	Did Not Use	Not at all Satisfied	Slightly Satisfied	Moderately Satisfied	Highly Satisfied	Total N	Mean
Creating and publishing the course syllabus (Syllabus)	0 (0%)	1 (5%)	3 (15%)	6 (30%)	10 (50%)	20	3.25
Creating a course calendar (Calendar)	7 (35%)	0 (0%)	3 (15%)	5 (25%)	5 (25%)	20	3.15
Managing a personal calendar (Calendar)	15 (75%)	0 (0%)	2 (10%)	2 (10%)	1 (5%)	20	2.80
Uploading, organizing, and sharing course materials (Files)	0 (0%)	1 (5%)	3 (15%)	6 (30%)	10 (50%)	20	3.25
Posting audio/video lectures or other multimedia (Files)	4 (20%)	1 (5%)	1 (5%)	6 (30%)	8 (40%)	20	3.31
Creating web pages (Pages)	7 (35%)	0 (0%)	1 (5%)	2 (10%)	10 (50%)	20	3.69
Having students create web pages (Pages)	16 (80%)	0 (0%)	1 (5%)	1 (5%)	2 (10%)	20	3.25
Organizing course content and activities into a series of modules or lessons (Modules)	4 (20%)	0 (0%)	0 (0%)	6 (30%)	10 (50%)	20	3.62
Posting assignments, managing submissions, and grading assignments (Assignments)	1 (5%)	0 (0%)	2 (10%)	7 (35%)	10 (50%)	20	3.42
Giving formative feedback on draft submissions (Assignments)	11 (55%)	0 (0%)	0 (0%)	2 (10%)	7 (35%)	20	3.78
Assigning peer reviews on assignment submissions (Assignments)	17 (85%)	0 (0%)	0 (0%)	1 (5%)	2 (10%)	20	3.67
Annotating assignment submissions with Crocodoc (SpeedGrader)	9 (45%)	0 (0%)	1 (5%)	2 (10%)	8 (40%)	20	3.64
Using Turnitin originality checking on assignments	14 (70%)	0 (0%)	0 (0%)	4 (20%)	2 (10%)	20	3.33
Giving audio or video feedback (Assignments, Conversations, Discussions, etc.)	13 (65%)	0 (0%)	0 (0%)	4 (20%)	3 (15%)	20	3.43
Creating and administering online quizzes, tests, and/or surveys (Quizzes)	8 (40%)	0 (0%)	2 (10%)	5 (25%)	5 (25%)	20	3.25
Facilitating graded and ungraded discussions (Discussions)	4 (20%)	0 (0%)	2 (10%)	7 (35%)	7 (35%)	20	3.31
Publishing course learning outcomes (Outcomes)	12 (60%)	0 (0%)	0 (0%)	5 (25%)	3 (15%)	20	3.38
Creating and using rubrics to grade assignments (Assignments, Outcomes)	5 (25%)	0 (0%)	2 (10%)	5 (25%)	8 (40%)	20	3.40

Table 6: Level of Satisfaction with Canvas LMS Tasks (continued)

For those tasks which you used Canvas in your course(s) during the Spring 2013 semester, please rate your level of satisfaction with their functionality.	Did Not Use	Not at all Satisfied	Slightly Satisfied	Moderately Satisfied	Highly Satisfied	Total N	Mean
Tracking student mastery of learning outcomes (Outcomes, Rubrics)	10 (50%)	0 (0%)	0 (0%)	6 (30%)	4 (20%)	20	3.40
Managing the course gradebook and grading policies (Assignments, Gradebook, Settings)	2 (10%)	0 (0%)	3 (15%)	7 (35%)	8 (40%)	20	3.28
Using analytics to monitor course and student activity (Analytics)	7 (35%)	0 (0%)	1 (5%)	8 (40%)	4 (20%)	20	3.23
Sending and receiving messages or notifications to and from students and groups (Inbox, Conversations)	1 (5%)	2 (10%)	5 (25%)	6 (30%)	6 (30%)	20	2.84
Creating and managing groups for group assignments, group discussions, and/or group projects (People > Groups)	9 (45%)	0 (0%)	2 (10%)	5 (25%)	4 (20%)	20	3.18
Allowing students to create their own groups for any purpose (People > Groups)	17 (85%)	0 (0%)	1 (5%)	1 (5%)	1 (5%)	20	3.00
Assigning collaborative work in Google docs or Etherpad (Collaborations)	14 (70%)	1 (5%)	1 (5%)	1 (5%)	3 (15%)	20	3.00
Conducting synchronous online discussions, lectures, presentations, office hours, or other real-time activities (Conferences)	14 (70%)	2 (10%)	0 (0%)	0 (0%)	4 (20%)	20	3.00
Keeping a faculty journal on some or all of your students (Faculty Journal)	17 (85%)	1 (5%)	0 (0%)	1 (5%)	1 (5%)	20	2.67
Keeping track of your course tasks (Calendar, Coming Up List, To Do List)	7 (35%)	0 (0%)	1 (5%)	5 (25%)	7 (35%)	20	3.46
Importing or exporting course content (Settings)	4 (20%)	2 (10%)	3 (15%)	4 (20%)	7 (35%)	20	3.00
Integrating an external learning tool or platform with my course, e.g., SoftChalk Cloud, Piazza, etc. (External Tools)	14 (70%)	1 (5%)	0 (0%)	1 (5%)	4 (20%)	20	3.33
Presenting my course in a language other than English (Settings)	20 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	20	--

Ninety-five percent (19/20) of faculty respondents found Canvas LMS either moderately easy (9/20) or very easy (10/20) to use; 60% (12/20) found it highly useful for their teaching and 30% (6/20) moderately useful for their teaching (see Tables 7 and 8). Five female respondents rated Canvas LMS moderately easy to use and five very easy to use. One male rated it slightly easy to use, three moderately easy to use, and five very easy to use. One female respondent found Canvas LMS slightly useful, four moderately useful, and five highly useful. One male respondent found it slightly useful, one moderately useful, and seven highly useful.

Table 7: Overall Ease of Use of Canvas LMS

Please rate the overall Ease of Use of Canvas	Difficult to Use	Slightly Easy to Use	Moderately Easy to Use	Very Easy to Use	Total N	Mean
Overall Ease of Use of Canvas	0 (0%)	1 (5%)	9 (45%)	10 (50%)	20	3.45

Table 8: Overall Utility of Canvas LMS for Teaching

Please rate the overall Usefulness of Canvas for your teaching	Not at all Useful	Slightly Useful	Moderately Useful	Highly Useful	Total N	Mean
Overall Usefulness of Canvas	0 (0%)	2 (10%)	6 (30%)	12 (60%)	20	3.50

Respondents were also asked to rate their level of agreement with a variety of statements about Canvas LMS (see Table 9). All of the statements were rated 3.56 or above on a scale of 1 to 5 (strongly disagree to strongly agree). The highest rated statement was *I expected Canvas to facilitate my communication with my students* with a mean of 4.61. The lowest rated statement was *I expected Canvas to help my students to prepare for exams/tests* with a mean of 3.56.

Table 9: Level of Agreement with Statements about Canvas LMS

Please rate your level of agreement with the following statements about Canvas	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable	Total N	Mean
Canvas enabled me to do what I wanted for my course(s).	0 (0%)	2 (10%)	0 (0%)	9 (45%)	9 (45%)	0 (0%)	20	4.25
Canvas was easy for me to learn how to use.	0 (0%)	0 (0%)	3 (15%)	6 (30%)	10 (50%)	1 (5%)	20	4.37
Canvas was easy for my students to learn how to use.	1 (5%)	1 (5%)	2 (10%)	7 (35%)	9 (45%)	0 (0%)	20	4.10
The teaching center on my campus has been available for assistance in using Canvas.	0 (0%)	0 (0%)	0 (0%)	6 (32%)	8 (42%)	5 (26%)	19	4.57
I expected Canvas to help my students to learn the course materials/content.	2 (11%)	1 (5%)	4 (21%)	8 (42%)	4 (21%)	0 (0%)	19	3.58

Table 9: Level of Agreement with Statements about Canvas LMS (continued)

Please rate your level of agreement with the following statements about Canvas	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable	Total N	Mean
I expected Canvas to help my students to prepare for exams/tests.	1 (5%)	2 (11%)	4 (21%)	8 (42%)	3 (16%)	1 (5%)	19	3.56
I expected Canvas to help my students evaluate how well they are doing in the course.	1 (5%)	0 (0%)	4 (21%)	8 (42%)	5 (26%)	1 (5%)	19	3.89
I expected Canvas to help my students be in control of their own learning in the course.	1 (5%)	0 (0%)	0 (0%)	11 (58%)	7 (37%)	0 (0%)	19	4.21
I expected Canvas to expand access to learning materials available to my students on the course topics.	0 (0%)	1 (5%)	1 (5%)	10 (53%)	7 (37%)	0 (0%)	19	4.21
I expected Canvas to facilitate my communication with my students.	0 (0%)	1 (5%)	0 (0%)	4 (21%)	13 (69%)	1 (5%)	19	4.61
I expected Canvas to facilitate communication between my students.	0 (0%)	2 (10%)	1 (5%)	7 (37%)	7 (37%)	2 (10%)	19	4.12
Canvas increased my efficiency as a teacher.	0 (0%)	2 (10%)	3 (16%)	2 (10%)	12 (63%)	0 (0%)	19	4.26
Canvas increased my effectiveness as a teacher.	0 (0%)	2 (10%)	4 (21%)	6 (32%)	7 (37%)	0 (0%)	19	3.95
Canvas was a valuable aid to me in my teaching.	0 (0%)	1 (5%)	5 (25%)	6 (30%)	8 (40%)	0 (0%)	20	4.05
Using Canvas has been beneficial to my students' overall learning.	0 (0%)	1 (5%)	4 (20%)	7 (35%)	8 (40%)	0 (0%)	20	4.10
I have enjoyed using Canvas in my course(s).	0 (0%)	0 (0%)	2 (10%)	8 (40%)	10 (50%)	0 (0%)	20	4.40
In the future, I would like to use Canvas in this course.	0 (0%)	2 (10%)	2 (10%)	6 (30%)	10 (50%)	0 (0%)	20	4.20
In the future, I would like to use Canvas in my other courses.	1 (5%)	1 (5%)	2 (10%)	4 (20%)	12 (60%)	0 (0%)	20	4.25

When asked what they most liked about Canvas LMS faculty respondents noted that creating and modifying content was easy, and the platform design was intuitive. The mobile access and the ability to connect with social media and online resources (e.g., YouTube) were also noted as positive aspects of Canvas. The ease of creating groups and subgroups was also mentioned by faculty respondents as a feature they most liked.

