

LEARNING MANAGEMENT SYSTEM Task Force Report

APRIL 2021

Table of Contents	
Introduction	2
Community Survey Results	4
Summary Findings	4
Canvas	5
D2L/Brightspace	5
Blackboard Learn Ultra	6
Appendix	8
Appendix A: LMS Task Force Pilot Survey	9
Faculty/Staff Responses to Pilot Survey	9
Student Pilot Survey Responses	32
Appendix B: Community Survey Data	33
Community Sandbox Registration Data	33
Community Survey Data: Students	35
Community Survey Data: Faculty/Staff/Manager	46
Additional Comments (Redacted Emails)	54
Appendix C: LMS Working Group	56
Calendar of Demonstrations in preparation to develop the LMS Sandboxes.	56
Appendix D: Senate Phase I Report	57
Appendix E: LMS Academic Technology Working Group	58
AT Working Group Student and Faculty Technology Requests	58
AT Working Group Priorities	58
Appendix F: Minutes from Working Groups	59

Introduction

The University Learning Management System (LMS) Task Force is pleased to provide this report on our work during the Fall 2020-Spring 2021 academic year. As charged by President Repollet in the Summer of 2020, the Task Force built upon the work of the <u>University Senate</u> <u>Learning Management System (LMS) Task Force</u> to continue a thorough review of the three LMS products (Blackboard's *Learn Ultra LMS*, Instructure's *Canvas LMS*, and D2L's *Brightspace LMS*), providing recommendations for adoption to the President. Future activities include reviewing and recommending other supporting technologies to the President (<u>K-16</u> <u>Solutions, Ment.IO</u>, <u>Panopto</u> and potentially others) once an LMS platform has been chosen.

The charge was to review and make recommendations regarding the continued development and improvement of academic technology at Kean University focusing on:

- Classroom Technology
- Student Use Technology
- Faculty Use Technology
- University Wide Technology
- Additional Locations and Technology
- University Software/Systems

To best inform this work, the Task Force membership was comprised of <u>members</u> from each of Kean's Academic Colleges, the School of Online Education, representatives from the additional locations (Wenzhou Kean, Kean Ocean, and Kean Skylands), the Office of the Vice President for Academic Affairs, the Office of Computer Information Services, the University Senate, and graduate and undergraduate student representation.

The Task Force was then divided into two working groups: one primarily tasked with the LMS review and recommendations (the LMS Working Group) and one primarily tasked with instructional technology review and support recommendations (the Academic Technology Working Group). The focus of this report will be the work of the LMS Working Group (although both working groups had the opportunity to participate in the evaluations of the three LMS platforms) with a separate report from the Academic Technology Working Group forthcoming.

Our Work

During the Fall 2020 semester, the LMS Working group <u>met</u> and <u>reviewed demonstrations</u> by each of the LMS platforms (*Learn Ultra*, *Brightspace*, and *Canvas*). At the end of the Fall semester, pilot sandboxes were established in each platform to allow the Task Force members

(both working groups along with invited participants from the Office of Accreditation and Assessment and the Office of Accessibility Services) to begin exploring.

At the end of February, a pilot survey was completed by faculty, staff and students who participated in the pilot sandbox trial to review the details of the proposed platforms of *Learn Ultra*, *Brightspace*, and *Canvas*. The sandbox approach is not unlike what Kean does as part of its Kean Online Faculty Training. Individuals were given access to a fully functional LMS (one for each platform that contained preloaded course data). They then undertook a number of activities such as creating or submitting an assignment, creating or taking a test, creating or posting to a discussion board forum, etc. Upon completing each task, members then rated each task.

To make the most efficient use of the Task Force Members' time, it was agreed to limit the evaluation efforts to those of the LMS platforms only, with the evaluation of any additional plug-ins or other supporting technologies to be performed later. The goal was to allow respondents to provide targeted feedback on the functionality of each platforms' capabilities and ease of use.

The pilot survey results found that *Canvas* had the highest, most positive ratings for all aspects of the LMS by faculty, staff, and students. *Learn Ultra* and *Brightspace* each had some second-place finishes. The complete results of the LMS Task Force Pilot Survey are found in <u>Appendix A</u>.

In the Spring 2021 semester, the Task Force created the <u>University LMS Task Force website</u> as a resource for the Kean University community and refined the pilot survey for the review of the three LMS platforms.

Based on the experience of the Task Force members, participation in the sandbox experience for each platform could take up to three hours. As a result, the survey was adjusted to allow participants to either complete the survey based on the sandbox, on the resources provided by each LMS platform, and/or based on previous experience with the platform. Language in the survey questions was also adjusted based on feedback to help enhance clarity and potentially garner a greater number of responses.

The Task Force <u>invited</u> the community to participate in the review of the proposed learning management systems in March 2021. The complete results of the Community Surveys are found in the <u>Appendix B</u>.

Community Survey Results

Evaluation of LMS

Participants included students from first-year thru graduate level, full and part-time faculty, staff who teach and those who do not. Kean Union, Ocean, Wenzhou and Online locations all participated as did members of all of Kean's academic colleges.

As before, individuals were given access to a fully functional LMS, one of each product, that contained preloaded course data. They then undertook a number of activities such as creating or submitting an assignment, creating or taking a test, creating or posting to a discussion board forum, etc. and rated each task.

Summary Findings

The community survey reflects the findings of the pilot survey with *Canvas* being identified as preferred the highest overall. Additional factors to be considered are in the <u>appendix</u>, and below is a quick snapshot of the findings for each of the platforms reviewed by the Task Force and the community.

There are additional components to consider, for example, whether the platform fully meets our accessibility and assessment preferences. The components of accessibility and assessment were reviewed by the individuals responsible for these areas to help ensure Kean University is in alignment with laws, compliance requirements, and best practices.

Canvas

- Data collected from the LMS Task Force and Community Surveys are in agreement regarding preference to adopt Canvas as the new Learning Management System for Kean University
 - Overall Canvas scored the highest in the majority of reviewed categories across the three platforms
 - Findings from the Student Community Survey identify Canvas as being the top choice, but in general, students appear to be open to a new LMS platform overall
 - Faculty and Staff identified a clear preference for Canvas with a greater gap between it and the other platforms
 - Canvas was the only platform identified where the Faculty/Staff identified a yes to meeting their teaching needs
 - Canvas was identified by both the Office of Accreditation and Assessment and the Office of Accessibility Services (both students and staff) as the preferred platform.
- Positive and negative features as identified by the community survey
 - Most liked feature(s)
 - Students: Submitting an assignment
 - Faculty: Navigation
 - Least liked feature(s)
 - Students: (Tie) Posting to a discussion forum, emailing the instructor
 - Faculty: Setting up a test or quiz

D2L/Brightspace

- Data collected from the LMS Task Force and Community Surveys are in agreement that Brightspace is less consistently supported than Canvas.
- Brightspace consistently scored the middle ranking of the three platforms in the majority of reviewed categories
 - Findings from the Student Community Survey identify Brightspace as being an acceptable option
 - Faculty and Staff identified Brightspace as a possibility (greater than 50%) for supporting adoption of the platform, however the data demonstrates a clear preference toward Canvas with a greater gap between it and the other platforms
 - Brightspace was the only platform identified where the Faculty/Staff identified a *maybe* to meeting their teaching needs
- Positive and negative features as identified by the community survey
 - Most liked feature(s)
 - Students: (Tie) Access to view grades, view class schedule
 - Faculty: Creating assignments
 - Least liked feature(s)
 - Students: Posting to a discussion forum
 - Faculty: Navigation

