Recommendations: Learning Management System at UB

LMS Review Committee

January 11, 2022

Executive Summary:

- In fall 2021, the LMS Review Committee engaged in a review of three learning management systems (Blackboard Ultra, Brightspace, and Canvas) to identify the system that will best meet the needs of UB instructors and students.
- To collect this review, the committee developed an evaluation rubric against which to compare each system against necessary functionality.
- In addition to scoring each system with the evaluation rubric, the committee examined additional data collected through:
    - An instructional checklist completed by committee members as they performed instructional tasks within each system;
    - Feedback forms completed by members of the campus community after watching demos of the three systems;
    - An instructor's survey examining required functionality; and
    - Usage of the three systems among AAU peer institutions and other notable US institutions.
- Based on their review, the committee developed the following recommendations:
    - Canvas is the LMS that best meets the needs of instructors and students at UB.
    - The UB Learns Support Team, part of the Office of Curriculum, Assessment, and Teaching Transformation (CATT), will work with UBIT to coordinate a phased timeline for implementation, as well as the procedures for system configuration, custom branding, and internal/external integrations, including SIS and authentication, as well as relevant instructional tools, such as Respondus, Panopto, and Zoom.
    - CATT will coordinate:
        - The communication plan for informing the campus of the decision, as well as communications about key milestones and available supports throughout the transition;
        - The course migration process, as well as the training of instructional support staff across the university, including those in the Libraries and UBIT Nodes;
        - The training of instructors, as well as a phased in process for migrating instructors into the new LMS; and
        - Training and orientation materials for dissemination to students.
    - The Blackboard contract should be extended for at least one year to allow for a staged transition to the new LMS.
    - An LMS advisory group should be constituted to represent the concerns of instructors, instructional support and technical staff, and students on an ongoing basis.
    - The LMS Advisory Group should collaborate with Academic Affairs and UBIT to develop an Educational Technologies Policy to establish parameters around the implementation of educational and classroom technologies that provide specific learning management functions distinct from the centrally supported LMS and ensure that appropriate technical and accessibility standards are met by any tool that is considered for adoption.

LMS Review Committee Charge

Rationale:

At the end of 2022, SUNY will end the system-wide contract with Blackboard and transition to Brightspace D2L. This transition provides UB with the opportunity to evaluate the future direction of our Learning Management System (LMS), also known as UB Learns, and determine whether we join the SUNY contract with Brightspace, maintain a relationship with Blackboard, or establish a relationship with another service provider. The LMS review will constitute the Request for Information Process (RFI), and the recommended LMS could serve as UB's primary online delivery platform for the next five years or more, potentially having a significant impact on the future of online learning at UB. Products recommended are subject to NYS Procurement requirements.

Charge:

The LMS Review Committee is charged with evaluating learning management systems for possible implementation. In its evaluation, the committee should recommend features that an LMS should include to serve faculty and student needs best. As the LMS significantly affects teaching and learning across the campus, in the evaluation process, the committee should consult meaningfully with the broad range of constituents, engaging the breadth of faculty and student experiences.

Deliverables:

- Create an appropriate rubric for evaluating LMS products, including but not limited to specifications that can be used as part of the RFP process. The rubric should include an evaluation of the surrounding developer/development community and its ability to enhance the teaching and learning experience at UB. The rubric should attend to any social or racial inequities that might be manifested in the LMS environment.
- Develop and implement a process for receiving input from campus constituents that reflects a broad range of faculty and student experiences.
- Based on the rubric and processes developed above, evaluate each LMS and provide a recommendation for future direction of UB's LMS.
- Develop a sample implementation timeline and necessary migration.

Deadline:

Recommendation due January 24, 2022

LMS Review Committee Membership

Co-Chairs:

Valerie Nesset, Associate Professor, Information Science

Carol Van Zile-Tamsen, Associate Vice Provost for Curriculum, Assessment, & Teaching Transformation

Membership:

Bisantz, Ann; Dean of Undergraduate Education; Professor of Industrial and Systems Engineering

Brunelle, Erin; Senior Research Support Specialist, Center for Assistive Technology

Cerne, John; Professor, Director of Undergraduate Studies for Physics

Cichocki, Dianna; Clinical Assistant Professor, Management Science and Systems

Connolly, Michelle; Digital Learning Designer; Curriculum, Assessment, & Teaching Transformation

Greenfield, Mark; Web Accessibility Officer, Office of Equity, Diversity, and Inclusion

Kenline, Kelly; Assistant Vice President, UBIT

Kruger, Jessica; Clinical Assistant Professor, Community Health and Health Behavior

Meka, Jennifer; Director, Medical Education and Educational Research Institute

Morreale, Cathleen; Assistant Vice Provost for Educational Effectiveness and Learning Analytics

Nightingale, Alice; Assistant Professor, Engineering Education

Reed, Dawn; Director, Interdivisional Marketing & Communications

Rintamaki, Lance; Associate Professor, Director of Undergraduate Studies, Communication

Sajecki, Bryan; Undergraduate Education Librarian, University Libraries

Schen, Claire; Associate Professor, History

Weber, Cheri; Director of Technology Procurement, Procurement Services

Wright, Rob; Manager, Application Development, Enterprise Application Development

Schecter Powrie, Jennifer; Ph.D. Candidate, Linguistics

Singh, Nick; Student, Civil, Structural and Environmental Engineering

Wolfgang, Austin; Student, Sociology; Student Association Treasurer

LMS Review Process

The committee engaged in a holistic review process to develop recommendations that included feedback from a wide array of campus stakeholders and several types of data. The processes for collecting data are described below.

LMS Evaluation Rubric

The evaluation rubric was developed through a series of iterative steps, starting in July, 2021:

- Staff in the newly launched office of CATT began the groundwork for the committee through three avenues of effort:
    - Reaching out to peer institutions that had recently gone through an LMS review for copies of relevant rubrics and rating forms;
    - Reviewing Blackboard backend data to determine the usage levels of features and tools; and
    - Leveraging data collected during the pandemic, and information gained through personal interactions with instructors, to identify key needs and concerns.
- The first draft of the extensive rubric was shared with committee members (divided into admin/technical, instructor, and student sub-committees), and from the perspective of each subcommittee, members worked to identify the items that are must-haves or nice-to-haves versus those that don't matter. All rubric items for which at least one person indicated the item would be "nice to have" were maintained. In the end, the number of items dropped from the final version was less than 10.
- In addition to data collected from committee members, we used a process to collect rubric data from key groups of experts around the institution: the UB Learns Support Team, the Teaching Transformation Team, and members of Enterprise Application Services in UBIT.
- Review committee members completed the rubric based on participation in vendor demos and use of all three platforms in a sandbox setting.

To compile this data, ratings from each committee member were entered into a single version of the rubric for each LMS. An average rating was calculated for each rubric item and for each overall area of functionality. The final rubric with aggregate scores is shown in Appendix A.

Instructor Functional Checklist

Members of the Instructor Subcommittee participated in a hands-on review of each LMS. They were provided with a checklist of common instructional tasks to be completed in each system. To compile this data, ratings from each subcommittee member were entered into a single version of the checklist for each LMS. An average rating was calculated for each checklist item, as was an overall functionality score for each LMS. The checklist with aggregate scores and open-ended comments is presented in Appendix B.

Feedback from Stakeholders

University instructors, instructional support staff from across the institution, and students were invited to participate in demonstrations of each system by the respective vendor. After each demo, participants were asked to complete a short feedback form to share their impressions of each LMS. Individual responses were compiled to show the percentage of respondents rating functionality as at least acceptable, and the percentage who indicated that the target LMS should be adopted. The items and results are shared in Appendices C, D, and E.

Instructor Survey

In addition to participating in vendor demos and providing feedback on each LMS, we invited instructors from across campus to complete a more detailed survey about the key features that are must-haves in an LMS. To compile the data, we looked at the functionalities with the highest level of endorsement. These key functionalities were mapped to the committee rubric results to further weight rubric ratings for the functionalities that instructors desire most. Survey items and raw results are presented in Appendix F. We also mapped the key functionalities identified in instructor survey responses with ratings of that functionality on the LMS Evaluation Rubric. The full mapping is shown in Appendix G.

Peer Review

As an R-1 AAU institution, the committee wanted to document LMS use among both current and aspirational AAU peers and other notable institutions in the United States. Results are shown in Appendix H.

Findings

Rubric and Functional Review

The findings in the table below are average ratings for functional categories within the review rubric and for the functional checklist review of the sandbox course sites. For overall functionality, Brightspace and Canvas are tied, but both slightly edge out Blackboard Ultra. (The full rubric with aggregate ratings is presented in Appendix A.)

LMS Component	Blackboard Ultra	Brightspace	Canvas
Technical Specifications	2.0	2.1	2.1
Reporting & Analytics	1.5	2.0	1.9
Instructor Functionality	2.1	2.4	2.4
Student Functionality	1.9	2.5	2.4
Communications	1.9	2.4	2.6
Functional Review	2.1	2.6	2.8
Overall Score	1.9	2.3	2.3

To further understand the functionality of each system, we examined specific strengths and weaknesses that were particularly apparent to the reviewers.

Overall, we found functional and operational parity between the LMS systems reviewed. Each platform has full LTI/API third-party tool integration functionality, appropriate authentication connectivity and defined SIS workflow options to meet the university's needs. The Brightspace and Canvas platforms offer bulk and self-service content migration paths. Each vendor provides suitable support, documentation, and user community connections. We are also impressed with Brightspace and Canvas sales/support teams, who have gone above and beyond to answer our questions and solve any issues during the evaluation period. Additional strengths and concerns for each platform are noted below.

Brightspace Strengths:

- Modern and visually appealing user interface;
- Accessibility features are built-in throughout the system;
- Instructors/Students can create video/audio responses and these videos don't count against storage—up to 30 minutes; also includes features for accessibility and universal design—alt text, description, language selection and auto captioning option;

- Robust Portfolio tool included;
- Provides useful templates and online guidance for learning module design;
- Adaptive Release is very robust; multiple options, available throughout the system;
- Robust tool for monitoring student progress within individual courses;
- Activity feed represents an announcements tool that allows for student dialog; and
- From a procurement process, Brightspace represents the easiest path forward.

Brightspace Concerns:

- The SUNY single-instance, single tenant option will create complexity in the implementation due to the need for a Global ID, which UB currently does not use. This would also add additional time for implementation since the Global ID system would need to be implemented first.
- Course availability—inability to extend enrollments for particular students after a semester ends which has implications for incompletes;
- Course navigation and set-up was somewhat confusing on the instructional side;
- No "student peer review" assignment tool where Students can review the work of other students through criteria-based reference evaluation; and
- Requires the additional purchase of plagiarism detection and accessibility review applications.

Canvas Strengths:

- Intuitive User Interface for students and instructors;
- Impressive Calendar tool that allows drag and drop updates to assignments that then populates new dates throughout course; students can also reserve office hour appointments in calendar;
- Email is stored at course level and simultaneously delivered to email client;
- 'What-If' grading tool allows students to predict final grade by toggling assignment scores;
- Robust peer review tool for assignments, tests and discussion board posts;
- Robust tool for monitoring student progress within individual courses, as well as additional analytics with the Impacts tool;
- Content Editor includes an 'Auto Save' feature so that work is saved if connectivity is lost;
- SIS integration similar to current Blackboard integration;
- Included Portfolio tool;
- Studio tool available for creating and auto transcribing videos right in the course with auto transcribing; these videos do not count against storage quotas;
- Pages tool allows for formatted and accessible pages of course content;
- Assignment set-up provides for automatic scoring of missing assignments and calculation of late penalty, as well as automatically linking to a robust rubric tool if desired for assignment scoring; and
- Batch migration of up to 10,000 courses is included in the implementation plan.

Canvas Concerns:

- Potentially overcomplicated for some users;
- 'Busy/cluttered' home screen;
- No other SUNY implementations;
- Minimum custom branding options;
- Limited organization/hierarchy structure;
- Requires the additional purchase of plagiarism detection and accessibility review applications; and
- From a procurement perspective, would require a full request for proposal (RFP).
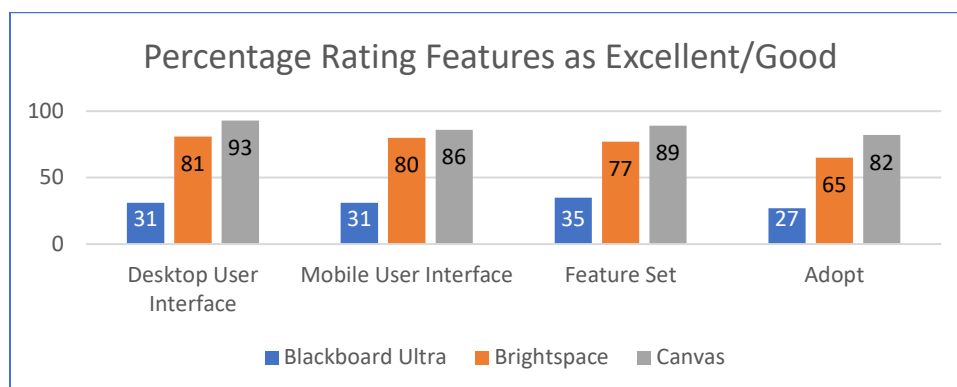
Blackboard Ultra Strengths:

- Faculty can customize content migration timeline;
- Long standing client, fully operational and integrated with all university tools;
- Provide clients 'Staging' and 'Test' environments;
- Ability to Customize gradebook calculations;
- Announcements appear as overlays: students have to actively dismiss announcements to get to course material;
- Built with a focus on mobile devices/responsive design;
- Automatic zeroes can be assigned if nothing submitted by due date;
- Microsoft Teams integration;
- Integrations with proctoring services; and
- Panopto does not require provisioning by instructor.

Blackboard Ultra Concerns:

- Not a mature product. Still adding or missing major and minor features;
- Complete course roster is always visible to all enrolled students;
- Limited question types for objective exams/tests/quizzes and does not allow for grading one question at a time;
- Items cannot be hidden in the Gradebook;
- Cannot use a rubric to score a Gradebook column without including a submission requirement;
- Content editor does not have accessibility checker;
- Minimal question bank management (can import but can't create/export question banks; can only edit questions when using in a test; cannot be copied across courses);
- No portfolio submission option;
- Peer review is only quantitative; and
- From a procurement perspective, would require a full request for proposal (RFP).

Feedback from Stakeholders

Based on reactions to the demonstrations (collected from 62 respondents for Brightspace, 54 responses for Canvas, and 44 responses for Blackboard Ultra), there is a clear difference between Blackboard Ultra and the other two systems, with Canvas being rated more highly than Brightspace: 82% of demonstration participants indicating that UB should consider its adoption as the next LMS. The figure below shows the responses from demonstration participants on the feedback forms for each LMS. Full reports of these results can be found in Appendices C, D, and E.

Percentage Rating Features as Excellent/Good

	Blackboard Ultra	Brightspace	Canvas
Desktop User Interface	31	81	93
Mobile User Interface	31	80	86
Feature Set	35	77	89
Adopt	27	65	82

Instructor Survey

The instructor survey asked UB instructors to identify key functionalities that are essential for their instruction, and approximately 220 instructors submitted responses (see Appendix G for the full report). The key functionalities were determined based on the percentage of respondents who indicated that a function was very or extremely important. The threshold was set at one-third of the respondents or greater. Then, the rubric ratings for each platform on each of these key functionalities was pulled out, and an overall score was calculated for each platform across the key functionalities. These results are shown in the table below.

Key Functionality Rubric Ratings	Blackboard Ultra	Brightspace	Canvas
	1.8	2.5	2.6

Notably, instructors indicate that they would like a more robust calendar option that allows students to make appointments during established office hours. Canvas has this functionality, and the Canvas calendar can also be synced directly with Outlook and Google Calendars, allowing instructors and students to see everything in one place.

Peer Review

The table below shows the peer review results among UBs AAU peers and other notable institutions in the United States. Overwhelmingly, institutions of similar size and scope have selected Canvas for their LMS.

Peer Group	Blackboard Ultra	Brightspace	Canvas
Current AAU Peers (6 Institutions)	1 (17%)	1 (17%)	4 (67%)
Aspirational AAU Peers (6 Institutions)	0	0	6 (100%)
Other Notable Institutions (6 Institutions)	0	0	6 (100%)

Decision-Making Process

Compiled quantitative and qualitative data was shared with members of the LMS Review Committee. Based on the ratings/comments related to functionality, interface, and ease of use, as well as the identified key features, and usage among peer institutions, committee members were asked to review all evidence and rank order the three systems in order of preference, with one being the most highly ranked and 3 being the least highly ranked. It is important to note that the committee itself did not look at any pricing information and did not consider the procurement ramifications when reviewing and ranking the three systems. Fifteen committee members submitted rankings, and percentages presented in the results table below reflect the percentage of these 15 who ranked each LMS as first, second, or third choice:

Ranking	Blackboard Ultra	Brightspace	Canvas
1st choice	0.0%	20.0%	80.0%
2nd choice	6.7	73.3	20.0
3rd choice	93.3	6.7	0.0%

Recommendations

Based upon all available information, the LMS Review Committee has ranked Canvas as the learning management system most likely to meet the needs of instructors and students at UB.

Additional Recommendations:

As a part of the review process, the committee engaged in conversations about implementing a new system, course migration, and training of instructors and instructional support staff. The following recommendations were a result of these discussions:

- The UB Learns Support Team, part of the Office of Curriculum, Assessment, and Teaching Transformation (CATT), will work with UBIT to coordinate a phased timeline for implementation, as well as the procedures for system configuration, custom branding, and internal/external integrations, including SIS and authentication, as well as relevant instructional tools, such as Respondus, Panopto, and Zoom.
- CATT will coordinate:
  - The communication plan for informing the campus of the decision, as well as communications about key milestones and available supports throughout the transition;
  - The course migration process, as well as the training of instructional support staff across the university, including those in the Libraries and UBIT Nodes;
  - The training of instructors, as well as a phased in process for migrating instructors into the new LMS; and
  - Training and orientation materials for dissemination to students.
- The Blackboard contract should be extended for at least one year to allow for a staged transition to the new LMS.

In addition, the committee recommends that an LMS advisory group be constituted to represent the concerns of instructors, instructional support and technical staff, and students on an ongoing basis. Finally, the committee recommends that this LMS Advisory Group collaborate with Academic Affairs and UBIT to develop an Educational Technologies Policy to establish parameters around the implementation of educational and classroom technologies that provide specific learning management functions distinct from the centrally supported LMS and ensure that appropriate technical and accessibility standards are met by any tool that is considered for adoption.