SpeedGrader, rubrics, and the ability to provide written and verbal feedback enabled faculty respondents to grade more quickly. With the integrated design of the assignments and the gradebook faculty noted that they could make simultaneous updates/edits to both sections. Respondents also appreciated the list of “to do tasks” on the homepage of Canvas LMS that alerted them to assignments to grade.

When asked what they liked least about Canvas, the most frequent answers were the Messages tool (Canvas’s internal email system), difficulty moving content from Oncourse to Canvas, and various challenges managing online discussions. Several respondents noted that the interface is not visually attractive and navigation within Canvas LMS requires more keystrokes than Oncourse; respondents suggested adding a “course home button” on each page of the interface. One respondent noted that s/he wanted to post an RSS feed, but could not find a feature in Canvas that allowed it. One respondent attempted to use SCORM, but could not get Canvas LMS to support it; this person suggested that Adobe Connect be integrated into Canvas to enable more flexible online conferencing.

Some faculty respondents continued to use Oncourse for testing the students, noting that Oncourse allows the faculty instructor to grade each question of an exam for all students before proceeding to the next question which is especially helpful in courses with large numbers of students. Another respondent preferred Angel LMS for grading discussions, and others noted that uploading quizzes/exams into Canvas resulted in typos/errors that had to manually edited.

Features or tools in Canvas LMS that allowed faculty to design their courses and/or teach in a new way included the “blue button” which allowed one faculty respondent to teach on a class day that would have otherwise been cancelled due to winter weather issues. Another respondent used course statistics to track how students were doing throughout the course and to offer assistance to those who were struggling.

The audio-feedback feature in the gradebook, SpeedGrader, and rubrics allowed faculty respondents to expand the type of feedback and assessment they provided to the students. The ability to integrate YouTube video of current events expanded the course content and enhanced the quality of one respondent’s lectures. One faculty respondent used forums (randomly assigned and purposely assigned groups) to enhance online discussions in her/his course. Another faculty respondent noted that the Etherpad allowed his/her students to complete an activity on the web and then share a link with all members of a class.

Summary of Student Survey

In March 2013 the 734 students who were enrolled in a course that piloted the Canvas LMS during the Spring 2013 semester across Indiana University campuses were sent a customized link to an electronic survey (using Qualtrics software) via email to their university email address by Dr. Piontek. The students were invited to voluntarily participate in the survey data collection on March 20th, with follow-up emails sent on March 31st, April 19th, and April 26th to all non-respondents. The survey was closed at 5pm (EDT) on May 2, 2013. One hundred twenty-nine students responded to the survey (18% = 129/734).

The survey included closed-ended and open-ended questions related to the students' experience with Canvas LMS and their perceptions of its quality and utility. The survey took approximately 20 minutes to complete. No individual received compensation for participating in the survey. Respondents could skip any items on the survey and could terminate their participation at any time. Only individuals 18 years of age or older (as of the date of opening the survey link) were allowed to participate. See Appendix B, Student Survey: Canvas Pilot Spring 2013 Semester, for a copy of the survey questions.

All survey responses are confidential and are reported in the aggregate. Individual comments are not reported with any combination of demographics that allows for identification of individuals.

Seventy-eight (61%) respondents identified themselves as female and 48 (37%) as male. Three respondents did not identify their gender. The age of students ranged from 18 to 59 years of age with the greatest percentage (61%, 77/126) in the 18 to 25 range. Female respondents ranged from 18 to 53 years with the largest percentage at age 23 (14%). Male respondents ranged from 19 to 59 years with the largest percentage at age 20 (15%).

Forty-two percent (54) of student respondents are seniors (four or more years undergraduate) (see Table 10). Fifty-six percent of respondents are affiliated with the IUPUI campus (see Table 11).

During the Spring 2013 semester Canvas LMS was scheduled to be piloted in 35 courses; respondents to the student survey represented 26 courses. Those courses included the academic areas of business, computer science/computer information technology, economics, engineering, English, law, liberal arts, nursing, and political science (see Table 12). Forty-five percent (54) of the respondents were in courses structured as online with no face-to-face interaction (see Table 13).

Table 10: Academic Level

Academic Level	Female	Male	Total N	%
First-year undergraduate (Freshman)	7	6	13	10%
Second-year undergraduate (Sophomore)	12	9	23	18%
Third-year undergraduate (Junior)	7	5	12	9%
Four or more years undergraduate (Senior)	32	21	54	42%
Masters student (MA, MS, MBA, MFA, MSW, MPA, etc.)	12	1	13	10%
Doctoral Student (EdD, PhD, etc.)	7	6	13	10%
Total	77	48	128	100%

Table 11: Campus Affiliation

Campus Affiliation	Female	Male	Total N	%
IU Bloomington	11	13	25	19%
IUPUI	42	30	72	56%
IU East	5	1	6	5%
IPFW	0	0	0	0%
IU Kokomo	2	1	3	2%
IU Northwest	3	0	3	2%
IU South Bend	15	3	20	16%
IU Southeast	0	0	0	0%
Total	78	48	129	100%

Table 12: Name of Enrolled Course

Course Name	Total N	%
A101, Introduction to American Studies, IUPUI, Section 32549	6	5%
A303, American Cyber Identify, IUPUI, Section 11827	5	4%
B249, Science & Technology Nursing: Practicum, IU Northwest, Section 2709	0	0%
C104, Business Presentations, IU Bloomington, Section 33980	0	0%
C106, Intro to Computers, IU Kokomo, Section 14565	1	1%
C204, Business Communication, IU Bloomington, Section 30743	5	4%
C204, Business Communication, IU Bloomington, Section 30751	7	6%
C522, Information Technology, Kelley School of Business, Section 1009	0	0%
C522, Information Technology, Kelley School of Business, Section 1011	1	1%
C562, Developing Strategic Capabilities, Kelley School of Business, Section 1021	0	0%
CIT 11200, Information Technology Foundations, IUPUI, Section 11938	3	3%
E104, Introduction to Macroeconomics, IU Northwest, Section 2586	1	1%
ENG G11, ESL for Academic Purposes II, IUPUI, Section 10755 (M/W 9am)	1	1%
ENG G11, ESL for Academic Purposes II, IUPUI, Section 8131 (M/W 12pm)	1	1%
F754, Valuation and Capital Investments, Kelley School of Business, Section 1054	0	0%
G391, Construction of Race, IUPUI, Section 31680	1	1%
H352, Healthcare Finance 1, IU Kokomo, Section 32432	2	2%
H363, The Developing Family and Child, IU Northwest, Section 2293	0	0%
I103, Information Literacy, IU East, Section 31966	2	2%
K441, Transition Across the Lifespan, IU Bloomington, Section 11869	2	2%
N528, Legal Research, IUPUI, Section 12415	6	5%
N528, Legal Research, IUPUI, Section 12414	1	1%
N528, Legal Research, IUPUI, Section 12453	5	4%
OLS 37800, Labor/Management Relations, IUPUI, Section 11818	26	23%
Q110, Intro to Information Literacy, IU South Bend, Section 4166	10	9%
S482, Nursing Management: Practicum, IU Northwest, Section 2479	0	0%
S483, Clinical Nursing Practice Capstone, IU Northwest, Section 2481	0	0%
S485, Growth & Empowerment, IU Northwest, Section 2301	1	1%
TCM 46000, Engineering Communication, IUPUI, Section 10210	2	2%
W310, Computer Based Learning, IU Bloomington, Section 25210	2	2%
W310, Integrating Technology K-12, IUPU Columbus, Section 31792	2	2%
W550, Research in Instructional Computing, IUPUI, Section 13588	7	6%
X574, Global Business, Kelley School of Business, Section 1051	0	0%
Y235, Intro to Public Management, IU South Bend, Section 29791	9	8%
Y576, Contextual Political Analysis, IU Bloomington, Section 32731	4	4%
Total	113	100%

Table 13: Course Format

Course Format	Total N	%
Face-to-face	16	13%
In a hybrid format using a blend of face-to-face and online interaction	45	37%
Online with face-to-face interaction only for exams	2	2%
Only online with no face-to-face interaction	54	45%
Other	3	3%
Total	120	100%

Thirty-six percent (44) of respondents described themselves as being very comfortable in using different types of technology and 19% (23) described themselves as being very uncomfortable (see Table 14). Respondents used a variety of technology devices to interact with Canvas LMS including most often a laptop/netbook computer (74%) and mobile phone with web access (71%) (see Table 15).