Blackboard Learn Ultra

- Data collected from the LMS Task Force and Community Surveys are in agreement regarding the ranking of Learn Ultra below the other two reviewed systems
 - Learn Ultra is different than the current version of Blackboard (Classic) the university currently uses
 - Learn Ultra consistently scored the lowest ranking of the three platforms in the majority of reviewed categories
 - Findings from the Student Community Survey identify Learn Ultra as being an acceptable option
 - Faculty and Staff identified Learn Ultra as a platform they would not be in support of the university adopting (greater than 50%)
 - Learn Ultra was the only platform where the Faculty/Staff identified a *no* to meeting their teaching needs
- Positive and negative features as identified by the community survey
 - Most liked feature(s)
 - Students: Access to view grades
 - Faculty: Creating assignments
 - Least liked feature(s)
 - Students: Posting to a discussion forum
 - Faculty: Uploading a video

As in the pilot, the overall results of the campus-wide sandbox found students, faculty and staff all rated *Canvas* as best on all tasks as well as the overall look and feel of the LMS. They also ranked *Canvas* first for adoption in the future. *Brightspace* came in second place edging out *Learn Ultra*, with *Brightspace* having a predominance of second-place finishes in individual task ratings. Students indicated \geq 74% support for adoption of a new LMS, with *Canvas* scoring the highest. Among the faculty, looking at each platform individually and responding to whether they would support adoption by Kean: *Canvas* had 91% support for adoption; *Brightspace* had 58% support; and *Learn Ultra* had more opposed to adoption at 54%, with only 46% in favor.

Future Considerations

Migration

Moving from one LMS platform to another is termed 'migration.' Each platform offers their own form of migration to their platform however, the Task Force also met with representatives from a software firm called K16 Solutions. K16 Solutions' "Scaffold" is a content migration and development platform and offers storage of backup from the former platform courses to provide access as needed after migration. It is a comprehensive course content migration service to transition more quickly and accurately, archive previous versions of course content more

affordably, and build best-in-class courses more seamlessly. The Task Force recommends further exploration of the effectiveness of the migration within the selected LMS, as well as this product, to fully inform our implementation process and preparedness.

Plug-Ins

In our research on the recent work done by other Universities to review available LMSs for their institutions, it became clear that in addition to the actual LMS platforms themselves, there were a number of third-party plug-ins that either added to or enhanced the functionality of the LMS itself. Two that are particularly note-worthy based upon these other reviews and multiple adoptions at numerous universities are Panopto and Ment.io.

Panopto provides lecture recording, screen-casting, video streaming, and video content management software. Beyond the basic screen capture found in an LMS, among other things, Panopto can create a written transcript of any video or lecture; create a searchable database of all videos used by any faculty member in any course; search inside all videos in the entire university video database for any word spoken or shown on screen; secure live stream broadcast-quality video; and provide test comprehension with built-in support for quizzing during videos. It is for use in both online/remote coursework as well as in classroom face-to-face sessions.

Ment.io provides an enhanced means of handling discussions and discussion questions in remote, online and face-to-face classes. Ment.io provides a transparent and inclusive discussion board, fostering collaborative thinking. It promotes deeper learning and equal opportunities in education, in and out of the classroom with discussion summaries and analysis. Ment.io yields structured easy-to-read discussions - ordered by AI-based scoring.

The original plan was to include both plug-ins to all three platforms during the sandbox experiences but it became clear that this was an overly complex design and required too much technical support which emerged as issues in the pilot. We did not include the plug-ins in the community sandbox and left the comments about them in the pilot survey section of <u>Appendix</u> <u>A</u> to preserve the integrity of the data. The Task Force recommends a separate trial be done with any potential plug-ins (in addition to Panopto and Ment.io) after a final LMS is chosen.

Appendix

- A. LMS Taskforce Pilot Survey
- B. Community Survey Data
 - a. <u>Registration Information for Survey</u>
 - b. Students
 - c. <u>Faculty/Staff/Manager</u>
 - d. Additional Comments (Redacted Emails)
- C. LMS Working Group
 - a. <u>Calendar of Demonstrations</u>
- D. Senate Phase I Report
- E. LMS Academic Technology Working Group
 - a. <u>AT Working Group Student and Faculty Technology Requests</u>
 - b. AT Working Group Priorities
- F. Minutes from Working Groups

Appendix A: LMS Task Force Pilot Survey

- The data of the Task Force Pilot Survey is based upon the LMS Task Force Pilot Survey
- The data below initially contained information regarding two plug-in options to support the LMS platform
 - In order to redirect technical resources back toward the LMS sandboxes and to promote the likelihood of survey completions, the plug-in options were not included in the community survey
 - Only three individuals filled out the survey data for the plug-in options. Two for one platform and one for the other. Therefore, for the focus of this report, both Ment.Io and Panopto <u>only</u> responses have been removed from the pilot study data below
 - The recommendation is to conduct an additional pilot and investigate these and other plug-ins once an LMS platform is identified
- Respondents to the pilot survey had the ability to fill out one survey for each of the LMS platforms
 - Based on IP addresses, the number of surveys completed per individual varied
 - Note: IP address cannot tell us if a person completed under more than one address and therefore the exact number completed per person cannot be calculated

Faculty/Staff Responses to Pilot Survey

Answer	%	Count
Faculty member (Full time)	83.33%	40
Staff member (Who teaches)	6.25%	3
Staff member (Who does not teach)	6.25%	3
Did not report or identify	4.17%	2
Faculty member (Adjunct faculty member)	0%	0
Total	100%	48

Amount of time/experience using an Learning Management System

Answer	%	Count
0-1 years	13.04%	6
2-4 years	19.57%	9
5 or more years	67.39%	31
Total	100%	46

Platform(s) Chosen to Review

Answer	Total Count
Blackboard Learn Ultra	15
Canvas	16
D2L/Brightspace	14
Total	45

Platform	Create Assignment	Post Welcome Message	Create Test/Quiz	Create Discussion Forum
Blackboard Learn Ultra (N=13)	3.92	3.62	3.54	4.08
Canvas (N=15)	4.13	4.56	3.81	4.44
D2L/Brightspace (N=14)	3.86	4.36	2.71	3.21

Complete each of the following tasks as an *instructor* in the sandbox

Rate on a scale from 1 through 5 where 1 is Slightly Difficult and 5 is Extremely Easy

Complete each of the following tasks as a *student* in the sandbox

Platform	Submit an Assignment	Take a Test	Post to a Discussion Forum
Blackboard Learn Ultra (N=13)	3.85	3.77	3.77
Canvas (N=15)	4.33	4.53	4.40
D2L/Brightspace (N=14)	3.64	3.00	2.86

Rate on a scale from 1 through 5 where 1 is Extremely Difficult and 5 is Extremely Easy

Platform	Respond to a discussion post	Grade a discussion question post	Grade a student assignment	Create a 5-minute long welcome video	Upload and share a video
Blackboard Learn Ultra (N=13)	4.23	4.08	4.00	3.31	3.46
Canvas (N=15)	4.47	4.07	4.13	3.93	3.93
D2L/Brightspace (N=14)	3.14	2.79	3.36	3.14	3.36

Complete each of the following tasks as an *instructor* in the sandbox

Rate on a scale from 1 through 5 where 1 is Slightly Difficult and 5 is Extremely Easy