ITEM	Description	Blackboard Ultra	Brightspace	Canvas
Administration	Ability to customize look and feel of LMS to support unique branding by program, department, & college.	2.0	2.5	2.5
Administration	Provides a utility to create and manage numerous courses at once. Allows for creation of new, copied, and deletion of courses in batches; the ability to "hide" or "unpublish" courses from students, and manage access for specified courses at the end of a term (disable/read only, etc.).	2.5	2.5	2.5
Administration	Ability to easily make courses accessible for editing and creating to ID outsourcing partners	2.0	2.0	2.0
Administration	Provides the ability for admins to search and edit users in the system based on personal details (user name, last/first name, student number).	2.0	2.0	2.0
Administration	Provision of customizable user profile and notifications.	2.0	2.0	2.0
Administration	Capacity for self-enrollment for both internal and external	0.0	2.0	2.0
Administration	Ability to define custom users types with granular rights and dynamically authorize permissions by role to a user upon authentication.	2.5	2.5	2.5
Administration	UB is given the administrative ability to delay upgrades and/or specific feature changes	1.0	2.0	3.0
Administration	Ability for individual users to occupy multiple discreet roles at different organizational levels. Eg. An instructor in biology and a student in sociology.	1.5	2.5	2.5
Administration	Ability to manually create courses and add users as necessary.	2.5	2.5	2.5
Administration	System provides organizational structure to support 'non-class' use of LMS. Non class use includes departmental training, continuing education content, community use etc.	2.0	2.0	2.0
Administration	Provider includes a negotiated percentage of user access accounts for 'Non-UB'/GUESTs. Purpose includes faculty collaboration, accreditation teams, vendor support ect.	2.0	2.0	2.0
Administration	Provides a scaleable solution for the implementation of increased usage, such that more storage and users can be	2.0	2.0	2.0
Integrations	Supports managed access to API and LTI. (Security tokens.)	3.0	2.5	2.5
Integrations	Support for commonly utilized web browsers, including current versions of Edge, Microsoft Internet Explorer, Apple Safari, Mozilla Firefox, and Google Chrome	2.0	2.0	2.0
Integrations	Ability to update user access to courses (drop/add) based on their enrollment information in the SIS.	2.5	2.5	2.5
Integrations	Ability to batch process the provisioning of user accounts, including create, re-activate, deactivate, and delete.	2.5	2.5	2.5
Integrations	Real-time API in core LMS to provision user accounts including create, re-activate, deactivate, and delete user accounts (SIS integration is two-way, not just one-way communication).	1.0	2.5	2.5
Integrations	Process in place for purging deleted accounts and user-related content, including APIs or automatic purging.	2.0	2.0	2.0
Integrations	APIs available to support username changes.	2.0	2.0	2.0
Integrations	Provision of customizable user profile that pre-populates the basics (i.e., student phone number, external email, etc.) imported from SIS	2.5	2.5	2.5

Category	Description			
Integrations	Grade passback for API / LTI integrations (Panopto SafeAssign, ExamSoft, etc).	2.5	2.5	2.5
Integrations	Provider enjoys priority status with LTI-integrated vendors	2.0	2.0	2.0
Integrations	System can integrate with the following via an extension or LTI: Turning Technologies, Panopto, Zoom, WebEx, ProcotorU, Microsoft Teams, Major Publishers (McGraw-Hill, Pearson, Cengage, etc.), Respondus LockDown Browser & Monitor and many other vendors.	2.0	2.0	2.0
Migration	Migration path assures the reliability of courses (teaching and learning activities) and content (learning objects and resources) from existing LMS to new LMS.	1.0	2.0	1.0
Migration	Offers custom course migration at no additional cost.		2.0	2.0
Mobile	Instructor centric app available for iOS and Android which allows grading. (Bonus point for offline grading.)	2.0	2.0	2.0
Mobile	Inclusion of responsive design methodology.	2.0	2.5	2.5
Mobile	Native mobile apps (student centric) for common mobile devices that include access to most of the tools in the LMS.	2.5	1.5	2.5
Mobile	Mobile solution provides the ability to quickly switch between courses, organization areas, and accounts in the mobile app.	2.0	2.0	2.0
Mobile	Mobile solutions allows for user to be signed in to multiple devices simultaneously.	2.0	2.0	2.0
Mobile	Company has operational contingency plan for mobile platform upgrades (such as Apple iOS upgrades).	2.0	2.0	2.0
Mobile	Provides capability to record videos on mobile for assignment submissions		3.0	2.0
Mobile	Mobile app that leverages notifications to keep students informed of new course developments in real-time. For example, notification an announcement within 1 minute of	2.0	2.0	2.0
Mobile	Mobile experience (app or browser) approximates desktop experience.	2.0	2.0	2.0
Provider	Provider has demonstrated a long-term business relationship approach	2.0	2.0	2.0
Provider	Provider is willing to work with more than one UB contact	2.0	2.0	2.0
Provider	Provider has acceptable peer institution references.	2.0	2.0	2.0
Security	Subject to regular security audits or assessments by a 3rd party, such as Threat and Risk Assessments (TRAs), vulnerability assessments, code review, or service/operational audits such as SAS, SSAE, Uptime Institute Tier certification.	2.0	2.0	2.0
Security	Provision of application security (i.e. password protection, encryption, etc.)	2.0	2.0	2.0
Security	Provider has current information security, privacy/data protection or related policies in place to protect client data and personal information.	2.0	2.0	2.0
Security	Provider has UB-approved SSO capability.	2.5	2.5	2.5
Security	Safeguards are in place to log all actions and create and audit trail of user actions so as to identify the unique individual responsible when/if a compromise occurs. Administrators can view these systems logs and logs are kept in a separate, password protected system to ensure only authorized access	2.0	2.0	2.0
Security	Service's logout is customizable so that UB systems are notified in real time when the user has logged out. UB has the ability to customize the logout process.	2.0	2.0	2.0

Security	Ability to configure session timeouts.	2.0	2.0	2.0
Security	Ability to disable the local log in.	2.0	2.0	2.0
Security	Provider software has mechanism to perform data backups on a regular basis	2.0	2.0	2.0
Security	Data and configurations can be restored from backup by OU, course, etc.	2.0	2.0	2.0
Security	Provider has an acceptable disaster recovery plan	2.0	2.0	2.0
Security	Contract with provider provides method of obtaining data at the end of the agreement period, should the vendor relationship end and we intend to migrate that data to another system. Contract should specify third party either returns all copies of data or removes UB data using a mutually-agreed-to method of data scrubbing.	2.0	0.0	2.0
Support	Highly responsive 24/7 end-user product support	1.0	2.0	2.0
Support	Provider has dedicated team(s) for updates, patching, and troubleshooting the LMS	2.0	2.0	2.0
Support	Provider has a predictiable and systematic process for updating, patching, routine maintenance, etc.	2.5	2.5	2.5
Support	Provider has an established and robust quality assurance testing process for new releases	2.0	2.0	2.0
Support	Provider has an established and robust quality assurance testing process for 3rd party plugins and other integrations	2.0	2.0	2.0
Support	Provider has active channels and status pages for timely communication of outages and known issues	2.0	2.0	2.0
Support	Provider has documented uptime of at least 99.9%	2.5	2.5	2.5
Admin	Ability to customize using open source code	0.0	0.0	0.0
	Overall	2.0	2.1	2.1

ITEM	Description	Blackboard Ultra	Brightspace	Canvas
Instructor	Provision of utility that identifies students who might be falling behind	1.0	2.0	2.0
Instructor	Ability to report statistics on a single grade item.	2.0	2.0	2.0
Program	Solution provides the ability to export completion records for compliance training and performance, competency, and career development to other UB systems.	1.0	2.0	2.0
Students	Students have access to activity/analytics reports about their performance. Allows for analysis of results and customized reports on individual student's grades and overall class grades.	0.0	2.0	2.0
Instructor	Solution provides reporting on course performance on items mapped to learning outcomes.	0.0	3.0	3.0
Instructor	Provision of data analysis and reporting tool that visually displays grade patterns	2.0	2.0	2.0
Sys Admin	Provision of report that shows object access and when users are accessing the LMS.	1.0	2.0	2.0
Program	Provides report that provides analysis of achievement of competencies over time.	2.0	2.0	2.0
Instructor	Provides a drop/add report.	0.0		0.0
Program	Provides report that tracks overall student grades and grades on specific components across sections and terms. (Program/course evaluation).	2.0	2.0	2.0
Program	Provides a report that tracks overall student success in comparison to course activity.	2.0	2.0	2.0
Program	Provides a report that tracks learning objectives at various levels (program, course, lesson-specific) from different points of view (individual, class, program, college-wide)	2.0	2.0	2.0
Instructor	Provides of report that details how a class and specific students performed on a test.	2.0	2.0	2.0
Assessment	Ability to access historical data as well as current data to aid in year-to-year comparisons	0.0	2.0	2.0
Sys Admin	Ability to export data into the institution's data warehouse	2.5	2.5	2.5
Sys Admin	Ability to produce reports in a variety of output formats including XML, delimited data sets, PDF, etc. Please list report formats supported.	1.0	2.0	1.0
Assessment	Ability to interface with third-party reporting tool(s) i.e. Tableau	2.0	2.0	2.0
Sys Admin	Ability to schedule a report to automatically run at a specific time, at defined intervals, and/or on other schedules	2.0	2.0	2.0
Sys Admin	Ability to report at varying levels of granularity (i.e. within a course, across groups of courses, across a campus, across a dept., system-wide, etc.) Provision of audit logs.	2.0	2.0	2.0
Sys Admin	Ability to assign report access to non-administrator role or group.	2.0	2.0	2.0

Sys Admin	Ability to log, retrieve and audit system use, including errors	2.0	2.0	2.0
Program	Provides the ability to combine several courses on a report at the student level to help identify struggling students	2.0	2.0	2.0
Sys Admin	Ability to save custom report settings.	2.0	2.0	2.0
	Overall	1.5	2.0	1.9

ITEM	Description	Blackboard Ultra	Brightspace	Canvas
Assignment	Instructors can create assignments with text instructions, embedded media, and attached files.	2.4	2.5	2.5
Assignment	Instructors can set a due date for assignments, which is automatically populated in the calendar and used for reminders/past due notifications to students.	2.4	2.5	2.5
Assignment	Instructors can set a time limit for students to submit the assignment once it is opened.	2.3	2.5	2.4
Assignment	Assignment submission and grading is functional, systematic, and efficient.	1.6	2.7	2.5
Assignment	Assignment submissions of standard file types (Word, PowerPoint, PDF, etc.) can be viewed inline and annotated directly within the browser.	1.8	2.4	2.4
Assignment	Assignment submissions can be downloaded in bulk for offline grading.	2.3	2.6	2.4
Assignment	Instructor can create assessments designed for students to review each other (peer-review).	1.8	2.3	2.3
Assignment	Assignment can be designated as extra credit.	1.8	2.2	2.0
Assignment	System includes a built-in plagiarism detection tool.	2.5	2.0	2.0
Assignment	Student assignment submissions can include multiple files in a single submission.	2.3	2.5	2.2
Assignment	Student assignment submissions can include images, sound, video, or embedded media via LTI integration.	1.8	2.8	2.4
Assignment	Assignments can have exceptions for specific students such as due dates, number of attempts, and availability	2.5	2.2	2.5
Assignment	Ability to provide the same and individual feedback/grades to group work	2.7	2.5	2.5
Assignment	Allow students to estimate course grade based on current work in line with grade breakdown	1.5	1.5	2.8
Assignment	Ability to quickly and easily contact groups of students based on scores received or submissions within an assignment to provide them with specific feedback	2.0	2.5	2.7
Assignment	Ability to insert in-line notes, mark ups, strikethroughs and audio commentary directly to an assignment from a tablet device	1.3	2.6	2.6
Assignment	Provides a video interface and audio tool that allows users to record feedback or supplemental course material from their webcam and/or microphone and insert into eLearning platform		2.9	2.5
Tests/Quizzes	Instructors can create tests with automatically scored: true/false, multiple choice, multiple answers, fill-in blank, numeric (with significant figures), matching questions, hot spot, calculate formula; and manually scored essay/short answer questions. Includes full text editor formatting options including the ability to embed media, create web links, and attach files.	1.4	2.0	2.7
Tests/Quizzes	Instructors can allow partial credit for answers on automatically scored questions.	2.2	2.0	1.8
Tests/Quizzes	Instructors can specify questions as extra credit.	2.0	2.4	2.3

Category	Description			
Tests/Quizzes	Test banks can be imported from existing test banks, as well as created and maintained by instructors. Questions in test banks can be imported into course exams.	1.7	2.6	2.3
Tests/Quizzes	Tests and test banks can be easily copied or imported from one course to another.	2.0	2.5	2.5
Tests/Quizzes	Instructors can create anonymous surveys.	3.0	2.5	2.5
Tests/Quizzes	Order of test questions can be randomized per student including multiple choice answer options.	2.4	2.3	2.3
Tests/Quizzes	Question selection can be randomized from a block of questions or test bank, where instructor specifies how many questions are presented to each student.	2.5	2.4	2.4
Tests/Quizzes	Instructors can control visibility and timing of feedback, including question text, right/wrong indicators, score per question, submitted answer, and correct answer.	2.5	2.3	2.3
Tests/Quizzes	Instructor can specify dates and times when students can access tests and modify these for individuals or groups of students.	2.0	2.5	2.5
Tests/Quizzes	Instructor can set a time limit for completing the test once a student has started it and can modify the time limit for specific individuals.	2.0	2.5	2.5
Tests/Quizzes	Instructor can set the number of attempts allowed and which grade is used of multiple attempts.	2.0	2.4	2.5
Tests/Quizzes	Instructor can limit access via a password.	2.3	2.2	2.2
Tests/Quizzes	Instructor can edit a question after students have submitted a test and automatically regrade submissions, including changing the correct answer, adding additional correct answers, providing full credit for all students, specifying a question as extra credit, or removing the question.	2.3	2.5	2.3
Tests/Quizzes	Instructors can view data on student access of tests, including date and time of when the student started the test, when individual questions were saved, and when the student submitted the test.	2.0	2.6	2.6
Tests/Quizzes	Instructor can download all student submissions as a tab- or comma-delimited file.	2.0	2.2	2.3
Portfolio	System provides an e-portfolio tool that allows for work to be shared internally and externally to the University.	2.5	2.3	2.3
Portfolio	Files submitted as part of regular course work can be imported to the portfolio as artifacts.		2.0	2.7
Portfolio	Students can upload files to be included as portfolio artifacts.	2.5	2.3	2.3
Portfolio	Portfolios can be easily submitted to a course assignment for grading and feedback.		2.3	2.0
Portfolio	Institution can create and manage templates for student portfolios.	2.5	2.3	2.3
Rubric	System has a rubric building tool that can be associated directly to assessments, including assignments, essay/short answer test questions, discussion boards, blogs, and wikis.	1.3	2.3	2.3
Rubric	Ability to automatically transfer grades and comments from rubrics to the grade book.	1.3	2.5	2.5
Rubric	Rubrics can be imported and exported.	2.3	2.5	2.7
Rubric	Provides a way to access student grade information for each course in one centralized location without having to log in to each course.	1.5	2.7	2.7

Rubric	Ability to share rubrics with other faculty in bulk and on a one-to-one basis			2.7	2.7
Rubric	Ability to connect grading rubric levels to specific learning outcomes.		2.8	2.5
Rubric	Ability to automatically transfer grades and comments from rubrics to the grade book.	2.5	2.5	2.5
Rubric	Ability to save and reuse rubrics.	2.3	2.5	2.5
			2.5	2.2
Gradebook	Manually create and maintain graded items (columns).	2.4	2.2	2.3
Gradebook	Manually edit all gradebook data.	2.5	2.5	2.2
Gradebook	Show or hide an individual grade item.	2.2	2.3	2.3
Gradebook	Ability for the faculty to select column visibility for the students, remove and customize columns in the gradebook, and override grades.	2.2	2.3	2.5
Gradebook	Specify overall grade calculation by points or a weighted grading scale by including all or only select graded items/categories.	1.7	2.3	2.8
Gradebook	Create custom grading scales. (Weighted totals and categories for calculating grades in accordance with syllabus)	1.7	2.2	2.2
Gradebook	Input scores, percentages, letters, pass/fail, or text entries.	1.3	2.5	2.5
Gradebook	Ability to create and use multiple grading schemes such as complete/incomplete, pass/fail, adjusting letter grade value, satisfactory/unsatisfactory.	2.0	2.5	2.0
Gradebook	Create extra credit items (columns).	2.0	2.3	2.0
Gradebook	Ability to easily incorporate extra credit.		2.4	2.4
Gradebook	Drop one or more of the lowest grades from a set of items.	3.0	2.0	2.3
Gradebook	Support for interim grade calculations in cases where the calculation drops ungraded items, and the ability to drop a grade by criteria, such as drop lowest, highest, or last.		2.3	2.5
Gradebook	Exempt a student from a graded item.	2.0	2.5	2.5
Gradebook	Email/message a student directly from the gradebook.	2.0	2.7	2.8
Gradebook	Reorder grade items (columns) via drag and drop.	2.7	2.7	2.7
Gradebook	Ability to "batch add" zeros for work not completed/submitted,and/or past due	2.5	2.0	2.3
Gradebook	Control visibility of feedback and grades (such as bulk "posting").	2.0	2.5	2.5
Gradebook	Ease of grading including ability to provide feedback to students, including edited copies of student work, text (in 3 or less clicks in the grading tool), audio or video feedback, without having to navigate away from the document viewer	1.5	2.3	2.3
Gradebook	Student view of grades includes completed and upcoming course assignments, graded assignments and feedback.	2.5	2.3	2.3
Gradebook	Student view of grades includes total points earned in the course.	2.3	2.3	2.3
Gradebook	Student view of grades includes how the final grade is calculated, including relevant weights.	1.5	2.3	2.5
Gradebook	Gradebook facilitates simple navigation for instructors to grade a series of student submissions to the same graded item.	3.0	2.4	2.4
Gradebook	When an instructor adds an assignment, test, or other assessment, the system automatically adds a graded item (column) in the gradebook.	2.5	2.5	2.6

Gradebook	Instructors can search the grade book for a student or graded item.	2.3	2.3	2.4
Gradebook	Assignments and tests can be graded anonymously, including for peer review.	2.0	2.3	2.3
Gradebook	Assignments can be graded by multiple individuals and their rubrics and/or overall ratings can be aggregated into a final grade.	1.5	2.3	2.3
Gradebook	Ability to track when and who created, deleted, or restored grade items. (Logging).		2.3	2.3
Gradebook	Instructors can filter the view of the gradebook using different criteria such as by student or graded item.	2.0	2.3	2.3
Gradebook	Ability to display grades in a variety of ways (i.e. letter, percentage, points, color); and for faculty to easily customize columns. More than one grade type can be used at a time (e.g., a letter grade to the student, and both a letter and a number or score to the instructor).	2.0	2.3	2.3
Gradebook	While scrolling thorugh the grade book the students names should be "sticky" or visible at all times.	2.3	2.5	2.5
Gradebook	Ability to insert in-line notes, mark ups, strikethroughs and audio commentary directly to an assignment from a tablet device	1.3	2.5	2.5
Gradebook	Instructors can submit an overall letter grade from the gradebook to our SIS (PeopleSoft/HUB), by an existing tool or by custom development.		2.3	2.3
Gradebook	Instructors can export and import the gradebook to and from an external spreadsheet program.	2.3	2.5	2.5
Gradebook	Ability to create and use multiple grading schemes (pass/fail. complete/incomplete, letter grade, score, etc)	1.7	2.5	2.5
Gradebook	Retains information about work completed by/grades of students who have dropped the course.	2.0	2.7	2.7
Gradebook	Provides a way to access student grade information for each course in one centralized location without having to log in to each course.	2.0	3.0	2.0
Gradebook	Ability to restore inadvertent grade item deletions without having to log an incident with help desk.		2.5	2.3
Gradebook	Instructors can sort students alphabetically or by performance on any graded item.	1.3	2.3	2.3
Gradebook	Support for instructors to grade assessments offline to and sync content automatically when connectivity is restored.		2.0	2.5
Gradebook	Instructors and administrators can view a history of changes to the gradebook.		2.6	2.6
Analytics	Provision of utility that identifies students who might be falling behind	1.3	2.6	2.5
Analytics	Ability to report statistics on a single grade item.	2.5	3.0	2.7
Analytics	Solution provides reporting on course performance on items mapped to learning outcomes.		2.6	2.5
Analytics	Provision of data analysis and reporting tool that visually displays grade patterns	2.0	2.6	2.6
Analytics	Provides of report that details how a class and specific students performed on a test.	2.0	2.5	2.5
Analytics	Ability to see who has received, opened, and/or read messages, emails, and or announcements		2.4	2.4