Table 14: Level of Comfort with Technology

Level of Comfort in Using Different Types of Technology	Female	Male	Total N	%
Very Uncomfortable	12	10	22	19%
Somewhat Uncomfortable	16	4	20	17%
Somewhat Comfortable	21	12	33	28%
Very Comfortable	24	19	43	36%
Total	73	45	118	100%

Table 15: Devices Used to Interact with Canvas LMS

Mobile Devices(s) Used to Interact with Canvas	Total N	% (N/129)
Mobile phone without web access	15	12%
Mobile phone with web access	91	71%
Portable media player without web access (e.g., mp3 player)	12	9%
Portable media player with web access (e.g., iPod Touch)	25	19%
Ebook reader (e.g., Kindle)	12	9%
Tablet (e.g., iPad)	41	32%
Laptop/Netbook computer	96	74%
Other device	5	4%

Respondents used a variety of web browsers in the courses that piloted Canvas LMS, most often Internet Explorer (32%), Firefox (31%), and Chrome (28%) (see Table 16). Most students (51%) averaged fewer than five hours per week using Canvas for their courses (see Table 17). Seventy-eight percent (93) of respondents had other instructors that used Oncourse LMS (see Table 18).

Table 16: Primary Web Browser

Primary Web Browser Used for Course	Total N	%
Chrome	34	28%
Firefox	38	31%
Internet Explorer	39	32%
Safari	8	7%
Other (Please describe)	2	2%
Total	121	100%

Table 17: Average Number of Hours Per Week Using Canvas LMS

Average Number of Hours Using Canvas for the Course During the Spring 2013 Semester	Total N	%
Never	3	2%
Fewer than 5 hours	62	51%
5-10 hours	46	38%
11-15 hours	6	5%
16-20 hours	2	2%
More than 20 hours per week	2	2%
Total	121	100%

Table 18: Use of Oncourse LMS

Have any of your instructors in courses at Indiana University used Oncourse Learning Management System?	Total N	%
Yes	93	78%
No	11	9%
I Do Not Know	16	13%
Total	120	100%

The student respondents were asked to rate the ease of use of the features of Canvas LMS on a scale of 1 to 4 (difficult to use to very easy to use) (see Table 19). Most of the features were rated in the moderately easy to use range (i.e., means around 3).

The highest rated feature was *grades* (e.g., *potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.*) with a mean of 3.28; this feature was used by 87% of respondents to this question. The lowest rated feature was *collaborations* (e.g., *using Google Docs, Ether Pad, or similar online tools*) with a mean of 2.48; this was also the least often used feature (42% of respondents to this question did not use this feature).

Table 19: Ease of Use of Canvas LMS Features

Please rate the ease of use of the following features of Canvas.	Did Not Use This Feature	Difficult to Use	Slightly Easy to Use	Moderately Easy to Use	Very Easy to Use	Total N	Mean
Announcements (e.g. send/receive messages, information, updates about course activities, etc.)	6 (5%)	6 (5%)	23 (20%)	38 (33%)	42 (37%)	115	3.06
Assignments (e.g., readings, papers, projects, quizzes, exams, assignments, etc.)	3 (3%)	8 (7%)	19 (17%)	41 (36%)	42 (37%)	113	3.06
Calendar (e.g., view and manage personal calendar, course events, and course due dates.	37 (32%)	10 (9%)	17 (15%)	29 (25%)	22 (19%)	115	2.81
Collaborations (e.g., using Google Docs, Ether Pad, or similar online tools)	48 (42%)	13 (11%)	19 (16%)	25 (22%)	10 (9%)	115	2.48

Table 19: Ease of Use of Canvas LMS Features (continued)

Please rate the ease of use of the following features of Canvas.	Did Not Use This Feature	Difficult to Use	Slightly Easy to Use	Moderately Easy to Use	Very Easy to Use	Total N	Mean
Conversations/Inbox (e.g., send/receive messages, information, and updates to and from other users).	7 (6%)	13 (11%)	22 (19%)	33 (29%)	40 (35%)	115	2.93
Discussions (e.g., blogs/wikis for communicating with instructor and other students)	21 (18%)	10 (9%)	23 (20%)	28 (24%)	33 (29%)	115	2.89
Files (e.g., resources, repository of materials)	23 (20%)	11 (10%)	25 (22%)	25 (22%)	30 (26%)	114	2.81
Grades (e.g., potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.)	15 (13%)	5 (4%)	14 (12%)	29 (25%)	52 (45%)	115	3.28
Groups (e.g., group workspace for communication and collaboration)	42 (37%)	12 (10%)	20 (18%)	18 (16%)	21 (19%)	113	2.68
Modules (e.g., course design, topical areas, chronological order of course, etc.)	21 (18%)	12 (10%)	17 (15%)	31 (27%)	34 (30%)	115	2.93
Notifications (e.g., course updates sent to email, cell phone, Facebook, or Twitter)	14 (12%)	11 (10%)	19 (17%)	32 (28%)	38 (33%)	114	2.97
Outcomes (e.g., course expectations for learning, progress towards mastery of outcomes, etc.)	39 (34%)	9 (8%)	17 (15%)	30 (26%)	20 (17%)	115	2.80
People (e.g., roster of students and faculty)	26 (23%)	6 (5%)	17 (15%)	29 (25%)	37 (32%)	115	3.09
Quizzes (e.g., completing quizzes/exams online, points earned, rubrics, etc.)	32 (28%)	6 (5%)	19 (17%)	19 (17%)	38 (33%)	114	3.09
Syllabus (e.g., course outline, readings, assignments, resources, and schedule, etc.)	6 (5%)	4 (3%)	20 (18%)	34 (30%)	50 (44%)	114	3.20

The student respondents were also asked to rate the utility (i.e., usefulness) of the features of Canvas LMS on a scale of 1 to 4 (not at all useful to highly useful) (see Table 20). Similar to their ratings on the ease of use, the highest rated feature was *grades (e.g., potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.)* with a mean of 3.51. The lowest rated feature was *collaborations (e.g., using Google Docs, Ether Pad, or similar online tools)* with a mean of 2.64. Most of the features were rated in the moderately useful range (i.e., means around 3).

Student respondents were asked to rate their level of agreement with a variety of statements about Canvas LMS (see Table 21). All of the statements had a mean rating of 3.08 or above on a scale of 1 to 5 (strongly disagree to strongly agree). The highest rated statement was *Canvas helps me to know what grade I received on an assignment/quiz/project* with a mean of 4.18; and the lowest rated statement was *Canvas helps me to study for exams/tests* with a mean of 3.08.

The statements with the highest percentage of strongly disagree and disagree ratings were *In the future, my professor/instructor should continue to use Canvas in this course* (32% of respondents to the question) and *I would like to use Canvas in future courses at Indiana University* (31%). The statement with the lowest percentage of strongly disagree and disagree ratings was *my professor/ instructor has been available for assistance when I have had Canvas difficulties* (5% of respondents to the question).

Table 20: Utility of Canvas LMS Features

Please rate the usefulness of the following features of Canvas in contributing to your learning in this course.	Did Not Use This Feature	Not at all Useful	Slightly Useful	Moderately Useful	Highly Useful	Total N	Mean
Announcements (e.g. send/receive messages, information, updates about course activities, etc.)	3 (3%)	4 (4%)	24 (21%)	37 (33%)	45 (39%)	113	3.12
Assignments (e.g., readings, papers, projects, quizzes, exams, assignments, etc.)	3 (3%)	3 (3%)	14 (12%)	38 (33%)	55 (49%)	113	3.32
Calendar (e.g., view and manage personal calendar, course events, and course due dates.	38 (34%)	10 (9%)	23 (20%)	23 (20%)	19 (17%)	113	2.68
Collaborations (e.g., using Google Docs, Ether Pad, or similar online tools)	45 (40%)	9 (8%)	21 (19%)	22 (20%)	15 (13%)	112	2.64
Conversations/Inbox (e.g., send/receive messages, information, and updates to and from other users).	16 (14%)	4 (4%)	17 (15%)	42 (37%)	34 (30%)	113	3.09
Discussions (e.g., blogs/wikis for communicating with instructor and other students)	21 (19%)	7 (6%)	23 (21%)	29 (26%)	31 (28%)	111	2.93
Files (e.g., resources, repository of materials)	21 (19%)	4 (4%)	24 (21%)	30 (27%)	33 (29%)	112	3.01
Grades (e.g., potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.)	15 (13%)	1 (1%)	7 (6%)	31 (27%)	59 (52%)	113	3.51
Groups (e.g., group workspace for communication and collaboration)	37 (33%)	7 (6%)	13 (12%)	38 (34%)	17 (15%)	112	2.87
Modules (e.g., course design, topical areas, chronological order of course, etc.)	19 (17%)	9 (8%)	17 (15%)	34 (30%)	34 (30%)	113	2.99
Notifications (e.g., course updates sent to email, cell phone, Facebook, or Twitter)	14 (12%)	13 (12%)	14 (12%)	36 (32%)	36 (32%)	113	2.96
Outcomes (e.g., course expectations for learning, progress towards mastery of outcomes, etc.)	34 (31%)	7 (6%)	22 (20%)	29 (26%)	19 (17%)	111	2.78
People (e.g., roster of students and faculty)	24 (21%)	8 (7%)	25 (22%)	33 (29%)	23 (20%)	113	2.80