Diackooai u Leai ii Oiti a		
Like Most About Platform	Like Least About Platform	
I love Blackboard. It just makes sense. Everything is so clear, easy, quick, and intuitive. Grading is a breeze.	Nothing.	
Perhaps my comfort with Blackboard made this easier to use Blackboard ultra	Blackboard Ultra is fine, it is easy to upload quiz/test questions	
This platform is not a significant upgrade from the Blackboard original experience. It is certainly better than the original experience. However, it is still a confusing interface. It is difficult to find where to record and access videos. It is difficult to find how to create assignments where students attach specific kinds of files.	It is difficult to find where to record and access videos. It is difficult to find how to create assignments where students attach specific kinds of files.	
Easy to create module/unit Easy to post lecture notes, assignment, announcement, discussion questions, etc. Easy to create quizzes and tests Easy to manage grade center Easy to use live session	annotation on the lecture notes during live session cannot be saved not enough space to make annotation next to slides in live session	
The look and feel of Ultra is superior in every way to the original Blackboard. It feels modern and much more intuitive. I liked how you could immediately go to submissions and start grading even from the assignment/test/DQ view. I really like the analytics and the ability to grade the DQs within the thread rather than having to go to another screen. I also like the look and feel of the gradebook and the ability to customize the gradebook.	I don't think the Sandbox was set up to properly conduct all the required tasks. I couldn't get into student mode so I couldn't submit an assignment or take a test. I wish it was more visually appealing like Canvas or D2L. I couldn't find a way to post a visually appealing welcome message except as a Discussion board. I couldn't find the Ment.IO integration.(<i>Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.</i>)	

Blackboard Learn Ultra

Like Most About Platform	Like Least About Platform
 I liked that the fonts copied well, and that I could add attachments and edit announcements. I was also able to email announcements, a function that I use all the time. It was easy to move assignments around to where you would like them to be. 	 I had difficulty adding links to assignments. It took me quite a while to figure out how to convert and download a file of questions. I do not like how the comment tool is set up for grading assignments; it changes the field of view of the assignment, so that part is no longer visible. I disliked all of the tabs, once within the course. This LMS was not visually appealing, beyond the landing page.
Layers are better for seeing where you are. Stream is good for instructors and students because they can see what's due and what's coming up. Exams are easier to make. I'd like to know if there's a bank outside the course shells where you can make an exam, and then if it's possible that every course that uses that exam is updated when the original exam is updated.	Help is buried, at least for finding out how to post videos for instructors.
	Still too many clicks to get to the courses, units, assignments. Creating DBs still requires multiple steps
The screens are much more aesthetically pleasing in ultra - nice smooth features and buttons	
Nothing	This is a real mess. Like D2L, the organization just is not clear, I could not even tell if my sandbox had real instructor access. I could not find where to create a quiz or an assignment. I could not find where my welcome and video and discussion post got posted. I was able to enter student view, but since I was never able to create the assignments I could neither attempt them nor grade them. The typing input boxes were light on features. I can't evaluate whether I can ask STEM questions in the quiz, because I could not get the quiz to work or even find it in the page.

Blackboard Learn Ultra (continued)

I believe this is user friendly and less clicks.

Like Most About Platform	Like Least About Platform
Much needed upgrade to current system. Set up in a familiar way, allowing for less transition time and less required training. If you use Blackboard, Blackboard Ultra is a more intuitive system, has a nice layout, allows for easy access to classes, and a convenient flow to course content, no requirement to click other links to get to what is needed within each unit. Ease of use would transfer to new faculty, not just continuing faculty.	No major issues with Blackboard Ultra as the system is so familiar even though a major upgrade.
Only critical information are displayed Most critical features are easy to access User-friendly with a Modern Look Easy to manage Personal Information Easy to see Student Profile Photos A Single Page is used to display the Content Easy to keep everything private until they are ready to post	Using Blackboard Collaborate is slow, hard to use and not responsive. Loading the pages is sometimes slow. I am not sure if that is because I am based in China.

Blackboard Learn Ultra (continued (2))

Canvas	
Like Most About Platform	Like Least About Platform
Ease of features. The instructor can click an assignment from anywhere and be able to edit it.	Students can see the average grades
It looks slightly more modern than Blackboard.	I do not like Canvas. I use it at 2 other schools. It's not as easy or intuitive as Blackboard and the Speed Grader is not a good interface. It's fine, gets the job done, but uninterested in switching.
print easy to read. able to slide screen divisions as needed. Easy to view grade rubric. Recording capabilities are cool.	some had to search for Hide grades feature. Kept losing track of where to toggle back to the main course screen.
The ease of use of the canvas platform is its winning quality. Also, having access to OER materials directly on the platform was another plus. Overall, Canvas was my favorite out of all 3 platforms being evaluated.	None
I think with time I could figure this out, it is challenging to jump from one system to another. canvas doesn't appear to have classes set up for practice. either that or i'm in the wrong area	
Similar to Blackboard Ultra. Ease of use and navigation. Decent landing page with Recent Activity. Calendar included in the system. Used by multiple county and community colleges allowing many transfer students to have working knowledge of the system.	A difference from the current system of Blackboard, assignments and discussions appear as separate options from modules. For online courses or virtual options that will utilize the LMS platform on a weekly unit basis, this separation of items that would be involved in each unit could appear confusing to students when it comes to knowing what to do. Panopto trial expired so I did not get to try the video option. <i>(Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.)</i>

Canvas (continued)		
Like Most About Platform	Like Least About Platform	
 I loved the landing page with the Kean background, even if it was kind of busy! Fonts copied well. I liked that comments and attachments could be added to announcements, and there seemed to be more editing tools than at D2L. Modules were easy to set up. I thought the ability to see work due without having to enter each module was a benefit. I liked the way the total value of assignments, discussion questions, etc was provided to students in the assignments section. I thought it was nice that the discussion question rubric showed right up with the assignment. 	 There was no draft function for announcements; this is a drawback to me as I often start to write an announcement and find I need to leave the page for additional information. I found setting up assignments to have a slight learning curve. It was hard to figure out how to add a file of questions to a quiz; zipped Blackboard files can be added but for questions that haven't been used in Blackboard need to be individually typed in or converted to a .csv file. 	
The module tool is better than the table of contents tool in Blackboard. Easy to organize modules. calendar view to remind you what is coming up.	Compared with blackboard, Canvas has a noticeably steep learning curve. Creating and administering tests and assignments is more difficult. Importing quizzes has some overbearing features. Gradebook management is less intuitive.	
I really like the calendar feature and that I can subscribe to the calendar feed. I really like the various customizations and options for each task. The integration with other applications such as Google Drive is key for me. The options are intuitive and where you would expect them to be and it feels as though you don't have to do a lot of preparation before you can start adding content, unlike Blackboard.	I really couldn't figure out how to grade a discussion question. I like the "speed grader" feature, but the gradebook view didn't seem intuitive and required a ton of clicking. I'm really hoping for a platform that isn't as click-heavy as Blackboard.	
User friendly-less steep learning curve for both		

course build and course management

Canvas (continued)

e Least About Platform
e anything right now. I would want a to personalize the course page and visually appealing. e confusing (Note that plug-in s removed from the pilot survey due sues and will be evaluated more CMS has been selected.)
s r sue

Canvas (continued (2))

Canvas (continued (3))				
Like Most About Platform	Like Least About Platform			
 I really enjoyed the ease of use. The interface is very easy to navigate. Simple to use and fast navigate Intuitive design and consistent content Simplicity of creating and managing contents Easy to import contents even from different LMS such as Bb and D21 Existence of internal tools like chat, conference and doc sharing Integration of external tools like Panopto, and google drive (Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.) Rich documentation and large Community 	 Quizzes should have proctoring and browser locked capability. Possibility of shuffling questions when making quizzes Making profile pictures bigger so they are easier to see Attendance is something that is missing. 			