	Overall	2.1	2.4	2.4

ITEM	Description	Blackboard Ultra	Brightspace	Canvas
Profile	Users can customize profiles in LMS including adding image, major/department affiliation, specifying language preference, control privacy of profile, gender pronouns	1.5	2.4	2.6
Profile	Student and instructor names and email addresses can be set via SIS integration and locked to prevent individual changes (application configuration. not profile)	2.3	2.3	2.5
Communication	Users can use an email or messaging feature to communicate with individuals and groups.	2.2	2.7	2.7
Communication	Email or messaging can include file attachments.	2.7	2.8	2.8
Communication	Email or messaging can be viewed within the LMS and be sent to an external email address.	2.0	2.3	2.8
Communication	Message notifications are highly visible to recipients.	1.3	2.5	2.5
Communication	Push notification feature for discussion posts and feedback (via text, email, etc.)	2.0	2.7	2.5
Communication	Email and notifications be suppressed at the course level (Instructors can limit students from emailing other members of the course)	2.0	2.3	2.3
Communication	Emails can be sent to groups based on assignment completion or grade status.	1.0	2.8	2.8
Communication	LMS has the ability to create an announcement within the course, including file attachments, that can be emailed simultaneously to the class.	2.6	2.2	2.5
Communication	Announcements can be created in advance to be sent at a later date.	2.8	2.7	2.7
Communication	Provision of an announcement/news utility within a course, within a section, for all users. Ability to edit, schedule and lock announcements and trigger them from other tools.	1.0	2.7	2.7
Communication	Ability for administration to post and edit system-wide, divisional, or departmental announcements.	2.0	2.7	2.7
Communication	Provides an announcement/news utility with the ability to create, edit, & schedule announcements that can differentiate between course and section.		2.5	2.5
Communication	LMS notifies students of upcoming and past due dates based on assessments created within the course (such as assignments, texts, discussions, or other items included in the grade book).	2.5	2.5	2.5
Communication	LMS includes ability to send SMS, email, and mobile push notifications, based on user preference.	2.5	2.7	2.5
Communication	Students and instructors can modify notification frequency and type based on personal preference.	2.0	2.3	2.3
Communication	System has a robust calendar feature that contains course events and tasks from all courses, differentiated clearly by course (such as by color).	2.5	2.3	2.8
Communication	System has a robust calendar feature that is automatically updated when an assignment due date is entered or updated in a course.	2.5	1.7	2.8

Communication	System has a robust calendar feature that allows students to access assignments by clicking on them within the calendar.	2.5	2.3	2.8
Communication	System has a robust calendar feature that allows students to add their own events to the calendar.	1.5	2.7	2.7
Communication	System has a robust calendar feature that can be synced with an outside calendar via automatic feed.	2.0	1.7	2.8
Communication	Ability to link discussion notifications directly to the post that prompted the notification or interact directly from notification	1.0	2.3	2.5
Communication	Support for student and instructors regarding notifications such as ability to receive news, upcoming assignment dates and course updates via numerous delivery methods including RSS formats.	2.0	1.7	2.8
Content	LMS has a fully functional discussion board tool (with a fully functional text editor).	2.0	2.6	2.6
Content	Instructors can enable or disable anonymous posting, and delete post	1.7	2.5	2.5
Content	Instructors can require that students make an initial post before viewing classmates' posts.	2.3	2.5	2.5
Content	Discussion posts can be marked "read" or "unread".	2.0	2.3	2.3
Content	Instructors can create separate discussion environments for small groups that can be open to all or only a select set of students.	2.5	2.5	2.5
Content	Instructors can limit discussions to specific time periods.	2.0	2.5	2.5
Content	Instructors can easily see a statistical summary of discussions displaying each user's participation, which can be used to generate grades from the same screen.	2.0	2.5	2.8
Content	Columns are automatically created in the grade book when discussion grading is indicated.	2.3	2.0	2.3
Content	Discussion grading includes a comment box for feedback and an interactive rubric.	2.5	2.3	2.8
Content	Users have the ability to subscribe to discussion and have notifications of posts.	1.5	2.5	2.5
Content	Instructors can enable video as an option for posts and replies.	1.5	2.3	2.5
Content	Students can "react" to posts (symbol/emoji)	1.0	2.5	2.5
Content	Potential AI integration			2.0
Content	Can turn on notifications for posts (replied to, mentions, etc)	1.7	2.3	2.3
Content	Easy of readability	2.0	2.8	2.8
Content	Ease of grading with multiple due dates, AI for automated grading based on assignment due date structure (meaning points can automatically be assigned based on timing of submission), grading for quality of submission, participation and community building		3.0	2.7

Content	Solution provides ability to track and log student activities while taking a test or quiz. Provides detailed student tracking for each course tool (e.g., how many discussion posts were read, how long did they spend on each quiz question). Provides tracking on individual level activity and course level activity.	1.0	2.3	2.3
Content	Ability for instructor to assess and grade discussion participation and postings (hooks into grading tool, aggregates user's posts and gives basic quantitative stats). Students and/or teaching assistants are able to rate other students on discussion postings (connects with the grading tool for assessment purposes).	2.0	2.3	2.8
Content	Ability to view number of unread discussion posts, total posts, views, unapproved discussions and details of last post.	2.0	2.3	2.3
Content	Push notification feature for discussion posts and feedback (via text, email, etc.)	2.3	2.3	2.5
Content	Ability to link discussion notifications directly to the post that prompted the notification or interact directly from notification	1.5	2.3	2.5
Group	Instructor can create groups via random assignment or manual selection of specific students.	2.3	2.6	2.6
Group	Groups are automatically created with combined course section numbers.		3.0	3.0
Group	Instructor can communicate with all members of a group via the email/messaging tools.	2.3	2.6	2.6
Group	Group members can communicate with one another via the email/messaging tools.	2.0	2.6	2.6
Group	Instructor can assign an assessment or assignment to one or more groups, the group members make a single submission on behalf of the entire group, the grade earned is assigned to all members of the group, and the group grade can be overridden for an individual group member.	1.8	2.5	2.5
Group	Ability for faculty to easily set up peer (self-enroll) groups, or assign peer groups.	2.0	2.0	2.0
Group	Supports group assessments, including the ability for any group member to submit on behalf of the group, and then grade is assigned to all members of the group.	2.0	2.3	2.7
Group	Support for team and class collaborations (i.e. group workspaces, randomized grouping, update of groups when new enrollments occur)		2.5	2.0
Group	Ability for students to create groups and initiate chat, discussion, conferencing, file sharing, etc. without faculty intervention			2.5
Group	Ability for faculty to easily set up peer (self-enroll) groups, or assign peer groups.	2.5	2.5	2.7
Content	Course template and navigation menu are customizable at the administrative and instructor level.	2.3	2.7	2.7

Content	System supports common file types such as text, multimedia, image and object files that are used in higher education.	2.2	2.7	2.7
Content	Supports adaptive release (rules for when to release) including email, announcements, assessments and assignments. This includes the ability to selectively release items to students based on multiple criteria, define how long an item is available to a specific student or selected individuals, establish selection criteria based on membership in a group or grading data or completion criteria, and if multiple criteria can be applied to various groups.	2.3	3.0	2.8
Content	Files can be uploaded to the system via drag-and-drop as well as browsing local storage.	2.0	2.7	2.7
Content	Content items can be ordered via drag-and-drop.	2.5	2.7	2.7
Content	Ability to move and/copy items easily from one module or folder to another	1.8	2.8	2.8
Content	Ability to copy content from a course shell (course structure, settings and gradebook functionality) into additional versions of a course.	1.3	2.7	2.8
Content	Ability to edit content within system, vs. downloading a file, editing, and re-uploading it. (version control)		2.7	3.0
Content	Creative Commons content displays attribution automatically (bonus for being able to select format).		2.5	3.0
Content	Provision of source code and WYSIWYG utility (and ability to toggle between the two) that allows users to create text within each area of the LMS and provides a spell check, equation editor, ability to create web links, easy embedding of content from applicable 3rd-party systems (e.g. MyMedia, YouTube, Vimeo), retain formatting when pasting from Word or Office 365, and support Math ML, LaTeX, or other similar applications.	1.0	1.8	2.0
Content	Ability to bookmark content within a lesson or course content		2.0	2.5
Content	Ability for creation, editing, sharing (across sections, courses, and years), and deletion of tests, surveys, and test banks. Ability to search and construct tests or surveys from items in test bank.		2.3	2.5
Content	Instructors can copy or import and entire course or select course materials and assessments for use in another course section.	1.7	2.6	2.8
Content	Instructors can import content packages and test banks from publishers.	1.7	2.8	2.8
Content	Courses can be archived (with and without student interactions) by the instructor or an administrator for storage outside of the system.	2.5	2.5	2.0
Content	System automatically generates back-ups of active courses on a routine basis.	1.5	2.5	2.5
Content	Access to previous course after end of semester (instructor and students)	2.0	2.5	3.0

Content	System has a function that offsets assignment and calendar dates when courses are copied.		2.0	2.5
Content	Provides ability to create courses from previous course content and from templates.	1.3	2.3	2.3
Content	Provides the ability to roll individual items back to a previous version on a course, program, department level. For example, version control on objects pointing to a repository.		2.5	3.0
Content	Ability to copy content from a course shell (course structure, settings and gradebook functionality) into additional versions of a course.	1.7	2.3	2.3
Content	Provides a central content repository that allows multiple course sections to point to/display the same content object within each course shell.		2.3	2.7
Content	Provides the ability to roll individual items back to a pervious version.		2.5	2.5
Content	Solution provides a Learning Object Repository that enforces a copyright.		2.0	3.0
Content	Migration path assures the reliability of courses (teaching and learning activities) and content (learning objects and resources) from existing LMS to new LMS.	1.0	2.0	2.5
Content	Provides ability to create courses from previous course content and from templates.	1.5	2.5	2.5
Content	Ability to make changes throughout different sections of courses in "one fell swoop"	2.0	2.3	2.7
Content	Provision of a utility to create and manage numerous courses at once. Allows for creation of new, copied, and deletion of courses in batches; the ability to "hide" or "unpublish" courses from students, and manage access for specified courses at the end of a term (disable/read only, etc.).	2.0	2.3	2.3
Content	Ability to manage course tools, such as setting which tools are visible in a course by default (either by the faculty or admin), setting which tools are visible in a course, and the ability of faculty to download/export course content, student reports, assessment submissions, grades, and communications in a format they can save and access on their computer.		2.3	2.7
Content	Provides the ability for instructors and admins to easily copy content from one course to another, including the export AND import of a course package that includes the course content, tools, assessments, etc. (but not the student data).	1.7	2.5	2.5
Content	Solution provides an auto-save function so that in-progress work is not lost in the event of an unexpected system outage.	2.0	2.5	3.0
Content	Solution provides proper validation and error handling when uploading files that is consistent throughout the system.	1.0	2.5	2.3
Content	Ability for faculty and developers to have "student views" and "faculty views" of the courses	2.0	2.8	2.8

Content	Ability for students to receive confirmation (i.e., a receipt) for submitting an assignment or assessment	1.3	2.7	2.7
Content	Provision of a video interface and audio tool that allows users to record feedback or supplemental course material from their webcam and/or microphone and insert into eLearning platform	2.0	3.0	2.8
Content	Ability to play a variety of multimedia file types across mobile, web, tablet, browser, and operating system platforms	2.0	2.8	2.8
Content	Solution provides a Learning Object Repository display of selected copyright.		1.0	3.0
	Overall	1.9	2.4	2.6

ITEM	Description	Blackboard Ultra	Brightspace	Canvas
Assigments	Student assignment submissions can include multiple files in a single submission.	2.3	2.5	2.5
Assigments	Support for submissions of student work to a centralized area; support for repeated submissions of an assignment	2.7	2.5	2.5
Assigments	Student assignment submissions can include images, sound, video, or embedded media via LTI integration.	2.4	2.8	2.6
Assigments	Portfolios can be easily submitted to a course assignment for grading and feedback.	1.3	2.3	2.3
Calendar	System has a robust calendar feature that contains course events and tasks from all courses, differentiated clearly by course (such as by color).	2.4	3.0	2.6
Calendar	System has a robust calendar feature that is automatically updated when an assignment due date is entered or updated in a course.	2.0	2.8	2.8
Calendar	System has a robust calendar feature that allows students to access assignments by clicking on them within the calendar.	2.2	2.8	2.8
Calendar	System has a robust calendar feature that allows students to add their own events to the calendar.	2.0	2.6	2.4
Calendar	System has a robust calendar feature that can be synced with an outside calendar via automatic feed.	2.0	2.0	2.6
Communication	Users can use an email or messaging feature to communicate with individuals and groups.	2.4	2.6	2.6
Communication	Email or messaging can include file attachments.	2.4	2.6	2.6
Communication	Email or messaging can be viewed within the LMS and be sent to an external email address.	2.3	2.3	2.8
Communication	Message notifications are highly visible to recipients.	1.8	2.8	2.6
Communication	Provision of an email utility built into the LMS that can integrate with external email systems	1.7	2.3	2.2
Communication	Push notification feature for discussion posts and feedback (via text, email, etc.)	2.2	2.6	2.6
Communication	Emails can be sent to groups based on assignment completion or grade status.	1.8	2.3	2.0
Communication	LMS notifies students of upcoming and past due dates based on assessments created within the course (such as assignments, texts, discussions, or other items included in the grade book).	2.4	2.8	2.4
Communication	LMS includes ability to send SMS, email, and mobile push notifications, based on user preference.	2.2	2.4	2.6
Communication	Ability to link discussion notifications directly to the post that prompted the notification or interact directly from notification	1.5	2.4	2.4
Communication	Support for student and instructors regarding notifications such as ability to receive news, upcoming assignment dates and course updates via numerous delivery methods including RSS formats.	1.8	2.6	2.0
Communication	Students and instructors can modify notification frequency and type based on personal preference.	2.0	2.8	2.6
Communication	Ability for students to create groups and initiate chat, discussion, conferencing, file sharing, etc. without faculty intervention	1.7	1.8	2.5

Category	Description			
Content	Students can upload files to be included as portfolio artifacts, including documents, presentations, images, videos, and sound files.	1.7	2.3	2.7
Content	Provides a video interface and audio tool that allows users to record feedback or supplemental course material from their webcam and/or microphone and insert into eLearning platform	1.3	3.0	2.6
Discussion	LMS has a fully functional discussion board tool (with a fully functional text editor).	2.0	2.6	2.6
Discussion	Students and/or teaching assistants are able to rate other students on discussion postings (connects with the grading tool for assessment purposes).	1.7	2.0	2.0
Gradebook	Students have access to activity/analytics reports about their performance. Allows for analysis of results and customized reports on individual student's grades and overall class grades.	1.0	2.4	1.6
Gradebook	Gradebook view allows easily filtering, sorting, and searching for instructors and for students.	1.8	2.5	2.4
Gradebook	Provides a way to access grade information for each course shell in one centralized location without having to log in to each course.	2.0	2.5	2.6
Gradebook	Students to estimate course grade based on current work in line with grade breakdown	1.7	2.7	2.8
Gradebook	Student view of grades includes completed and upcoming course assignments.	2.0	2.3	2.3
Gradebook	Student view of grades includes graded assignments and instructor feedback.	2.3	2.4	2.6
Gradebook	Student view of grades includes total points earned in the course.	2.2	2.6	2.4
Gradebook	Student view of grades includes how the final grade is calculated, including relevant weights.	2.3	2.5	2.5
Gradebook	Gradebook facilitates simple navigation for instructors to grade a series of student submissions to the same graded item.	2.0	2.5	2.3
Group	Supports group assessments, including the ability for any group member to submit on behalf of the group, and then grade is assigned to all members of the group.	2.0	2.5	2.3
Portfolio	Provides a portfolio tool where a portfolio can be submitted as an assignment.	1.7	2.3	1.7
Portfolio	Files submitted as part of regular course work can be imported to the portfolio as artifacts.	1.3	2.3	1.7
Portfolio	Students can download complete portfolios for personal archiving.	2.3	2.0	2.3
Portfolio	Students can share portfolios with internal and external viewers.	2.3	2.3	2.3
Profiles	Users can customize profiles in LMS including adding image, major/department affiliation, specifying language preference, control privacy of profile, gender pronouns	1.3	2.5	2.5
	Overall	1.9	2.5	2.4

Appendix B:
Instructor LMS Functional Review Checklist

Members of the Instructional Subcommittee completed the following task in a Sandbox course in each platform and provided ratings of the function based on the following scale: 0 = no evidence; 1 = unacceptable; 2 = acceptable; 3 = recommended. Average scores are presented in the table below.

Task	Subtask	Blackboard Ultra	Canvas	D2L
Insert a content folder for "Course Information"				
	Upload a Word document into the content area	2.2	3.0	2.8
	Upload a PDF file into the document area	2.2	3.0	2.8
	Link to a Panopto video	2.5	2.0	2.6
	Check content accessibility	2.0	2.3	2.3
Create an assignments folder				
	Set up assignment 1 to be a document upload	2.2	3.0	2.6
	Create a simple scoring rubric and link it to assignment 1	1.8	3.0	2.5
	Set up assignment 2 to be a text submission using the text editor tool	2.0	2.8	2.6
	Explore the plagiarism checking tool	2.0	3.0	3.0
	Explore inline grading tools	1.8	2.8	2.7
Create a discussion forum				
	Make the discussion forum a graded item	2.0	2.8	2.6
	Link a simple scoring rubric to the discussion forum	2.0	3.0	2.8
Create a test				
	Create items that are multiple choice, multiple select; multiple choice, single select; short answer.	2.2	3.0	2.2
	Apply different point values to each item.	2.2	2.8	2.8
	Set the release date and due date for the test.	2.2	2.8	2.8

Task	Subtask	Blackboard Ultra	Canvas	D2L
Review the gradebook				
	Insert a new grading column and link it to a scoring rubric	2.2	2.5	2.8
	Re-order grading columns	2.0	3.0	2.4
	Hide/reveal grading columns	2.4	2.8	2.8
	Delete a grading column	2.2	2.8	2.6
Explore and rate the following:				
	Class messaging (emails/announcements)	2.2	2.8	2.8
	The student retention center	1.7	3.0	3.0
	Student Groups Capabilities	1.8	3.0	2.7
	The student preview feature	2.6	3.0	3.0
	Intuitiveness of the user interface	2.0	3.0	2.0
	Clarity of guiding text	1.8	3.0	2.0
	Overall Score	**2.1**	**2.8**	**2.6**

Reviewers also shared additional comments:

D2L has a very intuitive user interface. All the options we may need are right there inline with the feature/tool and make it very easy to quickly set-up and expand a course. I went into this review biased and leaning towards Canvas, but I really was impressed with D2L. The mobile and "desktop" versions are slick. Love the grading with voice or text comments and how easy they make it to create a robust course or a simple course without getting lost in the tool bars. I also really like the course schedule view and believe that our students would find that very beneficial.