Table 20: Utility of Canvas LMS Features (continued)

Please rate the usefulness of the following features of Canvas in contributing to your learning in this course.	Did Not Use This Feature	Not at all Useful	Slightly Useful	Moderately Useful	Highly Useful	Total N	Mean
Quizzes (e.g., completing quizzes/exams online, points earned, rubrics, etc.)	30 (27%)	5 (4%)	16 (14%)	29 (26%)	33 (29%)	113	3.08
Syllabus (e.g., course outline, readings, assignments, resources, and schedule, etc.)	6 (5%)	5 (5%)	18 (16%)	39 (35%)	44 (39%)	112	3.15

Table 21: Level of Agreement with Statements about Canvas LMS

Please rate your level of agreement with the following statements about Canvas.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable	Total N	Mean
Canvas helps me to learn the course materials/content.	10 (9%)	8 (7%)	28 (25%)	48 (43%)	15 (13%)	3 (3%)	112	3.46
Canvas helps me to study for exams/tests.	11 (10%)	19 (17%)	29 (26%)	27 (24%)	11 (10%)	14 (13%)	111	3.08
Canvas helps me to complete course assignments.	5 (4%)	10 (9%)	16 (14%)	46 (41%)	31 (28%)	4 (4%)	112	3.81
Canvas helps me to take quizzes/exams.	9 (8%)	9 (8%)	24 (22%)	32 (29%)	20 (18%)	17 (15%)	111	3.48
Canvas helps me to make efficient use of my time in the course.	11 (10%)	13 (11%)	20 (18%)	37 (33%)	27 (24%)	4 (4%)	112	3.52
Canvas helps me to be in control of my own learning in the course.	8 (7%)	12 (11%)	25 (22%)	36 (32%)	27 (24%)	4 (4%)	112	3.57
Canvas helps me to know what grade I received on an assignment/quiz/project.	4 (4%)	6 (5%)	8 (7%)	33 (30%)	50 (45%)	10 (9%)	111	4.18
Canvas helps me to track my overall grade in the course.	6 (5%)	5 (5%)	7 (6%)	30 (27%)	52 (47%)	11 (10%)	111	4.17
Canvas helps me to communicate with my professor.	3 (3%)	8 (7%)	11 (10%)	46 (41%)	35 (32%)	8 (7%)	111	3.99
Canvas expands access to learning materials/resources available to me (e.g., print, audio, video, etc.).	7 (6%)	6 (5%)	30 (27%)	43 (38%)	22 (20%)	4 (4%)	112	3.62
Canvas was beneficial to my overall learning in the course.	9 (8%)	12 (11%)	31 (28%)	35 (31%)	22 (20%)	2 (2%)	111	3.45

Table 21: Level of Agreement with Statements about Canvas LMS (continued)

Please rate your level of agreement with the following statements about Canvas.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable	Total N	Mean
I have enjoyed using Canvas in my course(s).	14 (12%)	18 (16%)	19 (17%)	36 (32%)	21 (19%)	4 (4%)	112	3.30
In the future, my professor/instructor should continue to use Canvas in this course.	14 (12%)	23 (20%)	13 (12%)	31 (28%)	27 (24%)	4 (4%)	112	3.31
I would like to use Canvas in future courses at Indiana University.	17 (15%)	18 (16%)	18 (16%)	32 (29%)	22 (20%)	5 (4%)	112	3.22
University Information Technology Services (UITS) has been available for assistance when I have had Canvas difficulties.	7 (6%)	5 (4%)	30 (27%)	21 (19%)	10 (9%)	39 (35%)	112	3.30
My professor/instructor has been available for assistance when I have had Canvas difficulties.	5 (4%)	1 (1%)	15 (13%)	39 (35%)	38 (34%)	14 (13%)	112	4.06

For a comparison of faculty and student respondents' mean rating on similar statements about Canvas LMS see Table 22. In general, faculty respondents' ratings are higher than student respondents' ratings on the same statement, although they often follow similar patterns (i.e., comparatively low ratings on the same statement or comparatively moderate ratings on the same statement).

When asked what they most liked about Canvas LMS student respondents noted being able to see their grades on an assignment (and how peers did on that assignment), track grades across assignments, and receive automated updates when grades were posted by the instructor. Student respondents also noted that being able to see upcoming modules, assignments, and due dates enabled them to keep up with course requirements.

Many respondents found the design of the Canvas interface to be easy to understand and navigate with clearly defined tabs. Others noted that being able to see the groups in which they were a member, create a student profile, and communicate with small groups and the entire class as positive aspects of Canvas LMS. The announcements feature that updated students of important events was also noted by respondents as useful. Other respondents liked the discussion board display of posts in the order in which they were received, making it easier to track the flow of an online conversation. Student respondents also praised the screen sharing and file sharing features of Canvas.

Table 22: Comparison of Level of Agreement with Statements about Canvas LMS

Faculty Statement	Faculty Mean	Student Statement	Student Mean
The teaching center on my campus has been available for assistance in using Canvas.	4.57	UITS has been available for assistance when I have had Canvas difficulties.	3.30
I expected Canvas to help my students to learn the course materials/content.	3.58	Canvas helps me to learn the course materials/content.	3.46
I expected Canvas to help my students to prepare for exams/tests.	3.56 (lowest mean)	Canvas helps me to study for exams/tests.	3.08 (lowest mean)
I expected Canvas to help my students be in control of their own learning in the course.	4.21	Canvas helps me to be in control of my own learning in the course.	3.57
I expected Canvas to expand access to learning materials available to my students on the course topics.	4.21	Canvas expands access to learning materials/resources available to me (e.g., print, audio, video, etc.).	3.62
I expected Canvas to facilitate my communication with my students.	4.61	Canvas helps me to communicate with my professor.	3.99
Using Canvas has been beneficial to my students' overall learning.	4.10	Canvas was beneficial to my overall learning in the course.	3.45
I have enjoyed using Canvas in my course(s).	4.40	I have enjoyed using Canvas in my course(s).	3.30
In the future, I would like to use Canvas in this course.	4.20	In the future, my professor/instructor should continue to use Canvas in this course.	3.31
In the future, I would like to use Canvas in my other courses.	4.25	I would like to use Canvas in future courses at Indiana University.	3.22

When asked what they liked least about Canvas LMS a few student respondents noted the “blue button” feature failed a number of times and that their instructor defaulted to Adobe Connect for online videoconferencing. Other respondents noted the inability to archive discussions for future reference or to save all lectures in a separate file as negative aspects of Canvas. A few student respondents found Canvas’s multiple message systems confusing and repetitive: messages, gradebook updates, assignment feedback, discussions, and announcements.

A few respondents noted that when taking quizzes or exams the Internet connection would fail or slow down considerably. Uploading assignments was difficult for some student respondents; others did not like that Word format documents needed to be cut and pasted (i.e., command V), rather than uploaded for some of their course assignments.

Some student respondents found it difficult to adapt to the *Canvas* LMS interface, having used Oncourse for their other courses and in previous semesters at IU. They noted that the layout of tabs changed from one feature to another, and navigating between features was not intuitive. A few respondents noted that their instructor(s) used both Canvas and Oncourse to provide course materials, post information, and conduct assessment which was confusing and onerous. Others noted that they simply would prefer to have one LMS for all of their courses.

Summary of Faculty Phone Interviews

In March 2013 the 29 faculty members who piloted the Canvas LMS in their courses during the Spring 2013 semester across Indiana University campuses were sent an email to their university email address by Dr. Mary Piontek at CEEP inviting them to voluntarily participate in a 20-minute phone interview about experiences with Canvas LMS and their perceptions of its quality and utility.

Ten (34%) faculty members agreed to participate in the phone interview data collection process, and interviews were conducted March through May 2013. Dr. Piontek called each faculty member at a date, time, and phone number that was most convenient to them. Each faculty member completed a consent form as required by the IRB and handwritten notes were taken during the interviews; findings across the interviews are summarized below. See Appendix C, Faculty Interview Protocol, for a copy of the interview protocol and consent form.

Faculty members representing IU Bloomington (2), IUPUI (5), IU Kokomo (1), and IU Northwest (2) participated in the phone interviews. Of the seven faculty members from the IU Bloomington and IUPUI campuses, three taught courses in the Kelley Direct Program in the Kelley School of Business. The courses discussed by the faculty members in the interviews included business, computer and information technology, economics, engineering, liberal arts, and nursing areas of study.

Three faculty members' courses were taught face-to-face, two faculty members' courses were in a hybrid format (face-to-face and online sessions), and five faculty members' courses were completely online. Each of the faculty members had used Oncourse LMS software, and three had used Angel LMS software before piloting Canvas LMS.