Canvas (continued (3))

D2L/Brightspace		
Like Most About Platform	Like Least About Platform	
None.	I absolutely hate this system. I use it at another school. Grading takes so much longer because everything is constantly reloading and refreshing the page every time you submit. The DB is impossible to navigate. I hate everything about it.	
Personalized welcome page Large buttons for navigation	Hard to find the discussion board The descriptions for the icons appear out of the visibility line Individual units are cluttered	
Clean interface.	Not clear how to do some tasks as a student, at least in the sandbox. When I thought I was in a sample course it wasn't clear if I was in there as an instructor or as a student, and it took me a while to be able to figure out how to post a discussion question or take a quiz as a student. I realize the sandbox is an artificial environment but the part about experiencing it as a student was not clear. I do not like ment.io - it makes discussion questions subject to algorithmic standards and to pretty rigid parameters. I prefer more free-form platforms, but as a primarily f2f faculty member, the platform choice does not affect me as much as completely online instructors. (<i>Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.</i>)	
Ease of use and excellent customer service. I had a couple of quick questions regarding their platform and I reached out to them via email. Not only did they respond back within a couple of minutes but jumped on a zoom call with me to resolve all issues. Very impressive.	The platform was not as intuitive as Canvas but a close second.	
Not a fan		

D2L/Brightspace

D2Li Digitspace (continucu)			
Like Most About Platform	Like Least About Platform		
Bright user interface. Good vehicle for inclusion of announcements, as it appears more of a social network based vehicle.	Not intuitive as student or instructor, did not complete all tasks Complicated to the eye to know where to go. Separate locations for videos and discussion boards that aren't intuitive to understand what you should click on immediately unless you know the name. Feels like more of a social network design but I prefer a direct course type design with less of an informal feel. The more intuitive the design the better, and while attractive, it does not feel intuitive to me. More complicated to understand than our current system.		
 I liked that announcements could be saved as drafts, edited, and have start and end dates. I liked that fonts copied well (this has been an ongoing problem for me in Blackboard). The calendar tool was easy and intuitive. Items added to the calendar showed up clearly on the landing page for the students to see. I liked that I could add a video to an assignment. Comments on assignments seemed easy to place, edit, or delete. I liked that I could give a comment on a final grade. I liked the big tab to remind me that I could email students about missing assignments. Of the three LMS, this seemed the most intuitive to me. I loved that right where you were working on making a quiz, they told you exactly what file types you could use. No wasted time trying to figure that out. 	 I didn't see how to set a time of day for discussions to be due. Video links could be added by did not show up as thumbnails. Exam questions need to be manually entered or converted to .csv format, which is time-consuming. There is going to be a conversion issue with all of the options though. I wished the student entry for the discussion post could be seen at the same time as the rubric. 		

D2L/Brightspace (continued)

Like Most About Platform	Like Least About Platform
 I liked that announcements could be saved as drafts and edited and be assigned start and end dates. I liked that fonts copied well (I have found formatting to be an ongoing issue in Blackboard). The calendar tool was easy and intuitive. Items added to the calendar showed up clearly on the landing page for the students to see. I liked that I could add a video to an assignment easily. Commenting on assignments seemed straightforward. The opportunity to comment on a final grade would be very nice. I liked that there was a great big 'button' to 	 Like Least About Platform I didn't see how to set a time of day for discussions to be due. Video links could be added but did not show up as thumbnails. Exam questions need to be manually entered or converted to .csv format, which is time-consuming. However, file type for import was clearly marked and I didn't have to hunt around on platforms or the internet to find out what I needed to do. I wished the discussion question post and my feedback could be seen at the same time. I recorded a very short video in Big Blue Button and it took several hours to become available.
remind me that I could notify students who hadn't submitted assignments.9. D2L/Brightspace seemed the most intuitive of all the LMS options; I liked the interface.	

D2L/Brightspace (continued (2))

Like Most About Platform	Like Least About Platform
I didn't love it. Everything seemed unintuitive and difficult to organize. Compared to Canvas, I didn't like much of anything.	Pretty much everything. It was very click heavy. You have to click on arrows just to get the drop down menu, rather than the arrow automatically dropping. I really hated the way the discussion question board was organized. We text and email every single day and I don't understand why these discussion boards are so bad and click heavy. Why can't the discussion board look like email or text messages? I have to click 14 times just to respond to someone. Grading was also very burdensome. The page has to refresh after every grade entered. This is very slow. With the inhumane number of courses and students Kean gives us, this grade system will take days to complete just one assignment for a course of 35 students.
Not very impressed	All of the pieces didn't seem to fit together. The discussion board feature was a plugin, I never could get a student view thus could not do all of the tasks required, the video was not working and gave an error message, the quiz equation editor did not allow typing of math equations in latex, and didn't have an easy way to make formula-based questions for STEM classes
I tested the accessibility checker with html content copied in from an external html file and typed directly into the built in editor. I found the editor allowed tagging of textual content in basic ways - headers, paragraphs, ordered lists to enable accessibility. The checker worked very well at finding accessibility issues and prompted the user to correct the issues it found while checking. The user must know how to fix the error but it is a plus that the checker allows corrections mid stream while checking.	I found the User interface and user experience (i.e. mine, personal opinion) to be a bit congested and navigation somewhat cumbersome with potentially too many options and too much flexibility in setting up a course and creating uploading content. Possibly this is because I am a new user.
User friendly. The home page. mobile app.	

D2L/Brightspace (continued (3))

Like Most About Platform	Like Least About Platform
 Overall appearance as well as the flexibility and customization Flexibility for adding and displaying media Easy to update personal information and add personal picture Add contents of many types is relatively easy 	 There is sometimes more than one way to do the same thing, which may lead to confusion. Some contents can feel redundant. Locating the critical features is not intuitive. Creating quizzes takes time. The user has to perform many clicks before starting to see the final result. The system is sometimes slow. The Discussion boards are hard to read. The link between Ment.io and D2L is also not so clear especially when it comes to grading the DQs. (Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.) The user interface is sometimes not so consistent. When using the Record video function, the overall quality is poor. When adding a video in the announcement, the video does not play internally; I had to open it externally using the YouTube Link. Loading the content of the assignments is slow. I tried to with PDF submitted assignments, and I had to wait for a couple of seconds before seeing the PDF. For the grading, I am not sure if I have to go back each time and click over the name of one student to make the grading.

D2L/Brightspace (continued (4))

Platform	Yes	Somewhat	No	Total Responders
Blackboard Learn Ultra	54%	23%	23%	13
Canvas	63%	38%	0%	16
D2L/Brightspace	29%	21%	50%	14
Overall average	49%	28%	23%	43

The navigation is intuitive to you as an instructor

Areas of the platform that do not feel intuitive

Blackboard Learn Ultra

I stated this previously. It is not easy to find where to create assignments initially. Once you are in the assignments, it is difficult to figure out how to make an assignment where students are required to attach certain files. Also, I still cannot find where to even record a video in this interface. It is not intuitive. What is quite sad about the interface is that I watched the presentation provided by the Blackboard LMS visitors, and I still could not find my way around the interface in an intuitive manner.