The ability to ADD SECTIONS and even quickly view certain gradebook sections in Canvas is another HUGE bonus for mass enrolled courses with recitations not sure if this same feature is available with D2L

Wish Canvas had the option to ADD gradebook column that is NOT attached to a deliverable. For example, I would like the option to add a column of TA names to the gradebook in case I want to quickly sort through the gradebook by TA. Maybe there is an easier way to do this in Canvas and there is not a need to add a new column. This is an available feature in D2L which makes their gradebook superior in my opinion.

REALLY like the Bulk Action option in the gradebook for D2L!
The Quick Eval feature in D2L is also AMAZING.

While Canvas has a better rubric option that BB, it seems to me (upon brief review) that D2L has an even better rubric option.

From what I understand with Canvas, the ability to change things and create a version of the course that works for the individual is much easier than with BB or D2L.However, I have not verified this information to be true.

I am torn between Canvas and D2L. It seems that D2L has more to offer the advanced user, but I think D2L will overwhelm most instructors if they attempt to dig into the advanced options. On the other hand, D2L is robust for those who want the advanced options. Really torn between the two.

I think that any of these systems would be an improvement over what we have now. I also had some general comments on these systems below.

D2L: Pros-1) can do conditional weighting of grade columns. Can edit all grade columns at once, can import multiple files (no one at a time as with current BB) using drag and drop, pulse scheduler to warn students of upcoming workload. Cons: very different look from current BB may require some additional learning compared to other LMS.

Blackboard Ultra: Pros: 1) interface looks very similar to what we have now; 2) can implement gradually (courses can stay with current version and change later; 3) drag/drop files into LMS; 4) learning analytics in discussion board. Cons: 1) may not be as advanced as D2L (for example with respect to pulse scheduling)?

Canvas: Pros-1) highly rated and used mobile app; 2) great track record, footprint and reputation; 3) Looks like it has peer review on assignments (similar to Kritik? does it use AI to score reviews?); 4) Assignment due dates can be easily changed by dragging/dropping in calendar (changes everything, including syllabus, and sends students notification in 15 minutes); MS Immersive Reader/translator; Cons: 1) Different look from current BB, but may be closer than D2L?; 2) app may be great but does that mean that web browser access on mobile device may not work so well? BB claimed that the advantage of their product is that you didn't need an app and that browser worked great on mobile device.

We currently use the WileyPlus online homework system in PHY 107, 108, 207 and 208. The system has been integrated with UBlearns for the first time this semester (after 15 years of it being separate!) and we want to make sure it works well with the new LMS. I checked with Wiley and they said that as far as integration/compatibility is concerned, all three LMS work with WileyPlus, with Canvas working best, followed by BB and then D2L.

In addition to the ability to easily update assignments right in the calendar tool (which also notifies students of changes), instructors can also set up office hours appointments in the calendar that students can then sign up for. With regard to the gradebook, Canvas can assign 0s for late work and also automatically deduct the appropriate percentage based on days late, meaning less work for instructors of large classes.

Appendix C

Brightspace Evaluation
December 7, 2021 9:23 AM EST

Q1 - What is your primary role at UB?
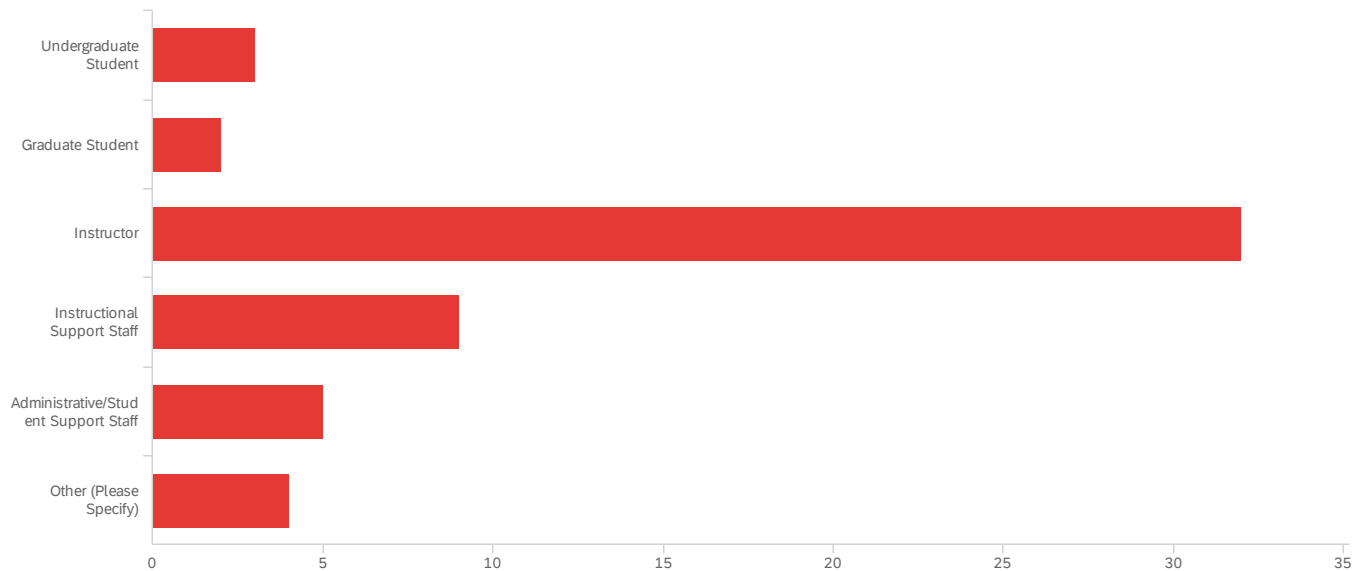
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your primary role at UB? - Selected Choice	1.00	6.00	3.42	1.12	1.26	55

#	Field	Choice Count	
1	Undergraduate Student	5.45%	3
2	Graduate Student	3.64%	2
3	Instructor	58.18%	32
4	Instructional Support Staff	16.36%	9
5	Administrative/Student Support Staff	9.09%	5
6	Other (Please Specify)	7.27%	4
			55

Showing rows 1 - 7 of 7

Q1_6_TEXT - Other (Please Specify)

Other (Please Specify)

Faculty

Staff

Research Faculty with a focus on online education

Instructor and Administrative Staff--Instruction related

Q5 - Besides D2L, which other vendor demos did you watch?

#	Field	Choice Count	
1	Blackboard Ultra	47.62%	30
2	Canvas	52.38%	33
			63

Showing rows 1 - 3 of 3

Q2 - Based on the Brightspace D2L demonstration, please rate the platform on each of the characteristics below:
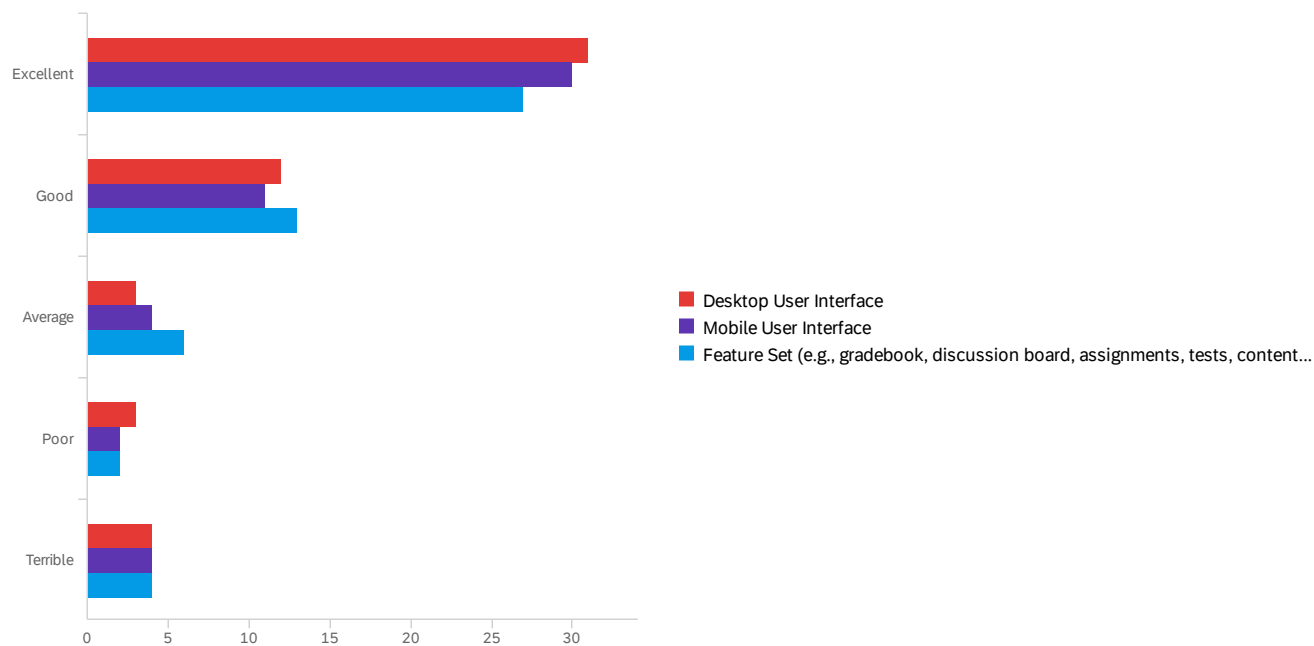
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Desktop User Interface	1.00	5.00	1.81	1.23	1.51	53
2	Mobile User Interface	1.00	5.00	1.80	1.22	1.49	51
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	1.00	5.00	1.90	1.21	1.47	52

#	Field	Excellent		Good		Average		Poor		Terrible		Total
1	Desktop User Interface	58.49%	31	22.64%	12	5.66%	3	5.66%	3	7.55%	4	53
2	Mobile User Interface	58.82%	30	21.57%	11	7.84%	4	3.92%	2	7.84%	4	51
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	51.92%	27	25.00%	13	11.54%	6	3.85%	2	7.69%	4	52

Showing rows 1 - 3 of 3

Q3 - Should UB adopt Brightspace D2L as its next learning management system?
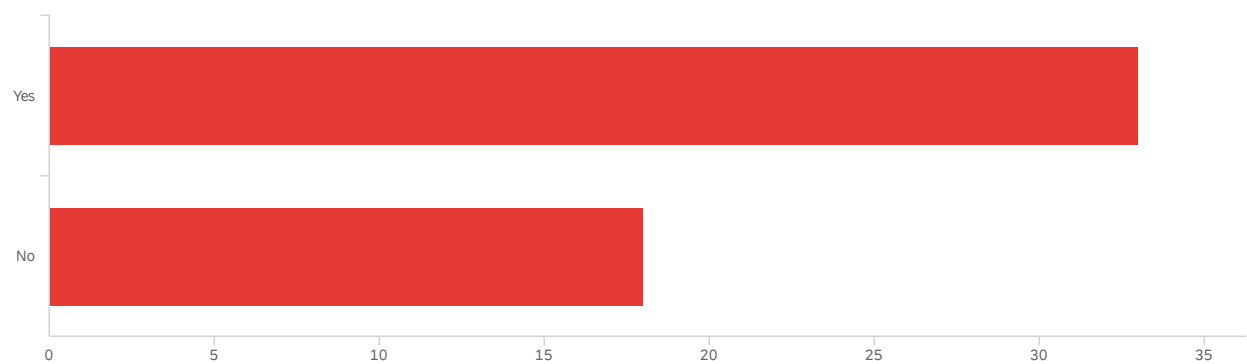
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Should UB adopt Brightspace D2L as its next learning management system?	1.00	2.00	1.35	0.48	0.23	51

#	Field		Choice Count	
1	Yes		64.71%	33
2	No		35.29%	18
				51

Showing rows 1 - 3 of 3

Q4 - Please share any comments about Brightspace D2L below:

Please share any comments about Brightspace D2L below:

I found this to be the worst option among the three. It had the least number of features. The interface looked extremely simplistic and cheap. It also seemed to be the least customizable.

Seems very intuitive and user friendly. Would be happy with D2L or Canvas.

This looks like an interesting LMS, but it doesn't seem to have the same level of maturity yet that Canvas (and even Blackboard) have. While D2L seems to be focused on mobile users, the interface overall doesn't look as intuitive to me as it could (and should) be.

Given that SUNY is moving to D2L it would make sense to move that way also. This way we can give online students a common experience across institutions. The functionality and tool availability was consistent with Canvas and much better than what is currently available in blackboard. Change is hard, but we need to update to better technologies if we want to improve the experience for our faculty and students and to stay current with our peer institutions.

I don't know what analytics Brightspace makes available to instructors, or whether those analytics can be exported easily. It does not appear that their editor supports entering mathematical equations. The constant use of "amazing," etc. every time a feature was demoed was annoying and the features did not appear much different from the other 2.

Similar to current LMS but does not have as many assessment tools which will limit remote/online teaching. Specifically, tools to allow individual assessment and online grading of both objective and subjective tests (did not seem as sophisticated as the other two in this regard). I thought in otherway similar to at least Ultra, but different enough that it will be a lengthy transition to a new system without much benefit or advancement

I see zero reason to prefer this system over the current UBLearns. Why is this switch being made at all? It will only take unnecessary time away from my teaching and research activities.

This was my 2nd choice. I like it and it seems fairly seamless to switch from Ultra. I did not find it as flexible or aesthetically pleasing as Ultra. I thought the features were easier to navigate than Canvas and did really like the accessibility tools.

Seems like a good design, clean and intuitive. However, I think the committee should speak to users at other universities, esp Binghamton (which went to Brightspace) and FSU (which went to Canvas) to get an idea of transition issues, how satisfied they are with the products, etc.

Seems to be a nice product. Difficult to assess without personally "going through the motions" myself. For all products, I would like to know what the email/text/push notifications look like. And, especially for emails - Can we customize the subject line and "from" information?

Yes, if you can not get Canvas. Having used UBlearns / Blackboard for years, I am fully in support of an alternative. My choice, after watching the videos for Canvas and Brightspace, is CANVAS. The usefulness of whichever system you chose in the end will also depend on who easy you (and the software providers) make it to get technical support. Real time support is critical. Finally, you need to be clear on the fact that the new 'rich content' that any of these systems allow instructors to use will have to be created in fact. There will be lots of work involved to make content rich. Who is going to do all this work?

Seems the least robust of the three options. I don't like the "linear learning path" format (I used "learning modules" in UBL last fall and students haaaaaaaaaaaated that format).

Honestly both Canvas and D2L appear to be better at what they do than my experience with Blackboard (I have sued both Canvas and D2L at other universities)

God bless the Gradebook Edit feature that was shown around 1h:12m in the recorded presentation. That is a major gripe I have with Blackboard: the gradebook experience as an instructor is very unpleasant. Overall, Brightspace D2L seemed like a good LMS, but my vote is for Canvas. I've used it at a previous job and it's stellar from an instructor UX perspective.

I liked Canvas a little better.

Please share any comments about Brightspace D2L below:

The architecture seems really different.

SUNY has already negotiated a contract with D2L, and Binghamton made the same choice earlier. Why would UB waste time and effort on another RFP?

I attended all three demos and wanted to review the video and chats, but could not find any way to do so. All three seemed pretty good – and all three seem to have decent interfaces and were working to make themselves more user friendly and accessible. However, it's hard do know what they are really like without working with them – and I sometimes think that my dissatisfaction with certain things in Blackboard are the result of familiarity. I'm sure I could work with any of them – but, I didn't see a "killer feature" in either Brightspace 2DL or Canvas that made me want to go through the trouble of learning a new system. In addition, neither Brightspace nor Canvas have Journals or Blogs (their workarounds aren't that attractive to me). I use this feature extensively (I think this is true of many in the English Department – and it is a deal breaker for me) I'd prefer to stay with Blackboard.

It looks like it's designed for little kids. It's not a strong system. I did not see features that I enjoyed. I'd say I even like blackboard more (which is saying a lot!). Pick Canvas please! By far the best.

Would like to see more about the integrations

I didn't feel as if enough was covered to get a sense of how functional it would be for instructors, so my responses are uninformed. However, I was not impressed.

Seems very intuitive and user-friendly. Love the easy at which Bb courses could be imported to brightspace. Also their emphasis on accessibility was great. [brightspace OR canvas would be a great change for UB]

I liked how clean the interface was. It appears easy to navigate and extremely user friendly. I liked how easy it was to convert BB courses to D2L. Faculty should have an easy time adapting to this LMS.

The accessibility functionality is outstanding. The mobile features beautiful and thoughtfully designed.

I asked this in the session and it was deferred to the administrative session, so wanted to refresh the question to keep it on the institutional awareness: In addition to courses, the current LMS system is also used for faculty/staff facing functions (e.g., space management training, interdisciplinary community building, compliance activities like Sexual Harassment Awareness training). Many of these "courses" are not time limited. Although not along the credit bearing course functionality path, any migration plans should address what we currently call "administrative" courses.

The accessibility considerations are necessary, and refreshing after many usability issues while working with students who use screen readers with Blackboard. Many of my questions were answered, but I do think the accessibility checker should be a requirement in order to facilitate campus-wide accessibility of the content provided on University LMS.

i loved easiness and flexibility of the content area - so easy to create course contents and manage them. The table of content on the left side menu bar is great for students to view as well. I am a previous user of D2L from other institution before coming to UB and using UBLearns. So i know and have hands-on experiences on ow D2L is better than UBLearns. Today's demo, Brad didn't show 'quizzes' function, it is great with quiz library and easy to create and modify quizzes, apply accommodation that we can use D2L quizzes option for regular exams, without using another software (e.g., ExamSoft) to deliver exams here - no need to download exam or managing another software to deal with. this can save money as well. i am highly supportive of migrating to D2L!!

I have yet to see the Canvas, but this is such an improvement from BB on so many levels. It will improve our learning environment considerably for students and faculty. The ability to organize your content, monitor students, interact, personalize communication. It will be very important to get a pilot/sandbox as soon as possible so we can really see how things will work.

I did not see the other presentations yet so it is hard to evaluate. Will the links be made available after all of them? I don't feel through the demo that questions about groups, group assignments and group grading was addressed. The individual learner seemed similar to Blackboard so for me this is not as helpful as I would have liked. I would have liked to try to grade something myself to better evaluate the platform. Feel free to contact me if there is a possibility to interact briefly with this LMS. Zirnheld@buffalo.edu

Please share any comments about Brightspace D2L below:

Very user friendly with ease of use. Rubrics, video, instant messaging, grading, accessibility are all positives in my opinion and very simple to modify are

This is the first session I have seen. So far, this one seems better than Blackboard and I have been using Blackboard Classic an Ultra for the past 1 1/2 years.

This is the first demo I watched, therefore I can't comment as to if UB should adopt it.

very clean interface and appears very easy to understand and navigate.

Lots of integrative modules and a very sleek, streamline platform with many new features.

Switching costs extremely high for faculty who invested time and effort in existing Blackboard courses.

I had to use this recently for another school. It is awful, discussion boards are terrible. Interactions on boards is awful. The transition of courses from one LMS to Brigtspace was awful. The faculty and students do not like it all. It is my least favorite LMS to reach on, I am not sure I would be willing to continue with it, it's thats bad.

D2L is the system which Canisius utilizes. It is much cleaner, easier and friendly for users, and it enables professors to communicate more effectively

I used D2L in undergrad and found it to be so much more straightforward than Blackboard. If a professor doesn't set up their Blackboard site well, it seems impossible to navigate. D2L is standard from class to class and has a lot of great and user-friendly features. After using both, D2L is definitely better in my opinion.

I just had another college I work for switch to bright space. The students do not like it at all, they complain to me al the time. The other faculty hated the process of transitioning their courses to bright space - faculty was very upset with the new format. The discussions boards are horrible as a set up. I actually decided to leave the school after this semester so to the switch, because it is horrible to teach on. The students engage much less with each, because they need to click in for all responses. I can see no one is reading each other's responses. Blackboard is much better in every way.