The faculty members were asked to describe what they most and least liked about the Canvas LMS; to identify any features that allowed them to design their courses or teach in new ways; and whether Canvas met their expectations for use in their courses. Eight of the faculty members interviewed had positive feedback about Canvas and overall were very satisfied with its features and utility. One interview participant was moderately satisfied with Canvas; this faculty member stated that s/he had limited time to familiarize him/herself with Canvas before piloting it in the course and thus had been selective about which features s/he used. One interview participant was not satisfied with Canvas and would not choose to use it in the future.

Most of the faculty members found Canvas to be intuitive and easy to use to organize and manage their courses. One faculty member described the difference between Oncourse LMS and Canvas LMS as Oncourse having the perspective of a tools-driven system and Canvas having the perspective of an instruction-driven system.

Features that interview participants found particularly useful were the ability to organize course content and activities into a series of modules or lessons (Modules); to post assignments, manage submissions, and grade assignments (Assignments and SpeedGrader); to assign peer reviews on assignment submissions (Assignments); to create and use rubrics to grade assignments (Assignments, Outcomes); to administer online quizzes and tests (Quizzes); to create groups for group assignments, discussions, and projects (People>Groups); and to facilitate graded and ungraded discussions (Discussions).

The integrated design of the calendar, syllabus, assignments, and conversations features of Canvas LMS was noted as an important element. Faculty members praised the ability to add/edit an entry in the assignments feature of Canvas and have related information dynamically populated in the calendar and syllabus. This not only saved time for the faculty members in making revisions to their courses, but also provided real-time updated information to students across multiple features in a Canvas course site.

Faculty members also noted that students appreciated that Canvas LMS could be accessed from a variety of technology devices; being able to respond to students' messages via text message through the mobile application allowed one faculty member to be very responsive to students at any time or place s/he wished to.

The discussion feature of Canvas was praised by faculty participants with online and hybrid courses. Both the quality and quantity of student-to-student and faculty-to-student interactions was described as significantly increasing when using Canvas LMS when compared to using Oncourse LMS. The faculty members created full-roster and small group discussion groups. One faculty member asked each student to upload a picture to his/her student profile so that every member of the course would see the faces of peers in the online course. A faculty member, who chose not to use the discussion, conferences, or collaboration features of Canvas in his/her face-to-face course, thought that those features would be particularly useful in hybrid and online courses taught in his/her department (that serve multiple IU campuses and/or external clients), especially in courses that emphasized group assignments and flexible grouping across a semester.

Faculty members who used group assignments in their courses noted that the ability to provide feedback on an assignment submitted by one member of a group and have that information available to all members of the group saved significant time in grading and provided consistent information to all members of a group about the quality of their collective work. Many of the faculty interviewed used the SpeedGrader feature in Canvas to streamline grading on discussion/blog postings, papers, projects, and presentation materials (e.g., PowerPoint documents). One faculty member noted that an assignment that typically took an entire weekend to grade had been reduced to four hours of grading time with the use of SpeedGrader. Another faculty member noted that s/he appreciated that when s/he logged into Canvas LMS there was a "to-do" list of assignments to assess/grade.

Using rubrics for group and individual student presentations, papers, and projects in Canvas also reduced faculty time devoted to grading and increased students' understanding of course expectations. One faculty member noted that s/he used rubrics as part of a peer-review assignment with students and found that the quality and depth of the feedback provided was appreciated by their peers and was clearly reflected in subsequent written work.

Some of the interview participants used the quizzes feature of Canvas to create timed quizzes and mastery tests (with randomized test questions and/or branching of questions for remediation) that could be attempted multiple times. One faculty member noted that assessments instruments s/he previously created in Oncourse when imported into Canvas unfortunately had formatting errors that needed to be recreated/edited; while another faculty member noted that importing test-banks from publishers/external educational sources was very easy and error free.

One interview participant had used the feature in the modules tools that blocked access to a module until a previous one had been completed successfully and found this was very helpful in assuring that students had attained mastery of foundational content before progressing to more advanced topics. Another interview participant noted that when posting videos for students to view as part of their coursework, the feature in Canvas that allowed students to receive credit for watching the video was helpful.

Informally a few of the faculty members asked their students whether they preferred Canvas or Oncourse, or for students in the Kelley Direct Program, Angel LMS system for their courses. Most of the students that replied to the instructors' informal emails preferred Canvas LMS to the other two systems.

Although most of the faculty members interviewed preferred the features in Canvas LMS to similar features in Oncourse LMS, there were some elements of Canvas that faculty members felt could be

improved. In general, the interface in Canvas LMS was described as intuitive, but visually unattractive. Navigating from one feature to another (and within a feature) in Canvas was described as awkward; usually it was quicker to go to the homepage/front page of Canvas and start over. One faculty member noted that s/he would have liked to be able to rename the navigation tabs to better align with the course design (e.g., changing the name of a tab from quizzes to homework). A few faculty members noted that their students had difficulty at the beginning of the semester in understanding how to access the Canvas course site to log in, but most noted that after a demonstration by the instructor students quickly adapted to the process.

One interview participant liked that the conversation feature in Canvas provided an ongoing thread of the messages between the faculty member and an individual student. However, another faculty member noted that unlike the message system in Oncourse that archives messages sent by the faculty member and students, the conversation feature in Canvas does not appear to automatically archive this information for future reference once the course is completed. This faculty member did not investigate if the journal feature of Canvas has archiving capability that might ameliorate the issue.

One faculty member liked the text messaging system feature but wanted to be able to provide basic formatting to the text, as can be done in the announcement feature. A faculty member from the IU Northwest campus noted that when posting deadlines for assignments the Canvas system did not appear to have a mechanism for designating the time zone (i.e., Central versus Eastern).

Those faculty members who used the video tool in Canvas to create and post video content for the most part found the tool to be very user-friendly, but one interview participant noted that the tool does not allow for videoediting. One interview participant was unable to integrate an RSS feed into individual assignments for his/her students; the only option appeared to be to add an RSS feed into the announcements feature in Canvas. Another faculty member noted that the “blue button” feature failed a number of times during the semester; another participant defaulted to Adobe Connect for online videoconferencing.

One faculty member noted that it was not possible to view the full class list in the roster; the entire class listing could only be viewed in the gradebook tool. Another faculty member chose not to use the gradebook feature because s/he did not want grades made publically available to students as soon as they were added to the gradebook; instead this faculty member used Oncourse for tracking grades and releasing them at a later point in time. This same interview participant would have liked a feature in Canvas that allowed for assigning letter grades (in addition to the numeric grading scales). Another faculty member noted that although s/he liked the rubric feature, s/he has some difficulty with the system seeming to advance from one student to another resulting in incorrect feedback going to students.

One interview participant noted that within the file tool s/he could not create subfolders for collections materials, unlike in Oncourse. Another faculty member, while s/he liked the ability to import curricular materials/tests from publishers, found that once files were imported they could not be easily moved in clusters, hidden from student access, or edited. This respondent was not able to easily edit exam questions within an imported file, and had to individually delete or move hundreds of files one at a time, rather than having an option to “select all and move.” To block the students from accessing the files the instructor blocked the entire “file” tab from students thus limiting the flexibility s/he had in using that feature in Canvas.

Summary of Student Focus Group Interviews

In March 2013 four faculty members at the IU Bloomington campus with hybrid or face-to-face courses that piloted the Canvas LMS during the Spring 2013 semester were sent an email by Dr. Piontek asking to volunteer to have a 15-20 minute focus group conducted with their students (volunteers only) during a session of their regularly scheduled course.

Of the four faculty members who were contacted one person volunteered to have a focus group take place in his/her course on March 23, 2013. Another faculty member responded that although his/her course was originally designed to be a hybrid course it was actually delivered as a fully online course and thus would not be suitable for an in-person focus group session. The remaining two faculty members did not respond to the email invitation (or subsequent follow-up emails).

Because only three students volunteered to participate in the focus group held on March 23rd on the IU Bloomington campus their responses are not summarized separately in this report. Instead, the students' comments are incorporated into the student survey summary of this report within similar questions (i.e., likes and dislikes). The three participating students completed consent forms as required by the IRB and handwritten notes were taken during the 20-minute focus group session by Dr. Piontek. See Appendix D, Student Focus Group Protocol, for a copy of the focus group protocol and consent form.

Appendix A

Faculty Survey: Canvas Pilot Spring 2013 Semester

Introduction and Consent

The Center for Evaluation and Education Policy (CEEP) in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation data collection includes online surveys of faculty members and students, phone interviews with faculty members, and focus groups with students aimed at capturing stakeholders experience with *Canvas* LMS and their perceptions of its quality and utility.

You are being invited to participate in the survey data collection because you are a faculty member who is implementing the *Canvas* LMS pilot in one or more of your courses during the Spring 2013 semester.

Your responses are confidential and will be reported in the aggregate in reports to the program staff. Individual comments will not be reported with any combination of demographics that would allow for identification of individuals. An aggregate report will be prepared for the Office of the Vice President for Information Technology summarizing findings of the data sets from the phone interviews, focus groups, and surveys.

Participation in the survey is completely voluntary. No individual will receive any compensation for participating. You may skip any items on the survey that you wish. You may terminate your participation in the survey at any time.

The survey should take approximately 20 minutes to complete. The survey data collection will close at 5pm (EST) on Day, Month, Date, 2013.