It was hard to find where to grade items.

The 'tabbed' sheets cover up other options; I am very visual and that bothers me.

Still hard to know where to look for some items, but it's better than the original Blackboard.

Lack of auto-populate function--need to repetitively upload redundant materials in multiple sites--Blackboard is still a labyrinth making the learning curve STEEP.

The gradebook

I can't find where anything is. The weird overlay of the course on top of the home page, as opposed to just viewing as a different page, wastes screen space and makes it hard to figure out where you are and what menu belongs to what. The graphical menu icons are non-intuitive, and there were not working mouse overs or text descriptions. I essentially could not find any of the items for the tasks we were supposed to perform. This is just awful.

Areas of the platform that do not feel intuitive

Canvas

The gradebook is a pain to navigate.

moving around from feature to feature. I ended up at the main page with all course tiles quite a few times.

Could NOT find the feature to create a live session. Clicked on Panopto and couldn't do anything with it. (*Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.*)

Too many options in the course itself, not set up as per current Kean method by weekly units. If that could be changed to be set up by weekly units, with assignments, discussions and live sessions included within each weekly unit (to ensure students will have a guide to completing the course successfully), then my concern would be resolved.

The gradebook seemed awkward. Perhaps I didn't spend enough time with it. But why can't gradebooks be as easy as Excel?

Areas of the platform that do not feel intuitive

D2L/Brightspace

Content tab is very vague and the toolbar at the top would be more user friendly to the left instead Hard to switch back and forth to the student view

It would be easier to start with nothing pre-loaded to see if I still felt the same. It wasn't bad.

can't find what i need, too much searching

The links to videos and the discussion board. When in a class, I'm unsure if I am in the course itself or on the main menu.

It really took me several minutes to figure out basic tasks like how to add a module or where the announcements go after making them. I couldn't really tell where the course home page was and the content was. Every time I clicked content it would take me to a different looking page. I am not a technophobe. I have experience writing code and building web pages. I did not like the feel of D2L.

The pieces are all plugins with brand names, I had to guess what things were, instead of things just being labeled video, or discussion

I found the User interface to be cumbersome, possibly due to the extreme level of flexibility built in but this could be to my minimal experience with LMS's in general and Brightspace. I am not a professional instructor.

- There is sometimes more than one way to do the same thing, which may lead to confusion. Some contents can feel redundant.

- Locating the critical features is not intuitive.

- The Discussion boards are hard to read. The link between Ment.Io and D2L is also not so clear especially when it comes to grading the DQs.

- The user interface is sometimes not so consistent.

- For the grading, I am not sure if I have to go back each time and click over the name of one student to make the grading.

	Blackboard Learn Ultra	D2L/ Brightspace	Canvas	Overall Average
Like the look and feel of platform	3.31	3.00	4.20	3.52

Rate on a scale from 1 through 5 where 1 is Strongly Disagree and 5 is Strongly Agree

Participant Concerns Regarding LMS Plug-Ins *Potentially* Meeting Needs

Blackboard Learn Ultra

Using Blackboard Collaborate is slow, hard to use and not responsive. Loading the pages is relatively slow. I am not sure if that is because I am based in China.

Not sure how it works on all devices

Canvas

Live video is a huge need for a LMS and I couldn't get it to work.

D2L/Brightspace

The LMS contains everything needed for faculty and stuff, but lacks the intuitive ease of set up and navigation I feel is necessary to provide a positive experience.

Panopto first didn't download on my laptop; when I returned to evaluate it through D2L the trial had ended, so I was not able to assess that..(*Note that plug-in evaluation was removed from the pilot survey due to technical issues and will be evaluated more fully after an LMS has been selected.*)

I am concerned about D2L's video conferencing capabilities for remote and hybrid classes.

Adoption rate. Response time.

Participant Concerns Regarding LMS Plug-Ins NOT Meeting Needs

Blackboard Learn Ultra

Poor organization, wasted screen space, I literally could not find the things I needed to test, so I have no idea. It was non intuitive and clunky.

I need a user friendly LMS--Blackboard is not user friendly

Canvas

[No Comments]

D2L/Brightspace

Too much searching...too many clicks more website than LMS

poor organization, loosely cobbled together from different pieces, no uniform feel. Quizzes for STEM students are hard to create. Could never get video working. Could not get the student view working.

Navigator and course tools are redundant Assignment tools should be more condensed

I need to be able to quickly build a course. This did not feel like it would be quick. I had to click around to find what I needed. The gradebook has to refresh and open new windows and pop ups. This will not work for me.

Additional Questions Regarding Platforms

Blackboard Learn Ultra

Was this set up to be a fully functional sandbox? It wasn't obvious to me how to complete basic tasks and I think that was a limitation of the sandbox. Unlike the other platforms I've reviewed, Blackboard still seems to be very structured and forces you to follow their structure, even with an experimental course.

Don't have enough background

Can we include contents from previous Bb versions into the new ultra-version? - Is there any guarantee about the availability of the tool in China? Have all features been tested in the presence of a VPN?

- The pages loading time is sometimes slow. Is that related to the country from which the system is accessed?

Canvas

If you add a Google drive document, is it dynamic? If I update the document in Google drive, is the latest version automatically in Canvas? I didn't see any way to prevent cheating during the quiz. Does Canvas support Respondus or something similar to make sure students aren't googling the answer during a quiz?

Can the accessibility checker built into Canvas be configured to run against external file formatted content (MS word/.doc, MS powerpoint/.ppt, PDF etc.) prior to or at time of upload to Canvas?

Is there any guarantee about the availability of the system and all its features in China? - Is there any technical problem using the system with a VPN?

D2L/Brightspace

Can the accessibility checker be run against uploaded file content (e.g. MS word, ppt-powerpoint, PDFs)? I could not figure out how to check externally loaded files.

Can Youtube videos be uploaded to announcements and assignments? Can assignments be modified in multiple areas?

Can we automatically import contents from different LMS such as Black Board? - Is there any guarantee about the availability of the tool in China? Have all features been tested in the presence of a VPN? - The pages loading time is sometimes slow. Is that related to the country from which the system is accessed or the servers' response time?

Additional Comments/Feedback on Platforms

Blackboard Learn Ultra

In order of preference, Canvas was awesome, original blackboard is useable but not ideal, D2L would be problematic, and Ultra is unusable

I like the Ultra version much better than the original version we are currently working with. I still think it has a lot of limitations and Blackboard has been very unresponsive to our project. I like the Ultra version but would probably prefer Canvas after experimenting with all three platforms.

Canvas

It is definitely better than Blackboard and if those were the only two choices, I would jump on Canvas immediately. I reviewed Canvas first, however, so I don't have a good basis for comparing it to other platforms.

D2L/Brightspace

I would highly recommend Canvas over D2L after my sandbox experience.