They also have a full playlist of tutorials to watch when adapting ot the new system

I Transferred to Ub from a large university that used D2L. I found that system to be very easy to navigate but when I transferred I had trouble figuring out the new system. I think that will be the biggest problem with the change. Trying to figure out the new system and have a whole university get used to it when they are used to one system already.

I will not have time to join the 3 LMS demo sessions – or indeed any of them – but I want to provide an up-front perspective from someone who has been an academic at UB for over 20 years. I spend so much of my time trying to keep up with UB's 'new and improved' systems for just about everything... IRB/CLICK, CONCUR, participant reimbursement (from ClinCard to ShopBlue), etc that I'd strongly prefer to stick with what we have learned how to use well (Blackboard). At least unless it's seriously broken AND there is robust infrastructure to provide on-demand, personalized support for the transition (e.g., if UB can save a lot of money by switching, then invest those savings in making sure you don't 'pay' for the switch with decreased faculty productivity). Do I love Blackboard? No, but it's fine, and I can use it pretty well. Do I want to switch to something that might be marginally better but will take away from the precious time I have to submit grants, conduct research studies, write research papers, mentor graduate and undergraduate students, etc? No. In my opinion, UB/SUNY should not want that either. Thank you for considering my opinion, and let me know if you would like more/different information. Best, Larry Hawk
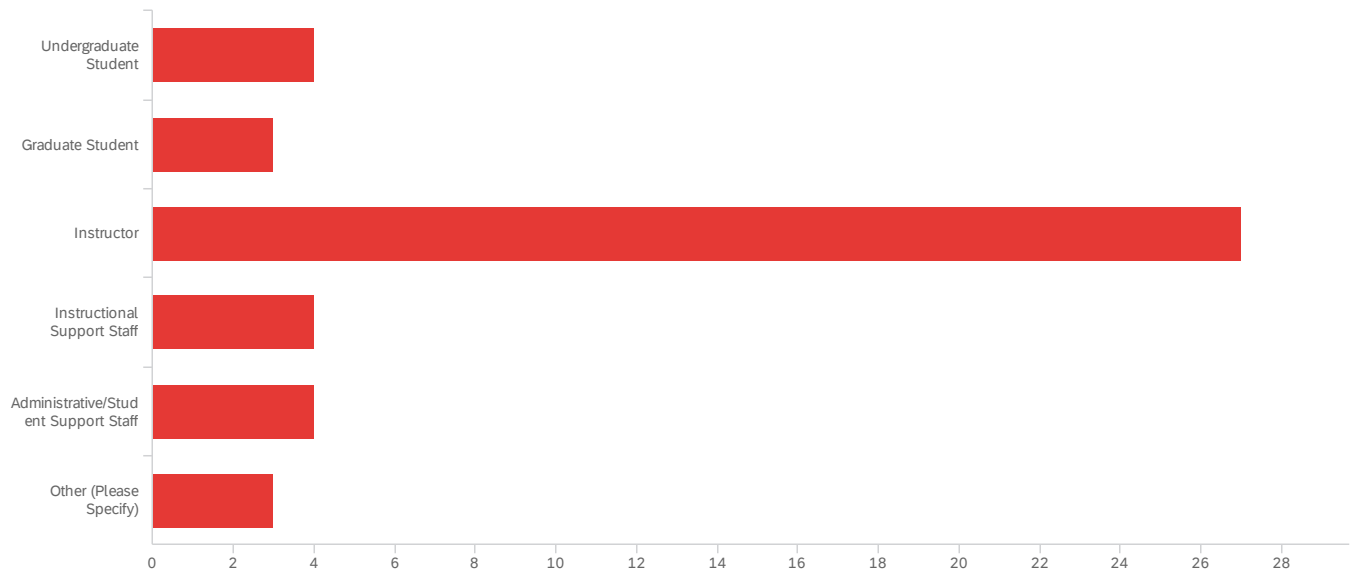
End of Report

Appendix D

Q1 - What is your primary role at UB?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your primary role at UB? - Selected Choice	1.00	6.00	3.22	1.19	1.42	45

#	Field		Choice Count
1	Undergraduate Student	8.89%	4
2	Graduate Student	6.67%	3
3	Instructor	60.00%	27
4	Instructional Support Staff	8.89%	4
5	Administrative/Student Support Staff	8.89%	4
6	Other (Please Specify)	6.67%	3
			45

Showing rows 1 - 7 of 7

Q1_6_TEXT - Other (Please Specify)

Other (Please Specify)

Faculty

Instructor and Admin Staff--department

Staff

Q5 - Besides Canvas, which other vendor demos did you watch?
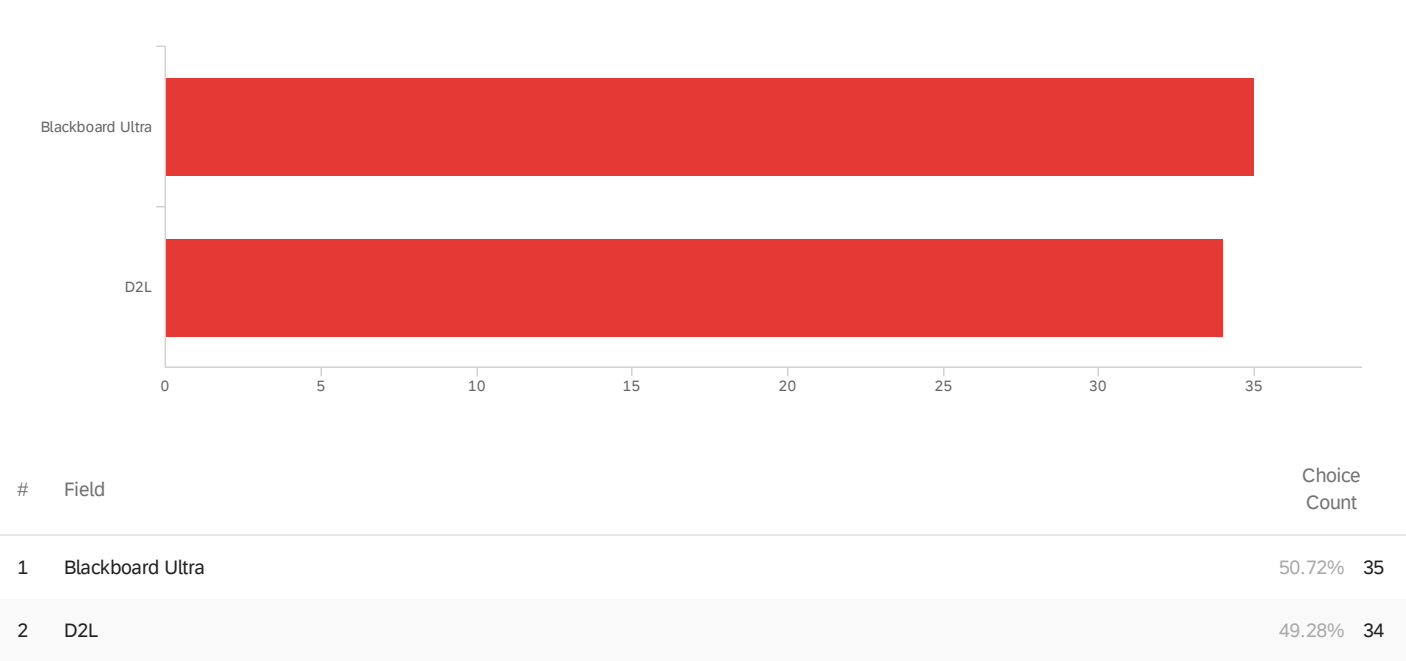
#	Field		Choice Count
1	Blackboard Ultra	50.72%	35
2	D2L	49.28%	34
			69

Showing rows 1 - 3 of 3

Q2 - Based on the Canvas demonstration, please rate the platform on each of the characteristics below:
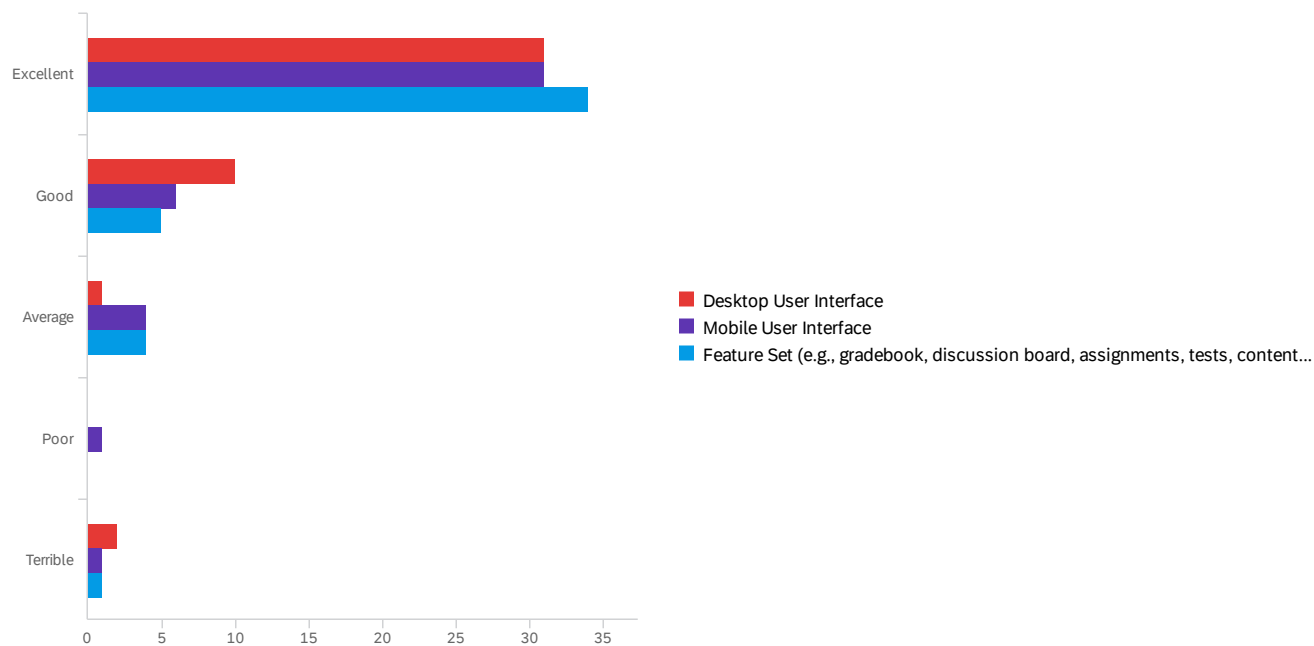
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Desktop User Interface	1.00	5.00	1.45	0.92	0.84	44
2	Mobile User Interface	1.00	5.00	1.49	0.92	0.85	43
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	1.00	5.00	1.39	0.83	0.69	44

#	Field	Excellent		Good		Average		Poor		Terrible		Total
1	Desktop User Interface	70.45%	31	22.73%	10	2.27%	1	0.00%	0	4.55%	2	44
2	Mobile User Interface	72.09%	31	13.95%	6	9.30%	4	2.33%	1	2.33%	1	43
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	77.27%	34	11.36%	5	9.09%	4	0.00%	0	2.27%	1	44

Showing rows 1 - 3 of 3

Q3 - Should UB adopt Canvas as its next learning management system?
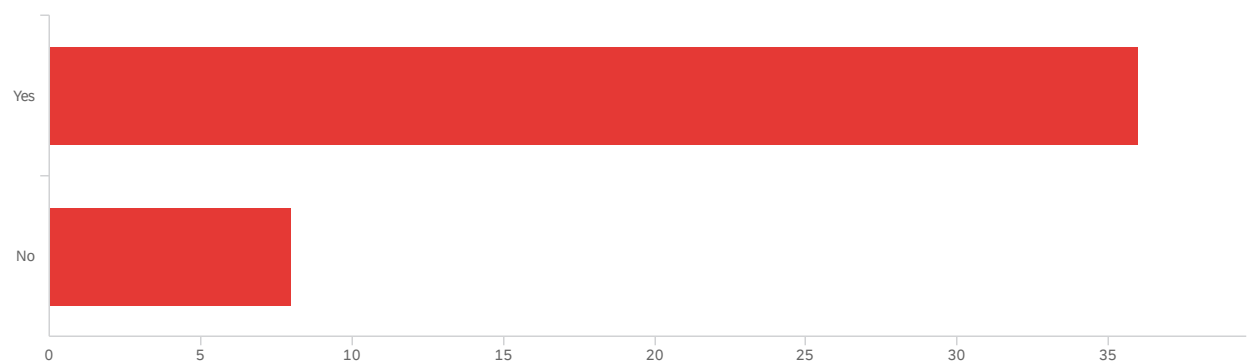
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Should UB adopt Canvas as its next learning management system?	1.00	2.00	1.18	0.39	0.15	44

#	Field		Choice Count	
1	Yes		81.82%	36
2	No		18.18%	8
				44

Showing rows 1 - 3 of 3

Q4 - Please share any comments about Canvas below:

Please share any comments about Canvas below:

I found this to be the best among the three. It had the most features and customizability. The interface looked great.

Canvas has developed into a rather mature, modern LMS that is feature-rich, has a modern user interface and presents information in a way that seems intuitive for students and instructors alike. Many of the features of Canvas are much easier to use than Blackboard's tools (especially the grade book).

I would be happy with a move to Canvas, the features and tools are consistent with D2L and much better than what Blackboard currently offers. I would however think it would be better to move to D2L since that is what SUNY is doing, and it would allow us to leverage the expertise and training that they will be offering system wide. It will also allow us to attract students from across the SUNY system into our online courses more easily. They will be confident that they know the LMS if we go with D2L so there will not be that extra hoop to learn if we were on Canvas.

I thought it was the best of the three, but I wish I had a chance to use it before saying "yes" we should adopt it. I did like the editor because it includes a LATEX equation editor. They have an analytics tab, but I'm not sure what can be tracked, how/if it can be exported, etc.

The presentation by Canvas did not provide as good a review of the features as the D2L and Ultra groups and so it was hard to evaluate "feature sets" above. On negative however is that the format is different from current LMS and so the learning curve during the transition would be much more work than Ultra and probably a bit more than D2L as well. It seems like it would take several weeks ("the summer") and an intense semester to "switch" over.

I see zero reason to prefer this system over the current UBLearns. Why is this switch being made at all? It will only take unnecessary time away from my teaching and research activities.

It's fine. And that's about all I can say. It looks the least up to date, had the least flexibility in format, and I simply wasn't impressed. This one feels like it would be change just to change and I have zero interest in that approach. I just don't feel like we'd be getting anything better with Canvas.

I've used D2L, Canvas, and UBLearns as an instructor at multiple universities. The transition to Canvas from D2L was extremely easy. Having to use UBLearns has been overly complicated after using Canvas. Not all of the features of Canvas are available in UBLearns or are replicable.

I don't have a recommendation. I don't think we should keep Bb if the only reason is difficulty in transitioning, because that does not seem to be an issue with either alternate platform. Maybe I shouldn't have been impressed by the statement that no one has transitioned away from Canvas to another LMS, but I was. Dashboard seems clean and intuitive. However, I think the committee should speak to users at other universities, esp Binghamton (which went to Brightspace) and FSU (which went to Canvas) to get an idea of transition issues, how satisfied they are with the products, etc.

What do email messages/texts/push notifications look like? Can the subject line and "from" information in emails be customized?

Having used UBlearns / Blackboard for years, I am fully in support of an alternative. My choice, after watching the videos for Canvas and Brightspace, is CANVAS. The usefulness of whichever system you chose in the end will also depend on who easy you (and the software providers) make it to get technical support. Real time support is critical. Finally, you need to be clear on the fact that the new 'rich content' that any of these systems allow instructors to use will have to be created in fact. There will be lots of work involved to make content rich. Who is going to do all this work?

Canvas is easier to use for both faculty and students. It meets the ever changing demands of in-person, hybrid, and remote learning. I like the integrated features for time management to help students remain organized. I have used UBlearns/Blackboard since 2001 and although it has met the need, I find that it is cumbersome and students struggle to follow the format. The time constraints on the faculty a significant. I also read reviews online, right now Canvas is considered the best LMS available for higher education. Additionally, will all Ivy League schools utilizing Canvas as their LMS, I feel that we have strong university backing to support this necessary change to ensure excellence in our educational model.

seems the most robust and user-friendly (for both faculty & students) of the three options

Please share any comments about Canvas below:

Canvas seems to offer a lot of updated features not currently available on UBlearns. The system seems easier to navigate and I like that you can seem things like grading from multiple courses at once.

Honestly both Canvas and D2L appear to be better at what they do than my experience with Blackboard (I have used both Canvas and D2L at other universities)

I love Canvas. It's a baller LMS. I used Canvas at another university, where we had previously used Blackboard. The UX was night and day between the two, and that's the major difference: Canvas makes repetitive / bulk actions easy to implement, and the gradebook is a *dream* compared to the one that Blackboard features. It's a shame because Blackboard has a lot of useful features, but Canvas has all the same ones and more, PLUS it has a great UX.

Large market share, flexibility, shared learning objects, seems like Canvas is a no-brainer!

I attended all three demos and wanted to review the video and chats, but could not find any way to do so. All three seemed pretty good – and all three seem to have decent interfaces and were working to make themselves more user friendly and accessible. However, it's hard do know what they are really like without working with them – and I sometimes think that my dissatisfaction with certain things in Blackboard are the result of familiarity. I'm sure I could work with any of them – but, I didn't see a "killer feature" in either Brightspace 2DL or Canvas that made me want to go through the trouble of learning a new system. In addition, neither Brightspace nor Canvas have Journals or Blogs (their workarounds aren't that attractive to me). I use this feature extensively (I think this is true of many in the English Department – and it is a deal breaker for me) I'd prefer to stay with Blackboard.

I used Canvas at my previous institution. It's leaps and bounds above Blackboard and D2L. Its user friendly for both students and faculty. What takes me 5 minutes to do in blackboard is a drag and drop in Canvas. Please, please switch to Canvas! No more blackboard…and D2L is the worst LMS I've seen. My friends in the PA state system use it and absolutely hate it.

Far and away the best LMS demonstrated. I loved the quizzing, accessibility, and assignment configurations. Seemed very intuitive.

I have been using Blackboard Ultra for 1 year and comparing all three systems, Canvas seems to be the most user friendly for students and faculty and have features that would be useful for most disciplines. It will also depend on the degree of restrictions/allowances that UB IT allows faculty to have when using the programs and that is also a key component in this process.

I wasn't able to stay 'til the end of the presentation, and I still have a ton of questions, but the presentation was considerably more impressive - both in terms of Canvas itself, what was covered, and how thoroughly and thoughtfully it was covered - than either of the other two. Hands down the best of the three (though, as I said, I still have many questions).

Canvas seems like the best option of all 3 systems. Very user-friendly, intuitive, and can be personalized to the user's preference while also providing a great default set up as well. They also seemed to genuinely care about accessibility features, including the ability to translate the page and read aloud, using 1 of their on-screen options. Finally, in my experience, I have had a number of students use Canvas at a previous institution, so this could also ease the transition for transfer students or students coming back to school. If UB doesn't select Canvas, brightspace would be my #2 choice.