The survey is being administered by the Center for Evaluation and Education Policy (CEEP) at Indiana University. The CEEP staff members serve as the external evaluators for the Evaluation of Canvas Learning Management System Pilot at Indiana University Campuses, and adhere to all federal and state legal and ethical guidelines for data security and privacy. If you have any questions about the survey, please contact Dr. Mary Piontek at mepionte@indiana.edu

If you are 18 years of age or older as of today's date and consent to participate in the survey data collection process, please acknowledge those conditions in the question below. Then proceed to next page to begin the survey.

Pre-Question 1: I acknowledge that I am at least 18 years of age or older as of today's date and consent to participate in this survey (will be a required check box)

Part I: Course/IU Context

- Q1: For how many years have you been an instructor/faculty member in higher education?
Scale: 1 year or less, 2-5 years, 6-10 years, 11-20 years, 21-30 years, more than 30 years
- Q2: What is your gender? (open text box)
- Q3: At which campus are you a faculty member? (Choose your PRIMARY academic appointment)
IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, IPFW-Fort Wayne
- Q4: In which course during Spring 2013 did you use **Canvas**? (If you used Canvas in multiple courses, please choose one for the purpose of this survey)
Please note: Although we ask you to identify the course in which you used Canvas this survey is not an evaluation of the course and the course name/number will not be identified in any aggregate reports. We will use this information only to create categories of types (disciplinary areas) and levels of courses for reporting purposes.
(drop down list of Canvas pilot courses)
- Q5: That course was primarily delivered (Choose one BEST answer)
Scale: face-to-face; in a hybrid format using a blend of face-to-face and online interaction; online with face-to-face interaction only for exams; only online with no face-to-face interaction; other (please describe).

Part II: Use of Technology

General Level of Experience/Use:

- Q6: In terms my level of comfort in using different types of technology, I am
Scale: very uncomfortable, somewhat uncomfortable, somewhat comfortable, very comfortable
- Q7: Which mobile device(s) do you currently use to interact with **Canvas**? (Choose all that apply)
Mobile phone without web access; mobile phone with web access; portable media player without web access (e.g., mp3 player); portable media player with web access (e.g., iPod Touch); Ebook reader (e.g., Kindle); tablet (e.g., iPad); Laptop/Netbook computer; other device (please describe)

Utilization of Canvas Technology in courses

- Q8: For those tasks which you used **Canvas** in your course(s) during the Spring 2013 semester, please rate your level of satisfaction with their functionality?
Scale: Did Not Use, Highly Satisfied, Moderately Satisfied, Slightly Satisfied, Not at all Satisfied
- Creating and publishing the course syllabus (Syllabus)
 - Creating a course calendar (Calendar)

- Managing a personal calendar (Calendar)
- Uploading, organizing, and sharing course materials (Files)
- Posting audio/video lectures or other multimedia (Files)
- Creating web pages (Pages)
- Having students create web pages (Pages)
- Organizing course content and activities into a series of modules or lessons (Modules)
- Posting assignments, managing submissions, and grading assignments (Assignments)
- Giving formative feedback on draft submissions (Assignments)
- Assigning peer reviews on assignment submissions (Assignments)
- Annotating assignment submissions with Crocodoc (SpeedGrader)
- Using Turnitin originality checking on assignments.
- Giving audio or video feedback (Assignments, Conversations, Discussions, etc.)
- Creating and administering online quizzes, tests, and/or surveys (Quizzes)
- Facilitating graded and ungraded discussions (Discussions)
- Publishing course learning outcomes (Outcomes)
- Creating and using rubrics to grade assignments (Assignments, Outcomes)
- Tracking student mastery of learning outcomes (Outcomes, Rubrics)
- Managing the course gradebook and grading policies (Assignments, Gradebook, Settings)
- Using analytics to monitor course and student activity (Analytics)
- Sending and receiving messages or notifications to and from students and groups (Inbox, Conversations)
- Creating and managing groups for group assignments, group discussions, and/or group projects (People > Groups)
- Allowing students to create their own groups for any purpose (People > Groups)
- Assigning collaborative work in Google docs or Etherpad (Collaborations)
- Conducting synchronous online discussions, lectures, presentations, office hours, or other real-time activities (Conferences)
- Keeping a faculty journal on some or all of your students (Faculty Journal)
- Keeping track of your course tasks (Calendar, Coming Up List, To Do List)
- Importing or exporting course content (Settings)
- Integrating an external learning tool or platform with my course, e.g., SoftChalk Cloud, Piazza, etc. (External Tools)
- Presenting my course in a language other than English (Settings)
- Other

Q9: Please rate the overall Ease of Use of *Canvas*

Scale: Very Easy to Use, Moderately Easy to Use, Slightly Easy to Use, Difficult to Use

Q10: Please rate the overall Usefulness of *Canvas* for your teaching.

Scale: Highly Useful, Moderately Useful, Slightly Useful, Not at all Useful

Q11: What did you like MOST about *Canvas*? Why? (open text box)

Q12: What did you like LEAST about *Canvas*? Why? (open text box)

Q13: Which, if any, features/tools in *Canvas* allowed you to design your course and/or teach in a new way?
(open text box)

Part III: Feedback on IU Learning Technology Pilots

Scale: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Not Applicable

Task-technology fit

1. *Canvas* enabled me to do what I wanted for my course(s).
2. *Canvas* was easy for me to learn how to use.
3. *Canvas* was easy for my students to learn how to use.

Facilitating conditions

1. The teaching center on my campus has been available for assistance in using *Canvas*.

Expected outcomes of LMS use

1. I expected *Canvas* to help my students to learn the course materials/content.
2. I expected *Canvas* to help my students to prepare for exams/tests.
3. I expected *Canvas* to help my students evaluate how well they are doing in the course.
4. I expected *Canvas* to help my students be in control of their own learning in the course.
5. I expected *Canvas* to expand access to learning materials available to my students on the course topics.
6. I expected *Canvas* to facilitate my communication with my students.
7. I expected *Canvas* to facilitate communication between my students

LMS performance impact

1. *Canvas* increased my efficiency as a teacher.
2. *Canvas* increased my effectiveness as a teacher.
3. *Canvas* was a valuable aid to me in my teaching.
4. Using *Canvas* has been beneficial to my students' overall learning.

Attitude towards LMS use

1. I have enjoyed using *Canvas* in my course(s).
2. In the future, I would like to use *Canvas* in this course.
3. In the future, I would like to use *Canvas* in my other courses.

Appendix B

Student Survey: Canvas Pilot Spring 2013 Semester

Introduction and Consent

The Center for Evaluation and Education Policy (CEEP) in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation data collection includes online surveys of faculty members and students, phone interviews with faculty members, and focus groups with students aimed at capturing stakeholders experience with *Canvas* LMS and their perceptions of its quality and utility.

An aggregate report will be prepared for the Office of the Vice President for Information Technology summarizing findings of the data sets from the phone interviews, focus groups, and surveys.

You are being invited to participate in the survey data collection because you are enrolled in one of the courses implementing the Canvas LMS pilot during the Spring 2013 semester.

Your responses are confidential and will be reported in the aggregate in reports to the program staff. Individual comments will not be reported with any combination of demographics that would allow for identification of individuals.

Participation in the survey is completely voluntary. No individual will receive any compensation for participating. You may skip any items on the survey that you wish. You may terminate your participation in the survey at any time.

The survey should take approximately 15 minutes to complete. The survey data collection will close at 5pm (EST) on Day, Month, Date, 2013.

The survey is being administered by the Center for Evaluation and Education Policy (CEEP) at Indiana University. The CEEP staff members serve as the external evaluators for the Evaluation of Canvas Learning Management System Pilot at Indiana University Campuses, and adhere to all federal and state legal and ethical guidelines for data security and privacy. If you have any questions about the survey, please contact Dr. Mary Piontek at mepionte@indiana.edu

If you are 18 years of age or older as of today's date and consent to participate in the survey data collection process, please acknowledge those conditions in the question below. Then proceed to next page to begin the survey.

If you are NOT 18 years of age or older as of today's date, please close the link to the survey now.

If you do NOT consent, please close the link to the survey now.

Pre-Question 1: I acknowledge that I am at least 18 years of age or older as of today's date and consent to participate in this survey (will be a required check box)

Part I: Student Demographics/Institutional Context

Q1: What is your current academic level?

Scale: First-year undergraduate (Freshman), Second-year undergraduate (Sophomore), Third-year undergraduate (Junior), Four or more years undergraduate (Senior), Masters student (MA, MS, MBA, MFA, MSW, MPA, etc.), Doctoral student (EdD, PhD, etc.)

Q2: At which campus are you enrolled as a student? (Choose ONE)

IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, IPFW-Fort Wayne

Q3: What is your age? (open text box)

Q4: What is your gender? (open text box)

Part II: Use of Technology

General Level of Experience/Use:

Q5: In terms my level of comfort in using different types of technology, I am

Scale: very uncomfortable, somewhat uncomfortable, somewhat comfortable, very comfortable

Q6: What type(s) of mobile device(s) do you currently use on a regular basis?

Mobile phone without web access; mobile phone with web access; portable media player without web access (e.g., mp3 player); portable media player with web access (e.g., iPod Touch); Ebook reader (e.g., Kindle); tablet (e.g., iPad); Laptop/Netbook computer; other device (please describe)

Q7: Have any of your instructors in courses at Indiana University used ***Oncourse***?