Student Pilot Survey Responses

- In addition to the Faculty/Staff pilot survey the LMS Task Force did deploy a student pilot survey
- The response rate at this time is too low to do an analysis of the student pilot survey
 - 1 graduate student responded to each of the three platforms
 - 1 undergraduate student responded to one platform
 - Both students indicate 2+ years of experience using Learning Management Systems and can be considered experienced online learners
- The survey questions themselves were analyzed through discussions with the faculty, staff, and student(s) on the Task Force to prepare a stronger and more targeted community-wide survey

Appendix B: Community Survey Data

Participants	Registration Counts
Freshman	5
Sophomore	10
Junior	29
Senior	29
Graduate Student	22
Total Student Registrants	95
Faculty (Full time)	53
Faculty (Adjunct/Half-time Lecturer)	28
Staff Member (Does Not Teach)	9
Staff Member (Who Teaches)	15
Total Faculty/Staff/Managers Registrants	105
Grand Total	200

Community Sandbox Registration Data

*Participants were required to register for the sandbox experience using their @kean.edu email address

Location	Primary Campus Location	Distribution Percentage
Kean Ocean	13	6.5%
School of Online Education	5	2.5%
Kean Union	163	81.5%
Wenzhou Kean University	19	9.5%
Grand Total	200	

*School of Online Education/SOE/KON students may have identified one of the other home campus sites as their primary campus location.

Community Survey Data: Students

- Data below includes information from surveys in which ≥ 70% of the survey was completed
- All grade levels are represented
- All colleges are represented
 - SOE responses are likely folded into one of the seven colleges by the participant's major

Classman	Credits
Freshman	Maximum of 29 earned credits
Sophomore	Minimum of 30 to maximum of 59 earned credits
Junior	Minimum of 60 to maximum of 89 earned credits
Senior	Minimum of 90 earned credits
Graduate Student	

Participant Baseline Data

	Blackboard Learn Ultra	D2L/Brightspace	Canvas	Class Total
Freshman	2	1	1	4
Sophomore	2	0	1	3
Junior	13	2	7	22
Senior	8	7	9	24
Graduate student	15	5	5	25
Total Responses	40	15	23	78

- While there is no way to specifically identify the conversion of those who registered for the platforms and those who actually executed the survey, 78 responses out of 95 individuals registered appears to be a strong conversion
- The data is inclusive of all grade levels at Kean
| College* | Freshman | Sophomore | Junior | Senior | Graduate
student | Totals |
|---|----------|-----------|--------|--------|---------------------|--------|
| College of Business and
Public Management | 1 | 0 | 8 | 13 | 10 | 32 |
| College of Education | 0 | 0 | 4 | 2 | 1 | 7 |
| College of Liberal Arts | 3 | 1 | 3 | 4 | 0 | 11 |
| Michael Graves College | 0 | 1 | 1 | 0 | 0 | 2 |
| Nathan Weiss Graduate
College | 0 | 0 | 1 | 0 | 14 | 15 |
| NJ Center for Science,
Technology and
Mathematics | 0 | 1 | 3 | 0 | 0 | 4 |
| The Dorothy and George
Hennings College of
Science, Mathematics
and Technology | 0 | 0 | 2 | 5 | 0 | 7 |
| Total All Colleges | 4 | 3 | 22 | 24 | 25 | 78 |

*School of Online Education students are grouped into their respective academic colleges

- All colleges are represented in the data collection
- Some colleges may have greater participation rates than others as some professors may have encouraged completing the sandbox exercise as part of a course
- Juniors and seniors comprise the greatest portion (86.7%) of undergraduate respondents while freshman and sophomores reflect less than 9% of the overall data collected
- With the largest portion of participants being Juniors and above, the overall pool of students who participated will have had more opportunity to participate in online learning prior to the Spring of 2020
 - This may increase their overall comfort level with the sandbox experience

Primary mode of courses (In non-pandemic situation)

	Predominantly face to face/In-person classes	Predominantly online classes	Total per Grade Level
Freshman	75%	25%	4
Sophomore	67%	33%	3
Junior	73%	27%	22
Senior	88%	13%	24
Graduate student	88%	12%	25
Overall Responses	82%	18%	78

- The largest category of respondents primarily take face-to-face courses
- Students who predominantly take online courses is a low percentage of responses, but this population is important as they will be the most frequent users of the future LMS
- The comparatively lower percentage of graduate students who predominantly take online courses is not a surprise as the fully online graduate programs are still newer to the university
 - Online programs currently only account for 2 of Kean University's graduate programs and 5 of our post-master's certifications.

	0-1 years	2-4 years	5 or more years	Grand Total
Freshman	100%	0%	0%	4
Sophomore	67%	0%	33%	3
Junior	55%	36%	9%	22
Senior	46%	50%	4%	24
Graduate student	56%	16%	28%	25
Average	55%	31%	14%	78

Amount of time using an LMS system for coursework



- There is some concern with regard to the reporting data in relation to Blackboard Learn Ultra as just over 90% of respondents indicated some to advanced experience
 - There is concern regarding whether the individuals understood Blackboard Learn Ultra was a different platform than the current Blackboard platform the university currently uses
 - There is a possibility the question is answered correctly and the users may have experience with Blackboard Learn Ultra from a previous institution, although identifying one's experience as "Advanced" would be unlikely due to the newness of the platform
- Overall responses do indicate a general familiarity with the platforms chosen to be reviewed in this analysis

	Yes, I participated in the sandbox.	I have used this LMS previously.	No. I did not participate in the sandbox, nor do I have prior experience with this LMS.	Total Responses
Blackboard Learn Ultra	43%	18%	40%	40
D2L/Brightspace	53%	20%	27%	15
Canvas	35%	39%	26%	23
Overall	42%	24%	33%	78

- The data regarding *I have used this LMS Previously* is slightly lower than the question regarding experience levels with platforms indicates
 - It is possible part of the percentage regarding those who participated in the sandbox is inclusive of those who have also used the LMS previously

Sandbox Interaction as a Student

Tasks	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Submit an assignment	4.09	4.53	3.90	4.20
Take a test	3.75	4.53	3.82	4.02
Post to a discussion forum	3.78	4.59	3.45	3.98

Average based on a 1 to 5 scale where 1 is Difficult and 5 is Easy

Ease of Platform Access

Platform	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Average
On a Mobile Device (Tablet, phone, etc.)	3.17	4.40	3.86	3.75
On a Laptop/Desktop	3.79	4.63	4.50	4.20

Average based on a 1 to 5 scale where 1 is Extremely Difficult and 5 is Extremely Easy

- Overall the mobile device responses are lower than the ease of use on a laptop for the students
 - This is a potential important factor given the types of devices our students may be most likely to access in an online course
 - Recommendation to pull additional data from a separate analysis to see where/how students are most likely to complete their remote learning
 - The greater than one point differential between Canvas and Blackboard Learn Ultra points toward Canvas as the more accessible product

Ease of use of the navigation for you as a student

Navigation Overall	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Ease of Navigation	3.58	4.29	3.91	3.88

Average based on a 1 to 5 scale where 1 is Highly Difficult to use and 5 is Highly Intuitive

• Averages may be high due to earlier identified familiarity with the platform

Completed Sandbox Tasks

As a Student	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Access Syllabus	3.63	4.76	3.70	4.02
View Class Schedule	3.83	4.47	3.60	4.00
Email the Instructor	3.64	4.18	3.18	3.58
Access Gradebook	3.88	4.63	4.40	4.22

Average based on a 1 to 5 scale where 1 Extremely Difficult and 5 is Extremely Easy

- While all scores are above average, the great drop in the average corresponding to emailing the instructor in Brightspace is concerning
 - This is a feature students need to have readily accessible

Most and Least Liked Features

Most Liked Features	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Access to view grades	38%	19%	40%	32%
Emailing the instructor	8%	0%	20%	8%
Posting to the discussion forum	17%	13%	0%	12%
Submitting an assignment	25%	44%	0%	26%
Taking a test	8%	0%	0%	4%
View class schedule	4%	25%	40%	18%
Grand Total	24	16	10	50