Canvas EXCELS overall on a few levels. My #1 choice of all the demos. Canvas shows its colors being designed by students and educators. Ease of use and quick access to what you are looking such as grades, feedback, finding content, is so far BEST in Canvas over the other 2 LMS's. The schools who chose Canvas, never left and magnitude of users who are now in Canvas should be NOTED. For Instructors, the options are fantastic. The data on these dashboards is so readily available and readable - impressive. Easy to reach out to a certain group of students who meet a specific criteria without jumping through hoops. I like the course overview charts as well, so much better than running tedious reports or digging down for them. Other functions that showed depth not just 'its there' such as online attendance, which you can actually control what it is looking at for student interactionss - could have used that during Covid - So many great features to mention - the templates, the grading simplicity yet advanced features not seen in the others such as exam on-the-fly accommodations. Checking accessibility, content building are all there in advanced form but easy to use. Time savers such as associating course content, creating templates, so designers can share it out to instructors, and build from quickly. I know from other instructors that the LOR-learning object repository has a much larger database to get great readily built modules, tests etc. from their community (much bigger numbers). In Grading - the hardest thing to do, Canvas makes it look so easy and weighting grades, as well as lateness penalties which we have struggled with for so long you can do easily. I hope we can get the opportunity and not just go with the flow at SUNY. It will pay off in the long run.

This seems way more user friendly than Blackboard, as a student and an employee. Among higher ed professionals that I have spoken with across the country, Canvas seems to be the most well-liked.

Please share any comments about Canvas below:

This was an excellent Demo (best of the 3). The ease of use, details within the grading setup, workflow. Concerns with accessibility; didn't see wikis, blogs, journals, or portfolios.

Brightspace is still my favorite tool. Canvas is second and Blackboard is a distant 3rd.

So many features, explains why Canvas leads in LMS! Canvas, canvas, canvas!

Wow! Using Canvas would streamline all our processes (student tracking, different quiz platforms, different calendar platforms) and make life much easier.

I lost the link to the D2L survey. But D2L and Canva look superior to Bb Ultra.

Lots of new features and sleek design the university can use and grow into.

I really like the added functionality of allowing student groups to use the LMS to manage their content as well.

both my children have used Canvas at high school and at Ohio State it is much more user friendly than Blackboard

The demo sessions have not all happened yet but I used Canvas at a prior institution and loved it. It is very user friendly both for faculty and students. I think it would add a lot of benefit to everyone at UB.

Canvas is so much better than blackboard

Over all many of my friends at other campuses use canvas and i enjoy the interface way much better than blackboard

Canvas was the preferred interface at my undergraduate institution and I greatly prefer it to Blackboard. I would LOVE to see Canvas implemented at UB

I used it at another university and it's terrible

I will not have time to join the 3 LMS demo sessions – or indeed any of them – but I want to provide an up-front perspective from someone who has been an academic at UB for over 20 years. I spend so much of my time trying to keep up with UB's 'new and improved' systems for just about everything… IRB/CLICK, CONCUR, participant reimbursement (from ClinCard to ShopBlue), etc that I'd strongly prefer to stick with what we have learned how to use well (Blackboard). At least unless it's seriously broken AND there is robust infrastructure to provide on-demand, personalized support for the transition (e.g., if UB can save a lot of money by switching, then invest those savings in making sure you don't 'pay' for the switch with decreased faculty productivity). Do I love Blackboard? No, but it's fine, and I can use it pretty well. Do I want to switch to something that might be marginally better but will take away from the precious time I have to submit grants, conduct research studies, write research papers, mentor graduate and undergraduate students, etc? No. In my opinion, UB/SUNY should not want that either. Thank you for considering my opinion, and let me know if you would like more/different information. Best, Larry Hawk, Ph.D. Professor of Psychology

End of Report

Appendix E

Blackboard Ultra Evaluation

December 7, 2021 9:29 AM EST

Q1 - What is your primary role at UB?
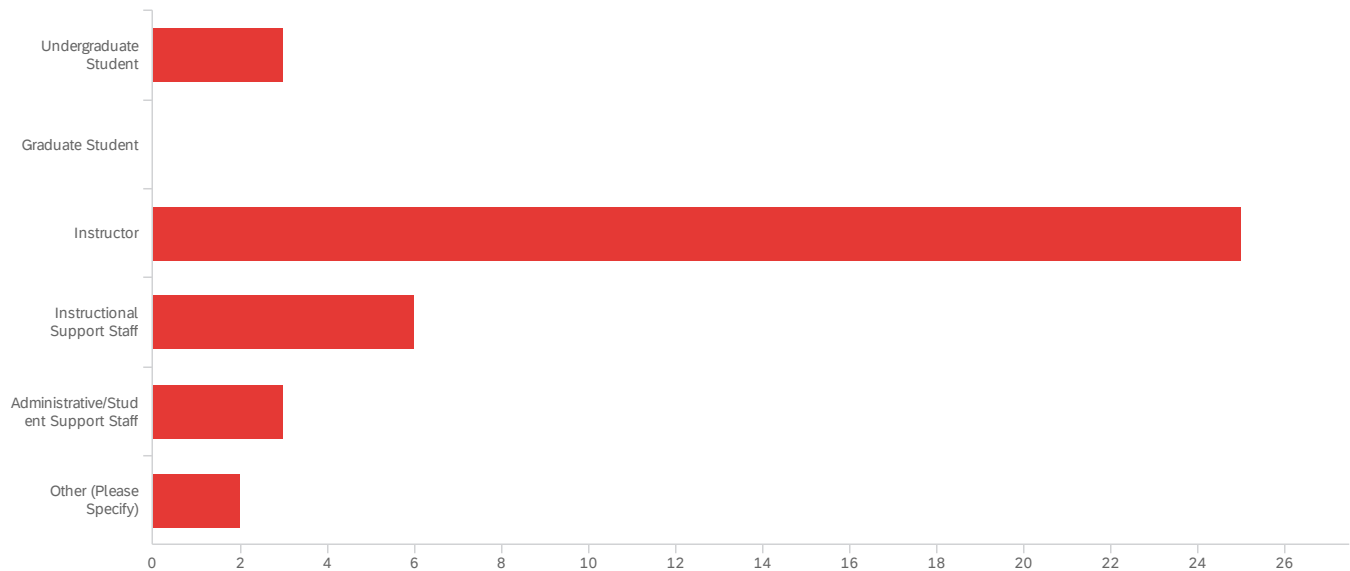
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your primary role at UB? - Selected Choice	1.00	6.00	3.31	1.07	1.14	39

#	Field		Choice Count
1	Undergraduate Student	7.69%	3
2	Graduate Student	0.00%	0
3	Instructor	64.10%	25
4	Instructional Support Staff	15.38%	6
5	Administrative/Student Support Staff	7.69%	3
6	Other (Please Specify)	5.13%	2
			39

Showing rows 1 - 7 of 7

Q1_6_TEXT - Other (Please Specify)

Other (Please Specify)

Faculty

Staff

Q5 - Besides Blackboard Ultra, which vendor demonstrations did you watch?
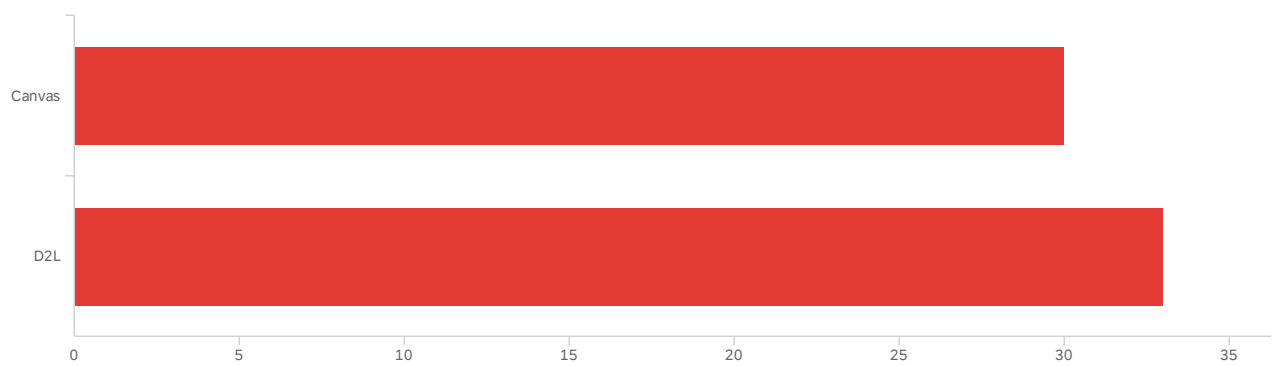
#	Field		Choice Count
1	Canvas	47.62%	30
2	D2L	52.38%	33
			63

Showing rows 1 - 3 of 3

Q2 - Based on the Blackboard Ultra demonstration, please rate the platform on each of the characteristics below:
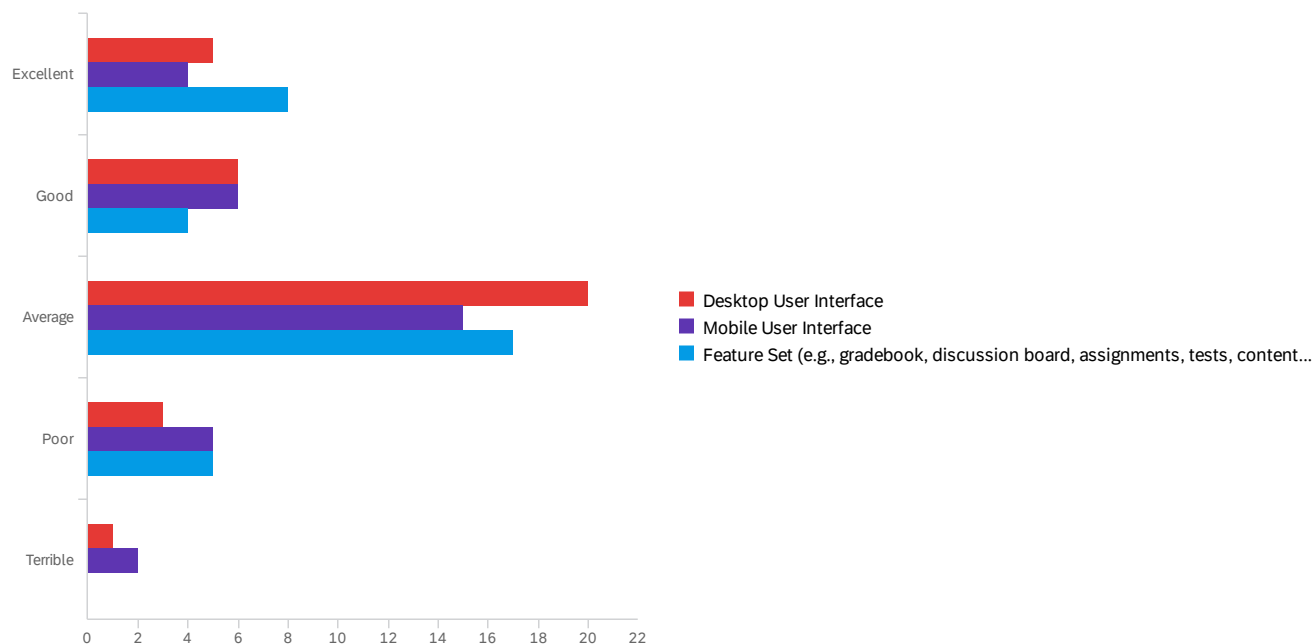
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Desktop User Interface	1.00	5.00	2.69	0.92	0.84	35
2	Mobile User Interface	1.00	5.00	2.84	1.03	1.07	32
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	1.00	4.00	2.56	1.01	1.01	34

#	Field	Excellent		Good		Average		Poor		Terrible		Total
1	Desktop User Interface	14.29%	5	17.14%	6	57.14%	20	8.57%	3	2.86%	1	35
2	Mobile User Interface	12.50%	4	18.75%	6	46.88%	15	15.63%	5	6.25%	2	32
3	Feature Set (e.g., gradebook, discussion board, assignments, tests, content, etc.)	23.53%	8	11.76%	4	50.00%	17	14.71%	5	0.00%	0	34

Showing rows 1 - 3 of 3

Q3 - Should UB adopt Blackboard Ultra as its next learning management system?
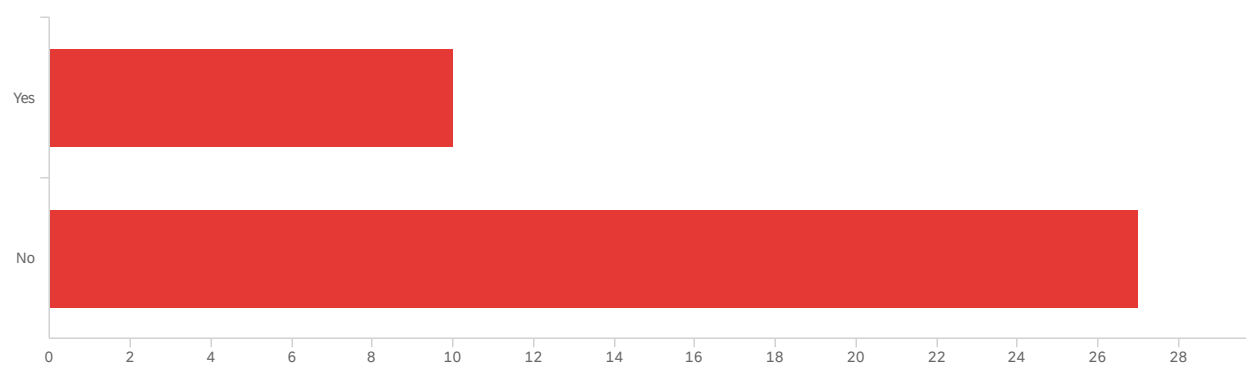
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Should UB adopt Blackboard Ultra as its next learning management system?	1.00	2.00	1.73	0.44	0.20	37

#	Field		Choice Count	
1	Yes		27.03%	10
2	No		72.97%	27
				37

Showing rows 1 - 3 of 3

Q4 - Please share any comments about Blackboard Ultra below:

Please share any comments about Blackboard Ultra below:

I rated the Blackboard LMS average among the three options. The obvious advantage is that UB users are already familiar with the system. They also said they would continue supporting Blackboard Classic, so we have the option to continue using the existing system without interruption. However, it does not have as many features and customizability as Canvas.

Ultra does not have sufficient HTML editing of all content.

Clunky, Ultra is certainly better than current legacy version, but still not as clean as other LMS.

I have heard that some faculty are of the opinion that since we all just learned blackboard during the pandemic we shouldn't switch away now and learn a new system. I want to put in a vote for switching away from blackboard while we have the chance. I know no software is perfect, and everyone has issues with whatever LMS they are using, but everything is a fight with blackboard, and nothing in the demo suggested that BB Ultra is a fundamental change from that dynamic.

While Blackboard Ultra seems to attempt to bring an aging system more in line with current expectations for a LMS, it just seems to me like the Blackboard devs are a bit behind the times. This is supported by the fact that many features that come standard with the other two LMSs are still under development for Blackboard.

The blackboard features are not currently comparable to those offered by the other two LMS. Their roadmap has many of these in development, but their is no indication of how they will be implemented and how user friendly they will be. Therefore it is not possible to rate how these will compare to the other two. Because of this I would not select blackboard because it does not make sense to commit to a long term contract with them without knowing fully what we will be getting.

I've watched the demo and have used Blackboard for a long time. I have not switched to the Ultra version because it lacks critical features. I don't want to be their new feature tester; it seems like they are playing catch-up with the others. I don't believe that their web editor supports mathematical equations. Analytics are available, but the reports are not customizable and do not present the information in a way that is useful to me.

Very user-friendly system; I have used the D2L LMS and based on that experience, I find Blackboard is still easier to navigate

The most receive version of Ultra is much improved over that taught 2 summers ago, especially in its flexibility for assessment which is an important component.

Blackboard Ultra seems to be the least terrible of three unfortunate options, in that it is most similar to the current UB Learns. Nonetheless, I see zero reason to prefer this system over the current UB Learns. Why is this switch being made at all? It will only take unnecessary time away from my teaching and research activities. I see zero benefits for students or instructors in making a change.

It's by far the easiest to navigate and build as you like. I like the features and they have gotten rid of most the things I currently find annoying about Ultra. The responsiveness to those issues impresses me. This LMS seems the most powerful nd because most of us are familiar with basic feature sets, it seems like the least heavy lift to students and faculty who are dealing with a LOT right now. I ahve all kinds of things I am excited about with the new tool features and design.

I do not like Bb, but Ultra is an improvement. I think the committee should speak to users at other universities, esp Binghamton (which went to Brightspace) and FSU (which went to Canvas) to get an idea of transition issues, how satisfied they are with the products, etc.

Customization of email messages (subject lines/ "from") - Wasn't clear if it supported a tablet and pen for online grading.

One thing stood out to me: the person running the demo said that there WASN'T a "grade-by-question" option for tests, which is a feature we currently have. I don't know if this was an error on their part or if it's really not in the version of the software they were demo'ing, but I use that feature VERY HEAVILY.

Please share any comments about Blackboard Ultra below:

Blackboard Ultra is still very similiar to what we are currently using and this is not an easy interface and doesn't offer any many options as the other management systems.

The presentation walked through Blackboard Ultra, but the features and layout discussed aren't something I've been able to access over the last year. That would have helped me better evaluate the new Ultra features. As it is, the current version of Blackboard that I do use is cumbersome and unpleasant in terms of instructor UX. It has most of the features I might want, but they're always time-consuming to get to and set up. Most features that I regularly use are buried three or more menus deep in the system and doing bulk actions and edits is generally not possible. I gave up on using the Communication features of Blackboard because I can't set delayed messages that also do push notifications to email. Finally, the Gradebook is visually messy and the options to simplify it require (again) multiple menu steps to set up. A simple visual should be the default. I find it difficult to do bulk changes in the current Gradebook. Finally, if I add an assignment column to the Gradebook that does not require a student submission (e.g. for a scheduled oral or paper exam), adding the grades and comments can't be easily done between students. I have to go to the full grade book, click on the individual student in the column, add my comments and grades, and then when I submit that information, I'm sent back to the gradebook instead of to the next student in the list. That kind of experience is what I associate with across Blackboard features unfortunately.

I attended all three demos and wanted to review the video and chats, but could not find any way to do so. All three seemed pretty good – and all three seem to have decent interfaces and were working to make themselves more user friendly and accessible. However, it's hard do know what they are really like without working with them – and I sometimes think that my dissatisfaction with certain things in Blackboard are the result of familiarity. I'm sure I could work with any of them – but, I didn't see a "killer feature" in either Brightspace 2DL or Canvas that made me want to go through the trouble of learning a new system. In addition, neither Brightspace nor Canvas have Journals or Blogs (their workarounds aren't that attractive to me). I use this feature extensively (I think this is true of many in the English Department – and it is a deal breaker for me) I'd prefer to stay with Blackboard.

It's just not a very user friendly system. It takes many steps to do simple (what should be) tasks. It does not show up well on iPad or mobile.

Blackboard has a terrible UI and one of the worst mobile apps ever made.

The usability issues for students remain with the new Ultra version, and it seems like time for UB to upgrade from these issues.

At one point, one instructor asked a question about test availability settings. Apparently, the BB team had never heard this request for improved test editing functionality, so they " submitted a feature request to the engineers"... This is a function that has come standard with other LMSs for years. When asked about the prospect for the development of additional quiz question types, the demo team clearly indicated that future product development was being performed by a third party. This should be an immediate cause of concern.

I only watched the beginning of the presentation, but I was very unimpressed. Also, Blackboard is very clunky and has been very unresponsive to requests over the year.