Scale: YES, NO, I do not know

Q8: Which course were enrolled in during Spring 2013 that used ***Canvas***? (If you were enrolled in more than one course that used Canvas, please choose one for the purpose of this survey)

Please note: Although we ask you to identify the course in which you were enrolled this survey is not an evaluation of the course, and the course name/number will not be identified in any aggregate reports. We will use this information only to create categories of types (disciplinary areas) and levels of courses for reporting purposes.

(drop down list of Canvas pilot courses)

Q9: That course was primarily delivered
Scale: face-to-face; in a hybrid format using a blend of face-to-face and online interaction; online with face-to-face interaction only for exams; only online with no face-to-face interaction; other (please describe).

Q10: The primary web browser I used for this course was

- Chrome
- Firefox
- Internet Explorer
- Safari
- Other (please describe):

Q11: On average, how many *hours per week* have you used **Canvas** for this course during the Spring 2013 semester?

Scale: Never, Fewer than 5 hours, 5-10 hours, 11-15 hours, 16-20 hours, more than 20 hours

Part III: Feedback on Learning Technology

Q12: Please rate the Ease of Use of the following features of **Canvas**

Scale: Did Not Use This Feature, Very Easy to Use, Moderately Easy to Use, Slightly Easy to Use, Difficult to Use

- Announcements (e.g. send/receive messages, information, updates about course activities, etc.)
- Assignments (e.g., readings, papers, projects, quizzes, exams, assignments, etc.)
- Calendar (e.g., view and manage personal calendar, course events, and course due dates.
- Collaborations (e.g., using Google Docs, Ether Pad, or similar online tools)
- Conversations/Inbox (e.g., send/receive messages, information, and updates to and from other users).
- Discussions (e.g., blogs/wikis for communicating with instructor and other students)
- Files (e.g., resources, repository of materials)
- Grades (e.g., potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.)
- Groups (e.g., group workspace for communication and collaboration)
- Modules (e.g., course design, topical areas, chronological order of course, etc.)
- Notifications (e.g., course updates sent to email, cell phone, Facebook, or Twitter)
- Outcomes (e.g., course expectations for learning, progress towards mastery of outcomes, etc.)
- People (e.g., roster of students and faculty)
- Quizzes (e.g., completing quizzes/exams online, points earned, rubrics, etc.)
- Syllabus (e.g., course outline, readings, assignments, resources, and schedule, etc.)

Q13: Please rate the Usefulness of the following features of **Canvas** in contributing to your learning in this course.

Scale: Did Not Use This Feature, Highly Useful, Moderately Useful, Slightly Useful, Not at all Useful

- Announcements (e.g. send/receive messages, information, updates about course activities, etc.)
- Assignments (e.g., readings, papers, projects, quizzes, exams, assignments, etc.)
- Calendar (e.g., view and manage personal calendar, course events, and course due dates.
- Collaborations (e.g., using Google Docs, Ether Pad, or similar online tools)
- Conversations/Inbox (e.g., send/receive messages, information, and updates to and from other users).
- Discussions (e.g., blogs/wikis for communicating with instructor and other students)
- Files (e.g., resources, repository of materials)
- Grades (e.g., potential points for an assignment, your results on a quiz/assignment, overall course grade, etc.)
- Groups (e.g., group workspace for communication and collaboration)
- Modules (e.g., course design, topical areas, chronological order of course, etc.)
- Notifications (e.g., course updates sent to email, cell phone, Facebook, or Twitter)
- Outcomes (e.g., course expectations for learning, progress towards mastery of outcomes, etc.)
- People (e.g., roster of students and faculty)
- Quizzes (e.g., completing quizzes/exams online, points earned, rubrics, etc.)
- Syllabus (e.g., course outline, readings, assignments, resources, and schedule, etc.)

Q14: What did you like MOST about **Canvas**? Why? (open text box)

Q15: What did you like LEAST about **Canvas**? Why? (open text box)

Q16: Perceived impact on learning

Scale: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Not Applicable

- **Canvas** helps me to learn the course materials/content.
- **Canvas** helps me to study for exams/tests.
- **Canvas** helps me to complete course assignments.
- **Canvas** helps me to take quizzes/exams.
- **Canvas** helps me to make efficient use of my time in the course.
- **Canvas** helps me to be in control of my own learning in the course.
- **Canvas** helps me to know what grade I received on an assignment/quiz/project.
- **Canvas** helps me to track my overall grade in the course.
- **Canvas** helps me to communicate with my professor.

- *Canvas* expands access to learning materials/resources available to me (e.g., print, audio, video, etc.).
- *Canvas* was beneficial to my overall learning in the course.

Q17: Attitude toward LMS use/Support for LMS use

Scale: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Not Applicable

- I have enjoyed using *Canvas* in my course(s).
- In the future, my professor/instructor should continue to use *Canvas* in this course.
- I would like to use *Canvas* in future courses at Indiana University.
- UITS has been available for assistance when I have had *Canvas* difficulties.
- My professor/instructor has been available for assistance when I have had *Canvas* difficulties.

Appendix C

Faculty Interview Protocol

Introduction:

Hello, my name is Mary Piontek and I am a staff member at the Center for Evaluation and Education Policy (CEEP) at Indiana University/.

CEEP in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members/instructors who are using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation has received IRB approval and will be managed within the guidelines of this approval process.

You have received a copy of this interview protocol in a previous email. You have also received and returned a consent form that provided you with additional information about the interview process and IRB assurances.

As a reminder, I will take handwritten notes during the interview discussion. Your comments made during the interview will be confidential. No individual will be identified by name, or by demographic characteristics that would reveal his/her identity, in the notes taken during the phone interview or in subsequent data summaries.

Participants are under no obligation to answer any of the questions during the interview; you may choose to terminate the interview at any time.

Do you have any questions or concerns that I may address before we begin the interview?

Let us begin.

Interview Questions:

- Q: What did you like MOST about *Canvas*? Why?

- Q: Have you used others LMS that provide you with these same features? Do you prefer *Canvas* to those Learning Management Systems (LMS)? If so, why?

- Q: What did you like LEAST about *Canvas*? Why? Do you have suggestions for how these issues might be ameliorated?

- Q: Which, if any, features/tools in **Canvas** allowed you to design your course and/or teach in a new way? How did your students respond to these new aspects of your course/teaching? How did these tools enhance their learning?
- Q: Did **Canvas** meet your expectations? In terms of ease of use? In efficiently managing your course? In enabling/enhancing student learning? In communicating with your students?
- Q: What else would you like to share about your experience with **Canvas**?



Phone Interview Consent Form
Faculty Members/Instructors at Indiana University Campuses
Indiana University *Canvas* Learning Management System Pilot

Title of Study: Evaluation of *Canvas* Learning Management System Pilot at Indiana University Campuses

Principal Investigator: Anastasia S. Morrone, Ph.D., Associate Vice President for Learning Technologies, IT Dean for IUPUI, and Associate Professor of Educational Psychology, IU School of Education Indianapolis is the Principal Investigator (PI) of the study. The Co-PI is Mary E. Piontek, Ph.D., Senior Research Associate, Center for Evaluation and Education Policy at Indiana University-Bloomington.

Purpose of Study: The Center for Evaluation and Education Policy (CEEP) in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members who are using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation data collection includes online surveys of faculty members and students, phone interviews with faculty members, and focus groups with students aimed at capturing stakeholders experience with *Canvas* LMS and their perceptions of its quality and utility.

An aggregate report will be prepared for the Office of the Vice President for Information Technology summarizing findings of the data sets from the phone interviews, focus groups, and surveys.

Study Procedures: If you agree to participate in the 20 minute phone interview, you will allow the evaluation team to use your responses for the purposes of the study as described above. The interviewer, a member of the evaluation team, using an IRB-approved protocol, will ask you a series of questions related to your experience with and perception of the *Canvas* LMS as used in your course(s) during the Spring 2013 semester.

The interviewer will take handwritten notes during the interview discussion. The interview notes will be electronically stored CEEP's secure server. Only the evaluation staff will have access to the interview data sets and resulting analyses.

Comments made during the interview will be confidential. Confidentiality of the interview will be maintained providing all interviewees with a participant number (no names). No individual will be identified by name, or by demographic characteristics that would reveal his/her identity, in the notes taken during the phone interview or in subsequent data summaries.

Participants are under no obligation to answer any of the questions during the interview, and can choose to terminate the interview at any time.

Time Commitment: The phone interview will last approximately 20 minutes. The interviewer will initiate the phone call to the participant. All phone charges associated with the interview process will be incurred by CEEP.

Voluntary Nature of the Study: Taking part in the phone interview process is voluntary. You are free to terminate the interview at any time. Terminating the interview will not result in any penalty or loss. Your decision whether or not to participate will not affect your current or future relations with Indiana University.

Risks: There is a risk that you may not feel comfortable answering some of the questions that will be asked during the interview. While participating in the interview you may decline to answer any and all questions.

Benefits: There are no anticipated direct benefits to be gained from participating in the phone interview process.

Confidentiality: Every effort will be made to keep your identity confidential. The interviewer will use a participant number to refer to you in the collection, analysis, and reporting of all data from the interview. No individuals will be identified by name in the notes taken during the interview or in subsequent data summaries. Only the members of the evaluation team will have access to the handwritten notes of the interviews. The interview notes will be stored electronically in the CEEP's secure server, and then transferred to the Office of the Vice President for Information Technology's secure server at the conclusion of the study. The Office of the Vice President for Information Technology will keep the electronic files for one calendar year and/or no later than July, 31 2014. The electronic files will then be destroyed under procedures as required by state and federal law.