• The most liked features for students overall is access to viewing grades

Least Liked Feature	Blackboard Canvas Learn Ultra		D2L/ Brightspace	Overall Average
Access to view grades	4%	0%	0%	2%
Emailing the instructor	25% 25%		10%	22%
Posting to the discussion forum	38%	25%	30%	32%
Submitting an assignment	13%	13%	10%	12%
Taking a test	13%	19%	30%	18%
View class schedule	8%	19%	20%	14%
Grand Total	24	16	10	50

- Despite the drop in average score for emailing the instructor through Brightspace, students did not identify this as a least liked feature
- In regard to the least-liked feature, *Discussion Forum*, it is important to keep in mind this may be influenced with previous bias as the students have been vocal about not liking the discussion forums

- There is no way to tell if the bias did in fact influence their decisions, but the fact it is the highest in all three platforms indicates further discussion on this feature may need to occur
- This is an important feature in the fully online courses run by the School of Online Education and is a necessary function for the online classes to run as designed
 - Recommendation to work with a smaller cohort to identify ways to help adjust mindset and train individuals in different ways to leverage the discussion forums as utilization of this feature is best practices in online education
- The low score in Brightspace for the feature, *Taking a Test,* may relate to several different possibilities
 - This is the product with the least number of overall responses
 - Unfamiliarity with the product
 - The test taking area is not as well developed as the other platforms

Look and feel of the LMS

Student View of LMS	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Look and feel of LMS	3.08	4.24	3.82	3.62

Average based on a 1 to 5 scale where 5 is Strongly Agree and 1 is Strongly Disagree

- While the score for Blackboard Learn Ultra dropped, the scores for Brightspace and Canvas are close to those indicated for ease of navigation
 - The scores between the *look and feel* of the LMS and for ease of Navigation should be similar as they are both tied to the overall user interface/design

Student Response to LMS Resources

The following questions are specific to the videos available to review within different Learning Management Systems and their features. Videos may include details about features, and step-by-step instructions on how to use each of the different features within the platforms.

Survey participants *did not* have to participate in the sandboxes to complete the questions regarding LMS Resources.

Participant review of LMS resources (videos) available	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Total
Yes. (I did this in conjunction with the sandbox experience.)	25%	26%	47%	29%
Yes. (I had prior experience with this LMS system but reviewed the resources.)	33%	43%	13%	32%
Yes. (I only reviewed resources, I did not do the sandbox nor do I have prior experience with the platform.)	28%	17%	27%	24%
No	15%	13%	13%	14%
Total Survey Responses	40	23	15	78

Based on Video Resources:	Blackboard Learn Ultra	Canvas	D2L /Brightspace	Overall Average
The resources were informative	3.70	4.31	3.56	3.88
The information aligned with my experience in the platform	3.83	4.69	3.78	4.10
The videos helped further enhance my understanding of the platform	3.83	4.56	4.11	4.13

Average based on a 1 to 5 scale where 1 is Disagree and 5 is Agree

All Student Participants in Community Survey Responses

	Yes	No	Total Responses
Blackboard Learn Ultra	74%	26%	34
Canvas	95%	5%	20
D2L/Brightspace	77%	23%	13
Overall Average	81%	19%	67

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• Students overall indicate they are agreeable to shifting to any of the LMS platforms reviewed

• Canvas received the greatest support for adoption at 95%

Community Survey Data: Faculty/Staff/Manager

- Data below includes information from surveys in which \ge 70% of the survey was completed

Years experience in LMS by Faculty/Staff/Manager type	Blackboard Learn Ultra	Brightspace	Canvas	Total
Declined to identify	1	1	0	2
Declined to identify	0	1	0	1
0-1 years	1	0	0	1
Faculty member (Adjunct/Half-time Lecturer)	8	3	9	20
0-1 years	2	0	0	2
2-4 years	1	1	4	6
5 or more years	5	2	5	12
Faculty member (Full time)	17	7	26	50
0-1 years	5	0	5	10
2-4 years	4	0	5	9
5 or more years	8	7	16	31
Staff member (who does not teach)	1	0	1	2
0-1 years	0	0	1	1
2-4 years	1	0	0	1
Staff member (who teaches)	2	2	3	7
0-1 years	1	1	1	3
2-4 years	0	0	1	1
5 or more years	1	1	1	3
Grand Total	29	13	39	81

Participant Baseline Data

- Full-time faculty account for 61.72% of responses
- Overall, individuals who teach (faculty, and staff who teach) account for 95% of respondents

Identification of participation in the sandbox and/or prior use of the platform

LMS Platform	Yes	No	Total
Blackboard Learn Ultra	23	6	29
D2L/Brightspace	8	5	13
Canvas	32	7	39
Grand Total	63	18	81

Identify previous use of the platforms

LMS Platform	Yes	No	Total
Blackboard Learn Ultra	15	7	22
D2L/Brightspace	2	5	7
Canvas	23	9	32
Grand Total	40	21	61



- Like the student survey, the responses in relation to the question regarding *Previous Use of the Platform* do not align
 - Additionally, with how recently Blackboard Learn Ultra has launched, and that Kean has not adopted the platform, there is a concern that the responses in Blackboard Learn Ultra are more reflective of our currently used Blackboard system
 - However, there are a number of adjuncts and newer professors to the university who may have previous experience with Blackboard Learn Ultra
 - Blackboard Learn Ultra scores may be lower and reflect the current sentiment surrounding our current Blackboard system

As an Instructor	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Create an assignment	2.91	4.65	3.25	3.84
Create a quiz/test	2.45	4.34	2.75	3.46
Post to a discussion forum	3.19	3.74	2.86	3.39
Post a welcome message	3.57	4.83	3.88	4.24

Professor Sandbox Experience Ratings

Average based on a 1 to 5 scale where 1 is Slightly Difficult and 5 is Extremely Easy

Instructor as a Student	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Submit an assignment	2.90	4.68	3.29	3.79
Take a test	4.31	4.57	3.67	4.36
Post to a discussion forum	3.00	4.74	3.14	3.80

Average based on a 1 to 5 scale where 1 is Slightly Difficult and 5 is Extremely Easy

As an Instructor	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Respond to a discussion post	3.36	4.73	2.86	3.95
Grade a discussion question	3.17	4.54	2.71	3.75
Grade a student assignment	3.22	4.55	3.13	3.85
Record a 1-minute welcome video	3.40	4.61	3.17	4.00
Upload and share a video	3.24	4.67	3.57	4.02

Average based on a 1 to 5 scale where 1 is Slightly Difficult and 5 is Extremely Easy

Based on the Sandbox

Identify if the platforms meet your teaching needs in each classroom environment below

Teaching needs	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
A Kean Online Course	2.91	4.45	3.43	3.77
A Hybrid Course	3.17	4.56	3.50	3.92
A Face-to-Face Course	3.22	4.38	3.75	3.87
A Remote Course	3.36	4.81	4.00	4.18

Average based on a 1 to 5 scale where 1 is Disagree and 5 is Agree

Ease of use of the navigation for you as an instructor

Navigation	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Ease of Navigation	2.77	4.47	3.5	3.74

Average based on a 1 to 5 scale where 1 is Highly Difficult to Use and 5 is Highly Intuitive