Ultra doesn't seem like a great step up from the current blackboard system. The interface is average, and there was not a great focus on accessibility or personalization. Lots of features that participants asked about were either not possible or potentially being added in the future, whereas brightspace and canvas already offered those same features. Blackboard is not particularly user friendly for students or for instructors, so we should move on to a new system.

the new interface has a more modernized look but the problem with the Blackboard/Learn is the same menu bar on the left side - which of most time we faculty or students do not use/need. The blackboard has too many layers of pages that it takes lots of clicks to go into a specific page. the feature sets are not as intuitive as other platforms - least flexible among three compared so far.

Some concerns that we have had with features in Blackboard have not been resolved or enhanced. Most individuals use basic functionality in an LMS and navigating those easily is most important.

Blackboard appears to be a laggard with its development and the new Ultra environment tries to bridge the old version instead of creating something new and innovative.

SO MANY things it is lacking in that other LMS's offer or have solved; accessibility functions lacking, no templates, lack of HTML, no portfolios, limited feedback. They dont respond to important fix requests such as document alignment in assignments, text size fluctuation (pts to pixels) and hyperlinks, quiz/assignment feedback lack of instructor control. BB has even gone backwards in some respects, they have removed basic functions such as hyperlinking text, alt text, etc.

Please share any comments about Blackboard Ultra below:

There are too many "roadmap" items.

It's okay. Reduced features from current Bb, so it seems a set backwards.

I beleive the campus is ready to try a different LMS with more user friendly enviroment.

I will not have time to join the 3 LMS demo sessions – or indeed any of them – but I want to provide an up-front perspective from someone who has been an academic at UB for over 20 years. I spend so much of my time trying to keep up with UB's 'new and improved' systems for just about everything... IRB/CLICK, CONCUR, participant reimbursement (from ClinCard to ShopBlue), etc that I'd strongly prefer to stick with what we have learned how to use well (Blackboard). At least unless it's seriously broken AND there is robust infrastructure to provide on-demand, personalized support for the transition (e.g., if UB can save a lot of money by switching, then invest those savings in making sure you don't 'pay' for the switch with decreased faculty productivity). Do I love Blackboard? No, but it's fine, and I can use it pretty well. Do I want to switch to something that might be marginally better but will take away from the precious time I have to submit grants, conduct research studies, write research papers, mentor graduate and undergraduate students, etc? No. In my opinion, UB/SUNY should not want that either. Thank you for considering my opinion, and let me know if you would like more/different information. Best, Larry Hawk, Ph.D. Professor of Psychology

End of Report

Executive Summary

To evaluate the features of the Learning Management System (LMS), *UBLearns* (Blackboard), an online faculty survey was initiated. The survey focused on six aspects of the LMS: Communication Tools, Calendar Functions, Creation Tools, Discussion Board, Assessment Tools, and Third-Party Integration.

306 faculty from more than nine disciplines responded. Most stated they are mostly familiar (32.48%) or very familiar (40.51%) with the LMS. From their responses, it is possible to conclude:

- Faculty find the LMS system not to be user-friendly, requiring them to take multiple steps for simple tasks.

- Faculty tend not to use the Communication Tools, using instead personal emails or HUB to contact students.
  - Faculty expressed frustration for some current Communication Tools, such as the Announcements, which are not automatically sent as emails and do not allow easy file attachment.

- Faculty were divided on the question of implementing text or push notifications as well as using the calendar system.
  - Comments suggested that students should be involved in evaluating these functions.

- Faculty mainly valued the Content Creation tool, although many expressed a desire for it to be more user friendly and easier to copy content across sections of courses.

- A majority of faculty (54%) did not actively use or value the discussion boards, noting that they did not automatically link to the gradebook and were time consuming for larger classes.

- Faculty primarily valued effective academic integrity features, noting that those provided in the LMS did not always work.

- Faculty primarily used third-party integrations licensed by UB, particularly Zoom and Panopto.
  - However, many faculty expressed frustration with how poorly other third-party products such as textbooks are integrated into the LMS.
  - Many faculty expressed a preference for non-UB-licensed products, such as Piazza, Micro, or Slack. Multiple faculty requested that UB license these.

Based on faculty responses we suggest further investigation into the following:

- About half the faculty expressed an interest in participating in a virtual focus group to further discuss the LMS.
  - This indicates a strong desire by faculty to have a greater voice in technology decisions that directly affect them.

- The possibility of licensing third-party software that are already popular amongst faculty, particularly Piazza.

- The correlation between modality and importance of certain LMS features. For example, when examining the use of discussion boards, most faculty respondents stated they teach in person, making discussion boards irrelevant for them.

Overview

306 faculty were surveyed, however their responses to each question varied, from 260 to 461. Half were tenure track (assistant, associate, and full) professors; 25% were full-time clinical faculty; 24% were adjuncts, and less than 1% were librarians.

Academic standing
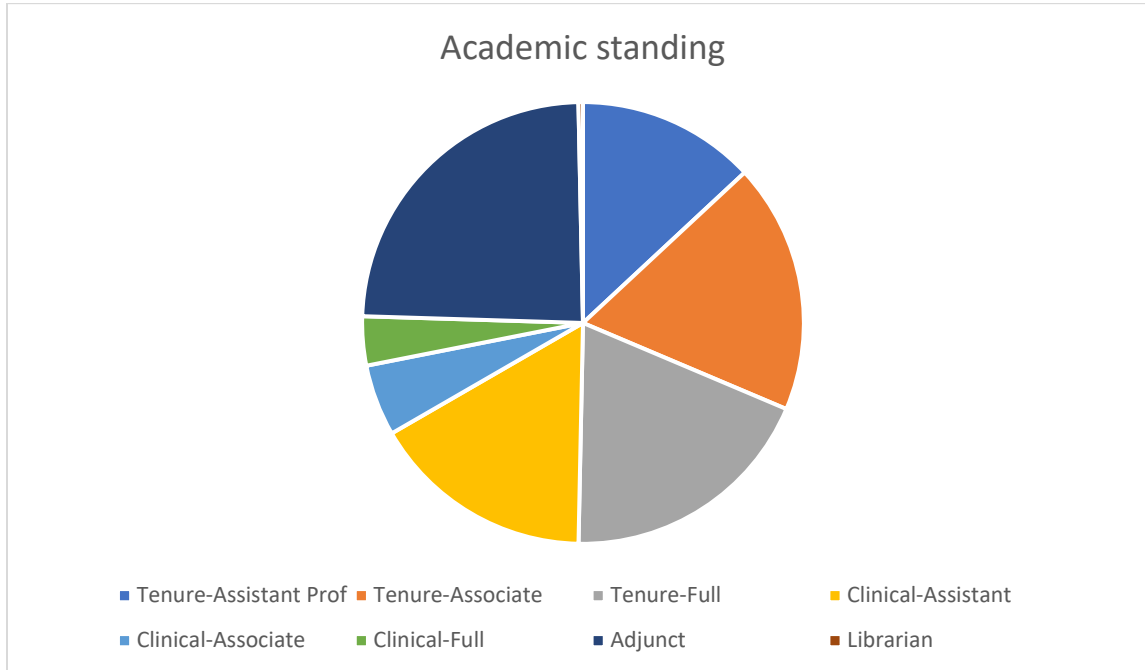
Most of the responding faculty were in the arts and humanities (23.6%) while faculty from the social sciences constituted 19%. Faculty from the sciences (14.4%) and school of medicine (14.7%) constituted the next two biggest groups. Education constituted 8.5% of respondents; Management and business 7.8%. Engineering 6.9%; law 2.9%. Other departments compromised of a total of 2.3% of respondents.

Academic Discipline

Legend: Arts and Sciences, Social Sciences, Sciences, School of Medicine, Education, Management and business, Engineering, Law, Other
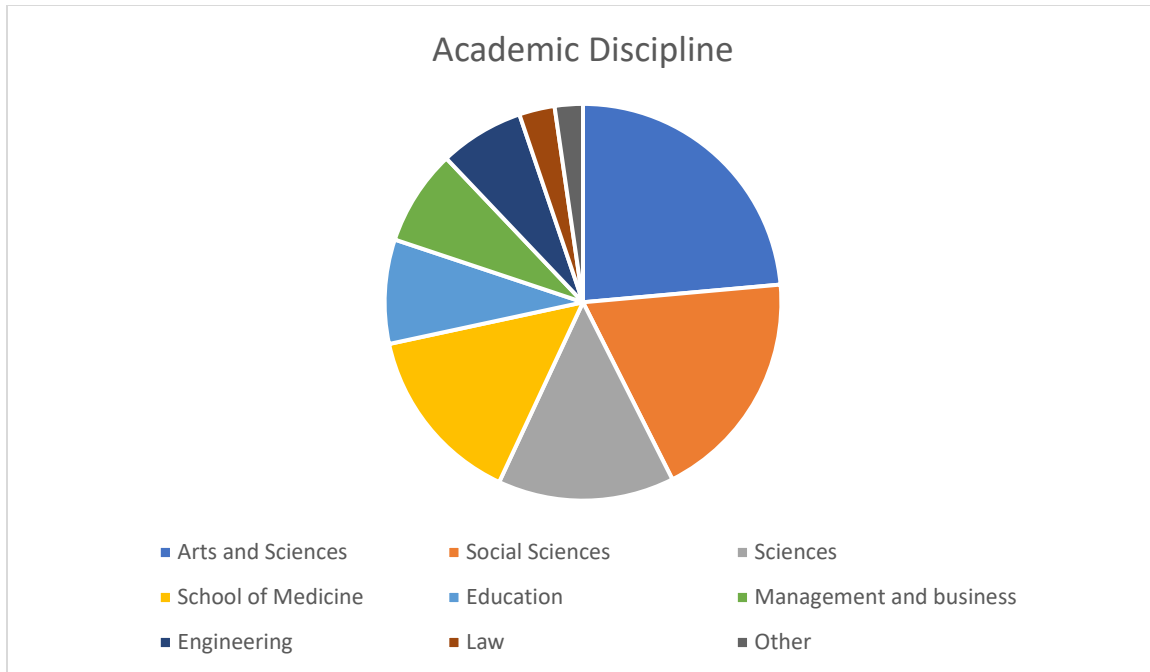
However, due to the low response rate, the needs and values of each division might be skewed.

Q5: Modality

The majority of faculty report face-to-face modality (55.97%), while 26.9% report online modality, and 17.14% suggest they use a blended or hybrid modality. However, these numbers may be slightly misleading; only 306 faculty took the survey yet there were 461 responses to this question. This suggests that faculty are mainly teaching face-to-face, but may teach in multiple modalities.

Modiality

Legend: F2F, Online, Blended/Hybrid
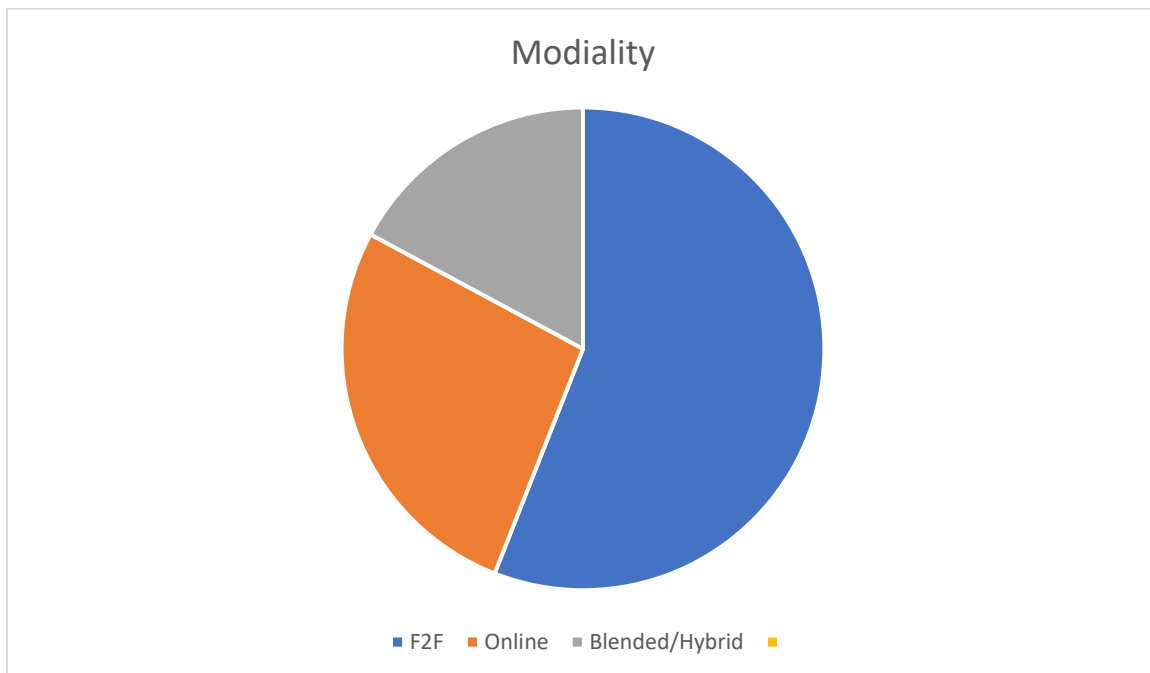
Q6: Frequency of Use Blackboard/ UBLearns
The majority of faculty report using UBLearns daily (60.83%), while 38.66% use it several times a week, 6.05% use it once a week; and 4.46% report other. However, there were 314 responds, suggesting that a few participants answered twice, leading to false results.

Frequency of Use

■ Daily ■ Several times a week ■ Once a week ■ Other
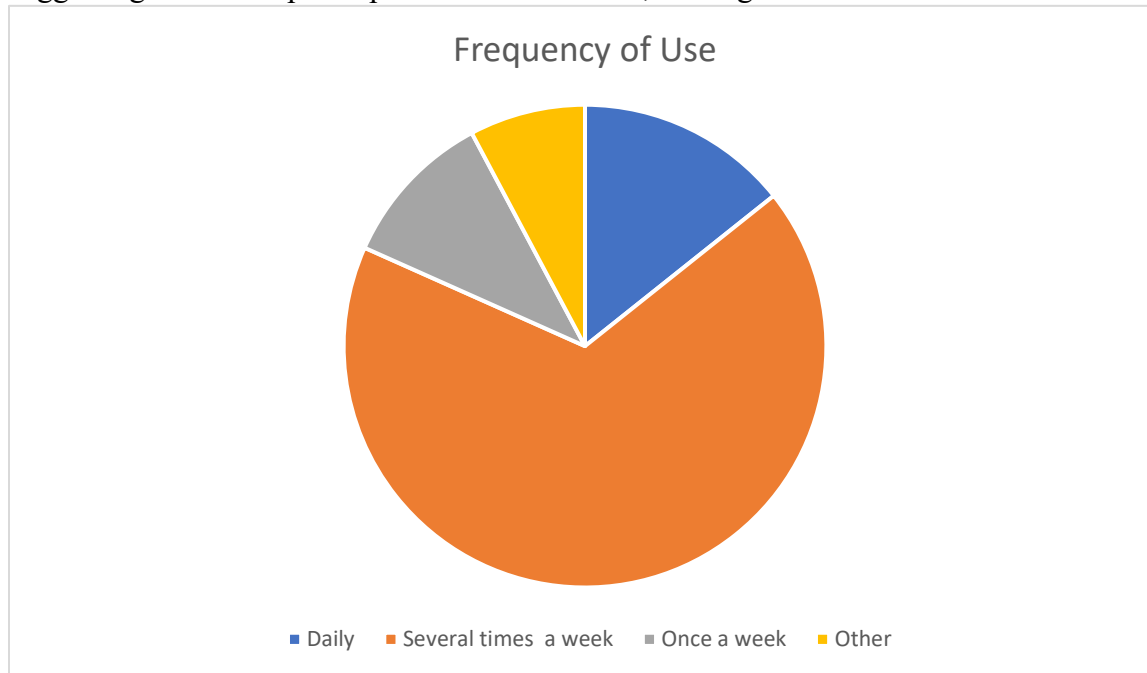
For those that reported other, fourteen clarified their response. One suggested that the use of UBLearns depends upon the type of modiality: "online: every day. f2f, large classes: after setup, only to upload exam grades. f2f, <=50 students: only to set up with syllabus and readings." Others reported using it only for specific tasks: "At the beginning of the semester when posting syllabus, course readings, assignments. Also when posting exam grades and finally, in sending emails from time to time" or "To post information, sometimes every day, sometimes once a week." One noted that they used UBLearns solely for panopto.

Q7: Use of Communications features
The vast majority (89.14%) of the faculty suggested that they use the communications features. 10.32% (31 comments) replied they use an alternative communication method, while .33% (1) comment) stated they were unsure or unfamiliar with this feature. Two qualitative responds emphasized the importance of the Announcements function, while several (8) wrote that they only use the Announcements function.

Of the 31 comments that suggested they did not use communication features, 25.8% stated they used their email to communicate with students. 16.1% stated they use HUB; another 16.1% stated they used a third party, such as SLACK or PIAZZA. 19.4% stated they only use

announcements, suggesting they do not associate it with communication features.

Alternative methods of communication

■ Email ■ HUB ■ Announcements ■ Third-Party ■ Not needed/verbal
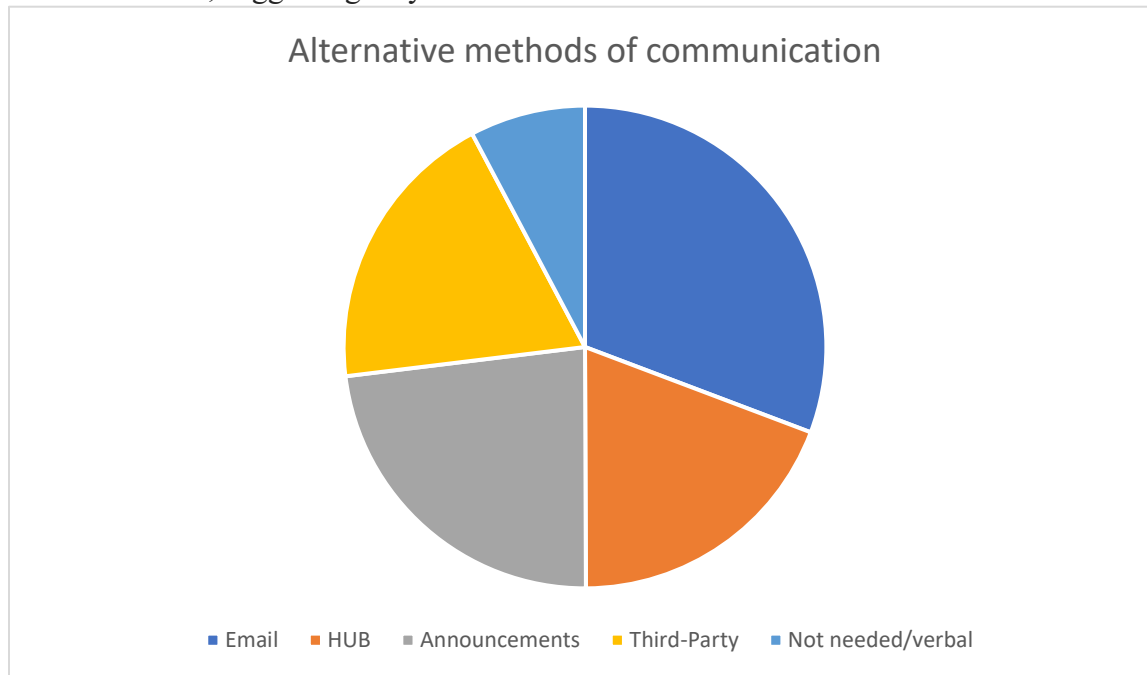
The reasoning for not using UBLearns as the primary form of communication varied. Six stated that it was not easy to use: "I've found the UBlearns - Blackboard interface cumbersome, unintuitive, and inefficient. Much of what I teach is hands on. The effort to get content up and student ready can be frustratingly time consuming. I looked a SLACK as easier alternative method to keep my students engaged in course content and with one another. Teaching one lab course does not require deep LMS communications."