Please note that we cannot guarantee absolute confidentiality; your identity may be disclosed if required by law. Organizations that may inspect and/or copy of the evaluation records for quality assurance and data analysis include groups such as the Principal Investigators, and their research associates, the IU Institutional Review Board or its designees, the Office of the Vice President for Information at Indiana University, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

Questions about this study: Contact Mary E. Piontek, Ph.D. Email: mepionte@indiana.edu
Phone: 812-855-4438 or 1-800-511-6575

Questions about your rights: The evaluation has received IRB approval will be managed within the guidelines of this approval process. For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at (317) 278-3458 or [for Indianapolis] or (812) 856-4242 [for Bloomington] or (800) 696-2949.

Consent: By signing below, you agree to participate voluntarily in this phone interview. You authorize the evaluation team to include the resulting analyses of information gathered in today's interview in an aggregate written report provided to the Office of the Vice President for Information Technology about the *Canvas* LMS Pilot Program. The Office of the Vice President for Information Technology may disseminate the aggregate report (and subsections of the report) to other entities across the Indiana University campuses, peer institutions, funders and granting agencies, and other constituencies interested in their programs and services.

Name of Participant (please print): _____

Signature (for participating in phone interview): _____

Today's date: _____

Name of Person Obtaining Consent (please print): _____

Today's date: _____

Appendix D Student Focus Group Protocol

Introduction:

Hello, my name is Mary Piontek and I am a staff member at the Center for Evaluation and Education Policy (CEEP) at Indiana University.

My name is Anastasia S. Morrone, Ph.D. and I am the Associate Vice President for Learning Technologies, IT Dean for IUPUI, and Associate Professor of Educational Psychology, IU School of Education Indianapolis.

CEEP in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members/instructors who are using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation has received IRB approval and will be managed within the guidelines of this approval process.

The focus group discussion will last approximately 20 minutes.

I have just provided you with a copy of this [interview protocol](#) and a [consent form](#). I will now review the consent form with you and answer any questions you may have.

I will take handwritten notes during the focus group discussion. The focus group may be audio-recorded to ensure thorough data collection. However, the audio-recorder may be turned off at any time during the discussion at the request of the focus group participants. The audio-tape will only be used to compare to the handwritten notes.

Comments made during the focus group will be confidential. Confidentiality of the focus group data will be maintained by providing all participants with a participant number (no names). Participants are under no obligation to answer any of the questions during the focus group, and can choose to withdraw at any time from the focus group session.

Taking part in the focus group is voluntary. You are free to exit the focus group at any time. Leaving the focus group will not result in any penalty or loss. Your decision whether or not to participate in the focus group will not affect your current or future relations with Indiana University.

There is a risk that you may not feel comfortable answering some of the questions that will be asked during the focus group. While participating in the focus group you may decline to answer any and all questions. I request that all participants in the focus group keep the conversation confidential. I ask that participants not discuss any of the focus group information with anyone after the conclusion of the focus group session.

Do you have any questions or concerns that I may address before we begin the focus group?

Let us begin.

Interview Questions:

Q: What did you like MOST about *Canvas*? Why?

Q: What did you like LEAST about *Canvas*? Why? Do you have suggestions for how these issues might be ameliorated?

Q: Which, if any, features/tools in *Canvas* enhanced your learning?

Q: For those of you who had courses that used the *Oncourse* Learning Management System, do you have a preference between *Canvas* and *Oncourse*? If so, why?

Q: What else would you like to share about your experience with *Canvas*?



Focus Group Consent Form
University Students at Indiana University Campuses
Indiana University *Canvas* Learning Management System Pilot

Title of Study: Evaluation of *Canvas* Learning Management System Pilot at Indiana University Campuses

Principal Investigator: Anastasia S. Morrone, Ph.D., Associate Vice President for Learning Technologies, IT Dean for IUPUI, and Associate Professor of Educational Psychology, IU School of Education Indianapolis is the Principal Investigator (PI) of the study. The Co-PI is Mary E. Piontek, Ph.D., Senior Research Associate, Center for Evaluation and Education Policy at Indiana University-Bloomington.

Purpose of Study: The Center for Evaluation and Education Policy (CEEP) in partnership with the Office of the Vice President for Information Technology at Indiana University (IU) is conducting an evaluation of the *Canvas* Learning Management System Pilot (*Canvas* LMS) Program being implemented during the 2012-2013 academic year across IU campuses (IU-Bloomington, IU-East, IU-Kokomo, IU-Northwest, IU-South Bend, IU-Southeast, IUPUI-Indianapolis, and IPFW-Fort Wayne).

The purpose of the evaluation is to provide formative feedback to guide the use of new technologies in teaching and learning at Indiana University campuses. As part of the evaluation, staff members from CEEP and the Office of the Vice President for Information Technology are collecting a variety of data from faculty members using *Canvas* LMS in their courses during the Spring 2013 semester and from students enrolled in those courses. The evaluation data collection includes online surveys of faculty members and students, phone interviews with faculty members, and focus groups with students aimed at capturing stakeholders experience with *Canvas* LMS and their perceptions of its quality and utility.

An aggregate report will be prepared for the Office of the Vice President for Information Technology summarizing findings of the data sets from the phone interviews, focus groups, and surveys.

Study Procedures: If you agree to participate in the 20 minute focus group, you will allow the evaluation team to use your responses for the purposes of the study as described above. The focus groups will be facilitated by a member of the evaluation team. The focus group facilitator will ask a series of questions of the group, providing time after each question for participants to respond. The questions will focus on your experience with and perception of the *Canvas* LMS as used in your course(s) during the Spring 2013 semester.

The facilitator will take handwritten notes during the focus group discussion. The focus group may be audio-recorded to ensure thorough data collection. However, the audio-recorder may be turned off at any time during the discussion at the request of the focus group participants. The focus group facilitator will use the audio-tape to compare to his/her handwritten notes. The focus group notes and audio-recordings will be stored in the CEEP's secure server. Only the evaluation staff will have access to the focus group data sets and resulting analyses.

Comments made during the focus group will be confidential. Confidentiality of the focus group data will be maintained by providing all participants with a participant number (no names). Participants are under no obligation to answer any of the questions during the focus group, and can choose to withdraw at any time from the focus group session.

Time Commitment: The focus group discussion will last approximately 20 minutes.

Voluntary Nature of the Study: Taking part in the focus group is voluntary. You are free to exit the focus group at any time. Leaving the focus group will not result in any penalty or loss. Your decision whether or not to participate in the focus group will not affect your current or future relations with Indiana University.

Risks: There is a risk that you may not feel comfortable answering some of the questions that will be asked during the focus group. While participating in the focus group you may decline to answer any and all questions. The facilitator will request that all participants in the focus group keep the conversation confidential. Participants will be asked not to discuss any of the focus group information with anyone after the conclusion of the focus group session. The Principal Investigators will not be able to control the actions of focus group participants after the conclusion of the focus group, but do not anticipate any undue risk to confidentiality.

Benefits: There are no anticipated direct benefits to be gained from participating in the focus group.

Confidentiality: Every effort will be made to keep your identity confidential. The facilitator will use a participant number to refer to you in the collection, analysis, and reporting of all data from the focus group. No individuals will be identified by name in the notes taken during the focus group or in subsequent data summaries. Only the members of the evaluation team will have access to the handwritten notes and audio recording of the focus groups. The focus group notes and audio-recordings will be stored electronically in the CEEP's secure server, and then transferred to the Office of the Vice President for Information Technology's secure server at the conclusion of the study. The Office of the Vice President for Information Technology will keep the electronic files for one calendar year and/or no later than July, 31 2014. The electronic files will then be destroyed under procedures as required by state and federal law.

Please note that we cannot guarantee absolute confidentiality; your identity may be disclosed if required by law. Organizations that may inspect and/or copy of the evaluation records for quality assurance and data analysis include groups such as the Principal Investigators, and their research associates, the IU Institutional Review Board or its designees, the Office of the Vice President for Information at Indiana University, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

Questions about this study: Contact Mary E. Piontek, Ph.D. Email: mepionte@indiana.edu
Phone: 812-855-4438 or 1-800-511-6575

Questions about your rights: The evaluation has received IRB approval will be managed within the guidelines of this approval process. For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at (317) 278-3458 or [for Indianapolis] or (812) 856-4242 [for Bloomington] or (800) 696-2949.

Consent: By signing below, you agree to participate voluntarily in this focus group. The second signature line signals your agreement to have the phone interview recorded on audio-tape.

You authorize the evaluation team to include the resulting analyses of information gathered in today's focus group discussion in an aggregate written report provided to the Office of the Vice President for Information Technology about the *Canvas* LMS Pilot Program. The Office of the Vice President for Information Technology may disseminate the aggregate report (and subsections of the report) to other entities across the Indiana University campuses, peer institutions, funders and granting agencies, and other constituencies interested in their programs and services.

Name of Participant (please print): _____

I acknowledge that I am 18 years of age or older as of today's date: _____ (initial)

Signature (for participating in focus group): _____

Signature (for audio-taping of focus group): _____

Today's date: _____

Name of Person Obtaining Consent (please print): _____

Today's date: _____