Most and Least Liked Features

Most Liked Features	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall
Creating assignments	32%	22%	57%	30%
Discussion posts	14%	6%	29%	11%
Grading	23%	16%	0%	16%
Navigation	18%	47%	0%	31%
Setting up a test or quiz	5%	3%	14%	5%
Uploading a video	9%	6%	0%	7%
Total Responses	22	32	7	61

- Navigation as a key element in *Most Liked Feature* is important as it impacts the overall user experience
- The total number of respondents to the Brightspace platform makes conclusions based upon the data tenuous

Least Liked Features	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall
Creating assignments	9%	0%	13%	5%
Discussion posts	9%	12%	0%	9%
Grading	13%	19%	25%	18%
Navigation	22%	12%	50%	21%
Setting up a test or quiz	17%	42%	13%	28%
Uploading a video	30%	15%	0%	19%
Total Responses	23	26	8	57

- Navigation as a least-liked feature in Brightspace is concerning
 - This response also does not fully align with the overall average regarding Navigation asked in a different section
- Negative, or least- liked features, should be seen as an opportunity to look at where individuals may benefit from additional training on how to find or use a specific feature in the systems
- The total number of respondents to the Brightspace platform makes conclusions based upon the data tenuous

Look and Feel of the LMS

The look and feel of the LMS is appealing

Navigation	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Look and Feel	2.57	4.56	3.25	3.67

Average based on a 1 to 5 scale where 5 is Strongly Agree and 1 is Strongly Disagree to Use

- The gaps in these averages are very different than that of the students
 - The student gaps are much tighter together where here, the professors gives almost a two point spread

Meet your teaching needs:	Yes	No	Maybe	Total Responses
Blackboard Learn Ultra	39%	48%	13%	23
Canvas	84%	6%	10%	31
D2L/Brightspace	13%	25%	63%	8
Overall Total	58%	24%	18%	62

LMS and Teaching Needs

- The gaps in these averages are not reflective of those observed in the student experience
- Brightspace does not have a comparable number of responses to that of Blackboard Learn Ultra or Canvas

Faculty/Staff Response to LMS Resources

The following questions are specific to the videos available to review different Learning Management Systems and their features. Videos may include details about features, and stepby-step instructions on how to use each of the different features within the platforms.

Survey participants *did not* have to participate in the sandboxes to complete the questions regarding LMS Resources.

Participant review of LMS resources (videos) available	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Total
Yes. (I did this in conjunction with the sandbox experience.)	34%	36%	69%	41%
Yes. (I had prior experience with this LMS system but reviewed the resources.)	34%	41%	8%	33%
Yes. (I only reviewed resources, I did not do the sandbox nor do I have prior experience with the platform.)	14%	15%	15%	15%
No	17%	8%	8%	11%
Total Survey Responses	29	39	13	81

Based on Video Resources:	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
The resources were informative	3.50	4.56	3.40	3.98
Resources will be helpful for the future to further learning	3.35	4.61	3.30	3.95
The information aligned with my experience in the platform	3.20	4.46	3.40	3.84
The videos helped further enhance my understanding of the platform	3.35	4.50	3.20	3.88

Average based on a 1 to 5 scale where 1 is Disagree and 5 is Agree

Based on Video Resources:	Blackboard Learn Ultra	Canvas	D2L/ Brightspace	Overall Average
Interested in working with the platform in the future	2.92	4.51	3.17	3.75
Meet Teaching Needs	3.04	4.49	3.25	3.79

Average based on a 1 to 5 scale where 1 is Very Unlikely and 5 is Very Likely

• The average suggests a much greater identified comfort level with the adoption of Canvas

All Faculty/Staff Participants in Survey Responses

Support for adopting the LMS in the future

	Yes	No	Total Responses
Blackboard Learn Ultra	46%	54%	24
Canvas	91%	9%	34
D2L/Brightspace	58%	42%	12
Overall Average	70%	30%	70

• Faculty/Staff show a clear preference toward Canvas with a much greater split in percentages than the Student survey

Additional Comments (Redacted Emails)

Additional community comments sent via email after survey closed

to LMSSandbox@kean.edu, Sorry I was unable to submit my LMS Survey earlier today. Attended the OER Conwell.	Mar 29, 2021, 5:37 PM	~	tomorro	* w as
I was unable to view the Bright space but was able to view both Blackboard and Ca overall.	anvas which seem user friendly	and qu	ite simil	ar
to LMS - Hello,	Mon, Ma	ar 29, (6:11 PI	М
I just realized the sandbox surveys were due today at 5PM (it is around 6p If I can still weigh in, my preferred LMS is Canvas. If I can still complete th			e them	I).
Thanks in advance.				
to LMSSandbox - Hello,	Mon, Mar 29, 6:17 PM	☆	+	•
I am sorry but I had class today from 4:30-5:45 and I missed the deadline to get my v Canvas. I took time last week to get to know Brightspace and Canvas and I even tried tutorials given in the summertime. After careful consideration, my vote is for Kean Un	d the new blackboard. I also w			the
Thank you very much,				

From: To:

My two cents on the introduction of new technology at Kean.

Let me just say I am good at technology and I do know what I am doing -- indeed far too often I am called upon to solve all sorts of issues in the dept!

Having looked at the 3 options available to us -- I think Kean should be making the move to Canvas. BB has had its day and BB 2.0 does not really seem to be a better option -- remember we now technically have 24/7 help and still there are too many options.

There will be a learning curve with Canvas but with decent training and support Kean could transfer easily and well for Fall 2022!

Thanks

I was not able to activate the Sandboxes as they are now closed.

My vote is for Canvas.

No to Blackboard. Canvas has more credentials and experience than Brightspace.

I hope that helps!

Appendix C: LMS Working Group

LMS Working Group Product Review Schedule			
Product	Demonstration Date		
K16 Solutions	November 10, 2020		
Blackboard Learn Ultra	November 17, 2020		
Canvas	November 24, 2020		
D2L/Brightspace	December 1, 2020		
Canvas	December 8, 2020		
Blackboard Learn Ultra	January 21, 2021		

<u>Calendar of Demonstrations</u> in preparation to develop the LMS Sandboxes.

Appendix D: Senate Phase I Report

Senate Phase I Report https://www.kean.edu/sites/default/files/2021-03/Kean%20LMS-Phase%201%20Report %20August%202020.pdf

Appendix E: LMS Academic Technology Working Group

AT Working Group Student and Faculty Technology Requests

https://www.kean.edu/media/working-group-student-and-faculty-tech-response

- File will open as an XLS

AT Working Group Priorities

During the initial weeks of the AT Working Group the group deployed a survey within their working group to prioritize tasks and break up additional focus groups. The general/summary data is below.

Focus Groups Under the AT Working Group
Classroom Technology
University Wide Technology
Student Use Technology
Additional Locations and Technology
University Software/Systems
Faculty Use Technology

Table below shows ranking of order of importance per the LMS Academic Technology Working Group

	Rank of Priority
100% reliable WiFi - 24/7.	1
Enhanced student access to technology through loan programs, tying technology to financial aid, working with B&N to give students new access to both hardware and software.	2
Proactive software licensing to support specific college-based applications.	3
Timely and effective support response to technology problems.	3
College-based technology support.	4
Implement a 5 year (maximum) replacement cycle for all computers, both individual and in labs	5
Proactive faculty and staff support so that basic administrative functions operate continually.	6

Appendix F: Minutes from Working Groups Minutes from Working Groups