One comment also stated that it was also difficult to schedule announcements in advance: "I don't use the communication features on UB Learns because there is no feature to set up announcements ahead of time and send them as email notifications at the moment that they go live. Each of these options is available separately -- I can force an announcement notification to send right away OR I can set up announcements to send at a later date / time, but I can't do both to make the delayed message show up on UB Learns and in students' inboxes simultaneously. Because of this, I have set up course listservs on Outlook to communicate with students.

Q8: Important Communication Features
When asked which features were important in an LMS (already included or wanted include), only announcements rated an extremely important (34.22%) and important (24.92%). The push notification feature was only rated moderately and slightly important (26.33%). The ability to send texts and push notifications based on student preference warranted least important (29.67%).

The question of whether it was important to have a system push or text based on student preference was largely rated as having lower important. Only 13.67% stated that it was extremely important and 16.67% said it was very important. The majority (29.67%) stated it was not important.
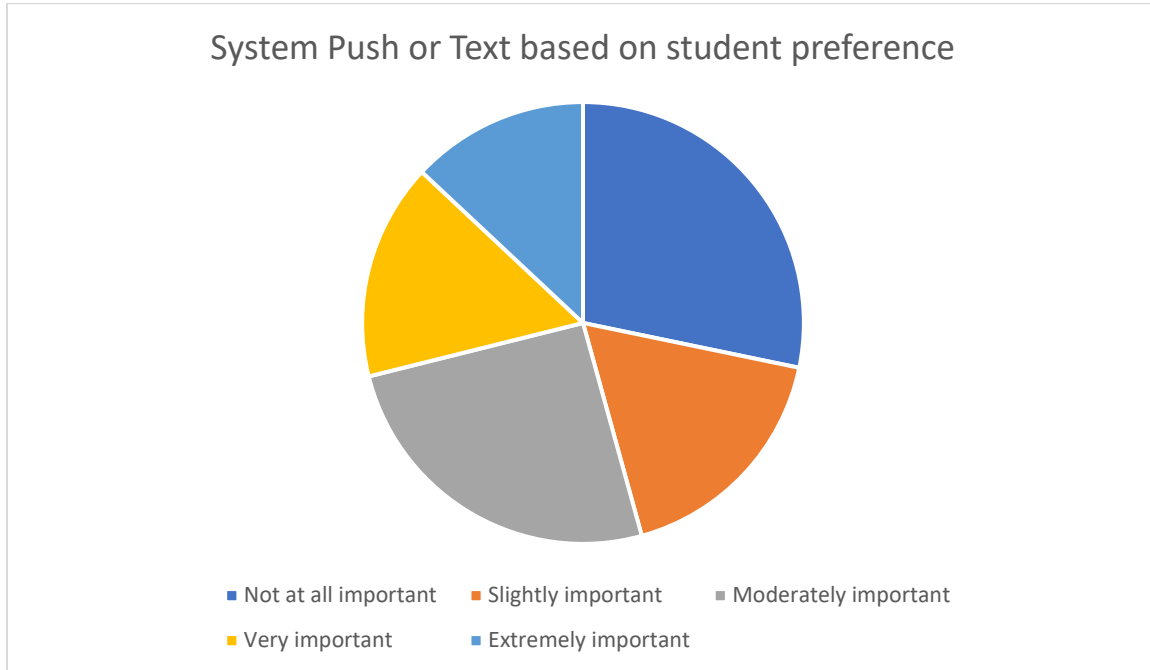
Just faculty were rated a push function based on student preference as of middle importance, they did the same for whether an LMS should have a push feature at all. The numbers were almost identical to the question of the student choice in notification.
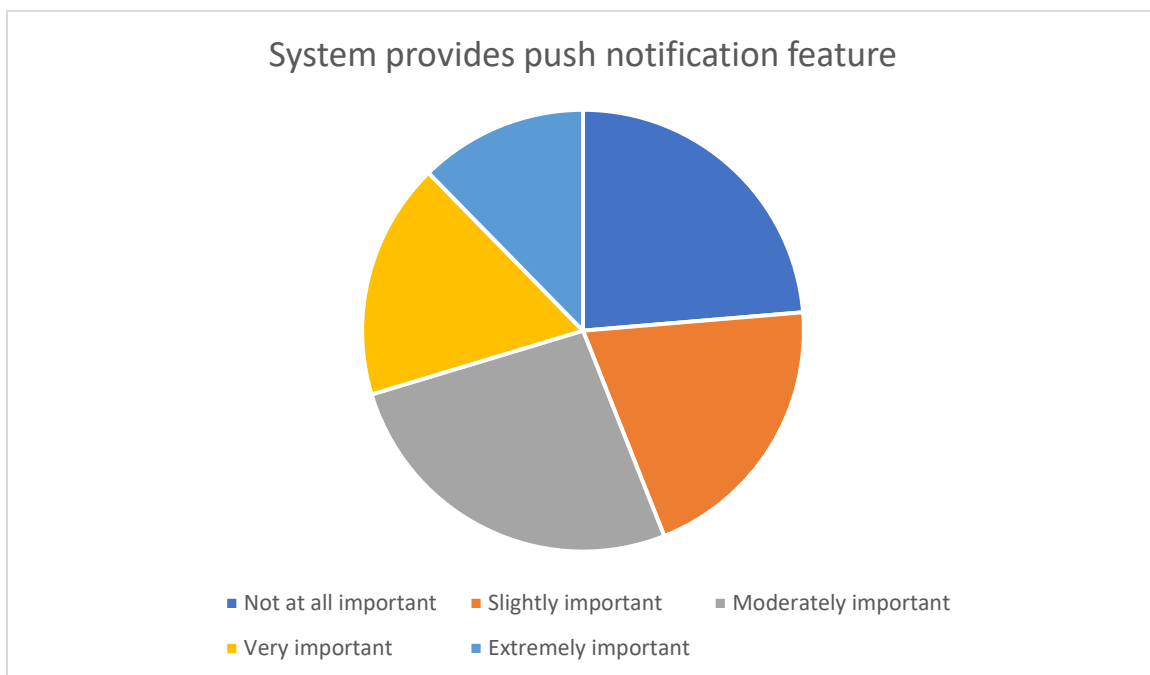
The question of emailing groups was largely divided between being moderately to extremely important. Approximately 25% stated it was either not important or slightly important.

Emails can be sent to groups based on assignment completion or grade status

■ Not important ■ Slightly important ■ Moderately Important ■ Very Important ■ Extremely important
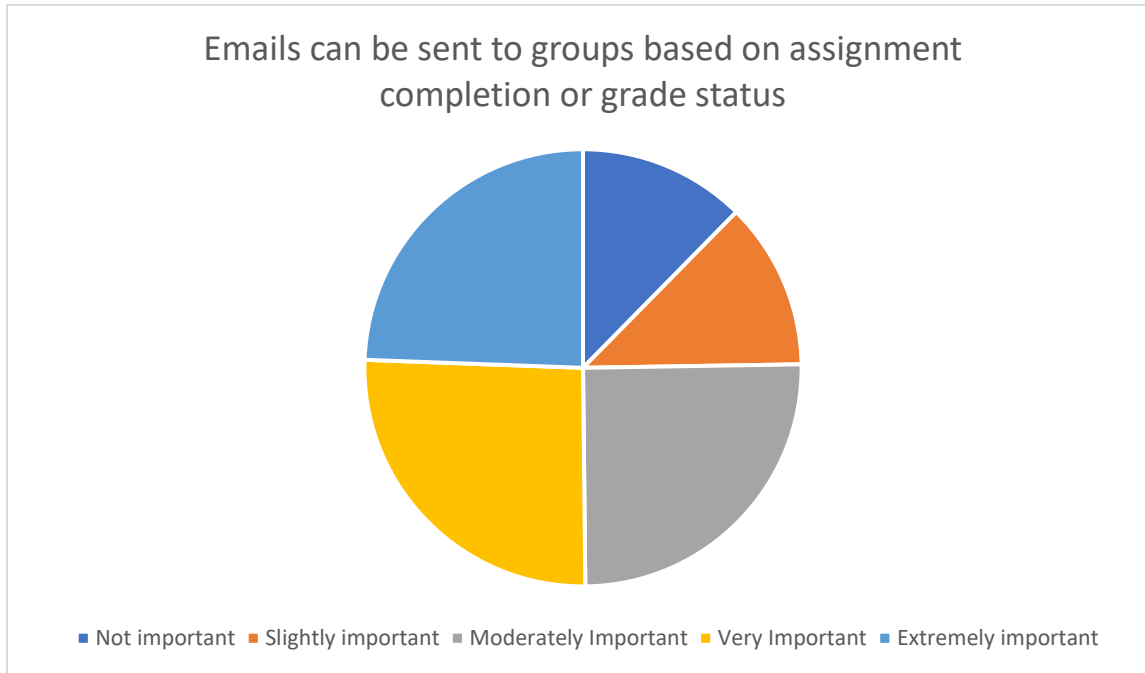
Q9: Comments on communication

66.31% of the faculty stated they did not have comments on the communications functions. 95 faculty responded with comments. 15.8% of respondents stated that the communications tools were confusing and not easy to use. 16.8% commented on the announcements tool, with 8.4% stating they wanted announcements to automatically be sent to emails and 5.3% stating they wanted to be able to easily add files to announcements. 13.7% stated a preference for email. 11.6% also stated they wanted to be able to see individual student emails.

A common theme was that faculty wanted the communication tools to be more user friendly. Many wanted more flexibility in email options, such as being able to see student emails, or the ability to respond to a group email sent from Blackboard. Another concern was that Announcements were not immediately sent via email, but had to be manually sent. Faculty were also concerned that students can send emails to them via Blackboard, but these emails do not show up in their inbox, remaining instead on the LMS.

There were various suggestions for major changes. Multiple faculty suggested integrating Piazza. Some faculty noted that they realize that students rely more on text messages, rather than email, which might suggest that text messages were important to students.

Q10: Calendar function

Most faculty stated that they did not use the calendar function (57.19%); while 16.84% stated they were not familiar with it.

122 responded with comments on why they did not use it. 34.4% stated that they were not familiar with the system and it was not a priority. 20.5% stated all information was in the

syllabus or discussed in person. 18% stated they use third party scheduling software. 16.4% stated that the system was not user-friendly. 4.9% stated that students were not familiar with the program. 4.1% stated they did not use it because it did not integrate into other calendar systems.

30 faculty commented after stating they were not familiar with the feature. 30% stated they simply were not familiar with the feature, while 6.7% they were not sure how to use it. 23.3% stated that it was not relevant in their class. 6.7% stated they use other software. It must be noted that 23.3% expressed confusion over the question.

For those stating they did not use it, the main reason was teaching in-person and emphasis on the syllabus. Others stated that students did not look at the calendar, so they did not utilize it. Multiple respondents noted that it was too time consuming or confusing to learn, so they never had. When asked if they use other software, Tracker, Google Calendars, Outlook, Doodle, were all noted.

Q24: Importance of Calendar Tools

Approximately 65+% of the faculty listed all proposed calendar functions as being moderately to extremely important.

74% of the faculty found it moderately to extremely important that the LMS system notify students of upcoming and past due dates. 279 responded to this question.
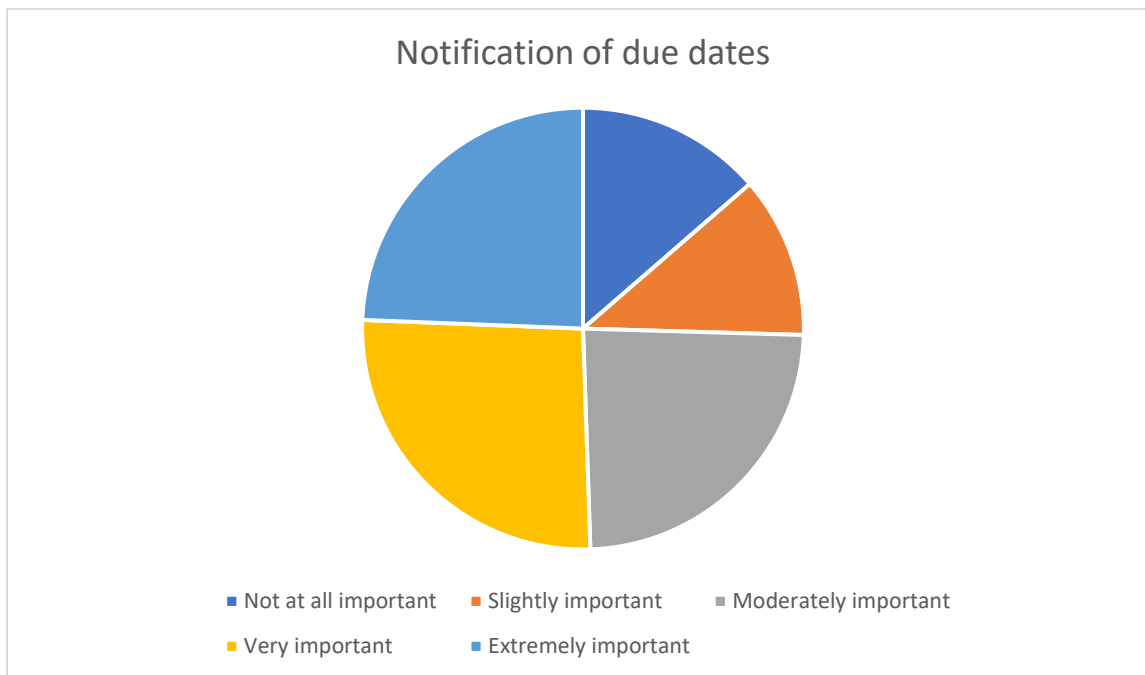
66% of faculty found a system that has a robust calendar feature that contains course events, etc. from all courses, clearly differentiated by color to be moderately to very important. 278 responded to this question.

Calendar events denoted by color

- ■ Not at all important
- ■ Slightly important
- ■ Moderately important
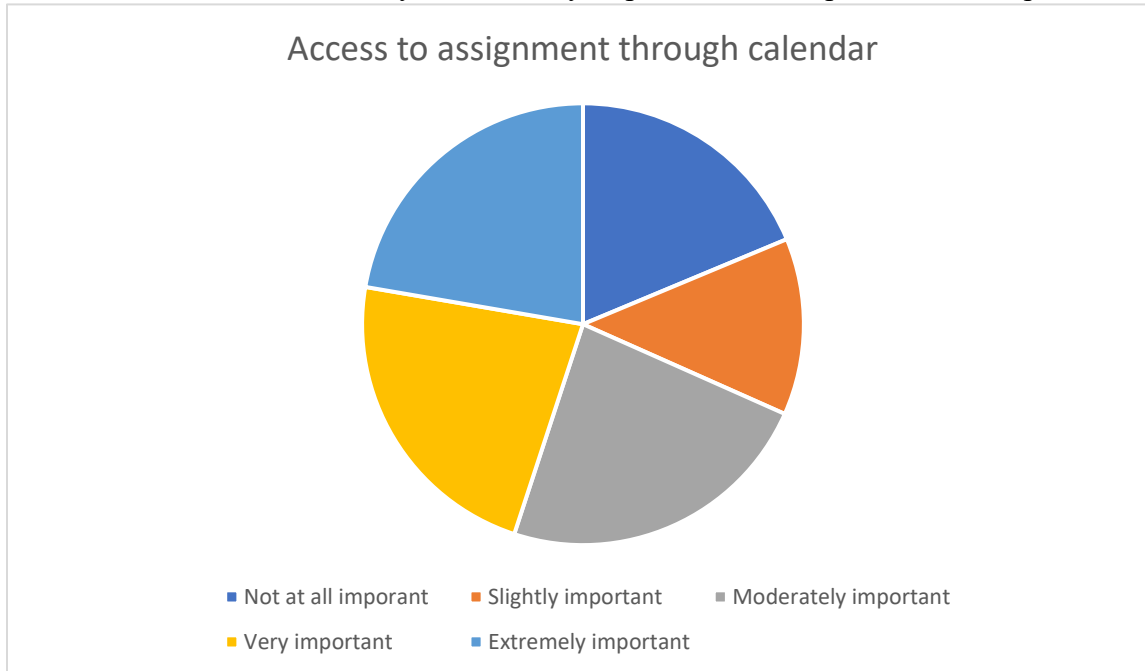- ■ Very important
- ■ Extremely important
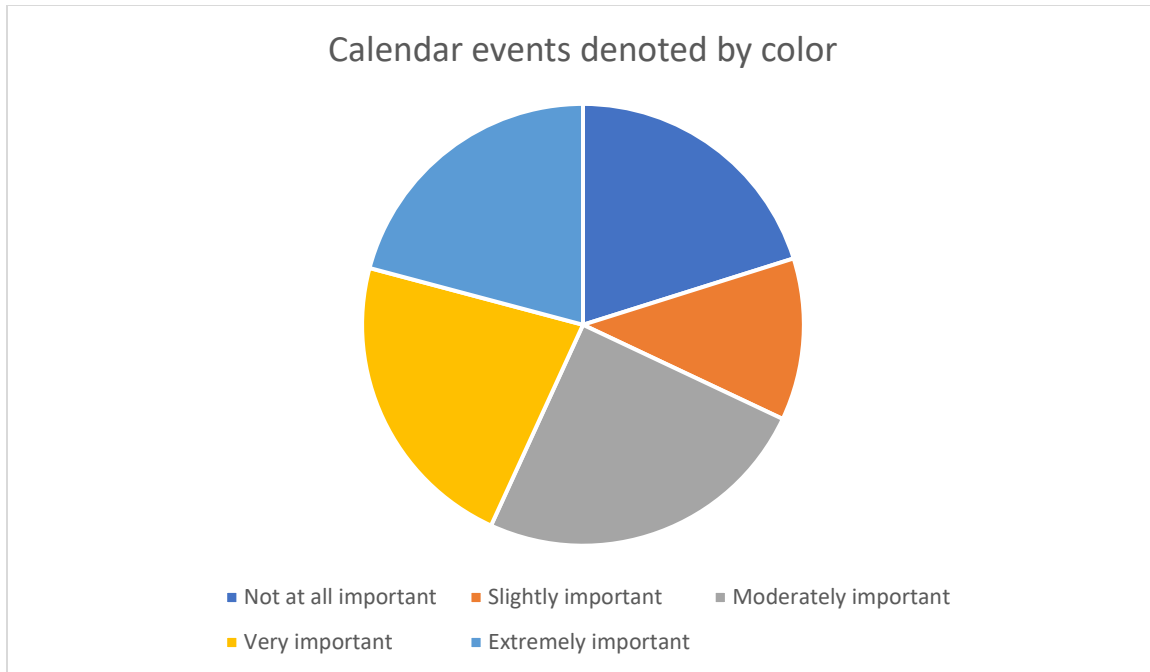
70% of faculty found having a calendar system that automatically updates to be important. This question had the highest percentage of those rating it "extremely important" (29.24%). Only 277 faculty responded.

Calendar automatically updates

- ■ Not at all important
- ■ Slightly important
- ■ Moderately important
- ■ Very important
- ■ Extremely important
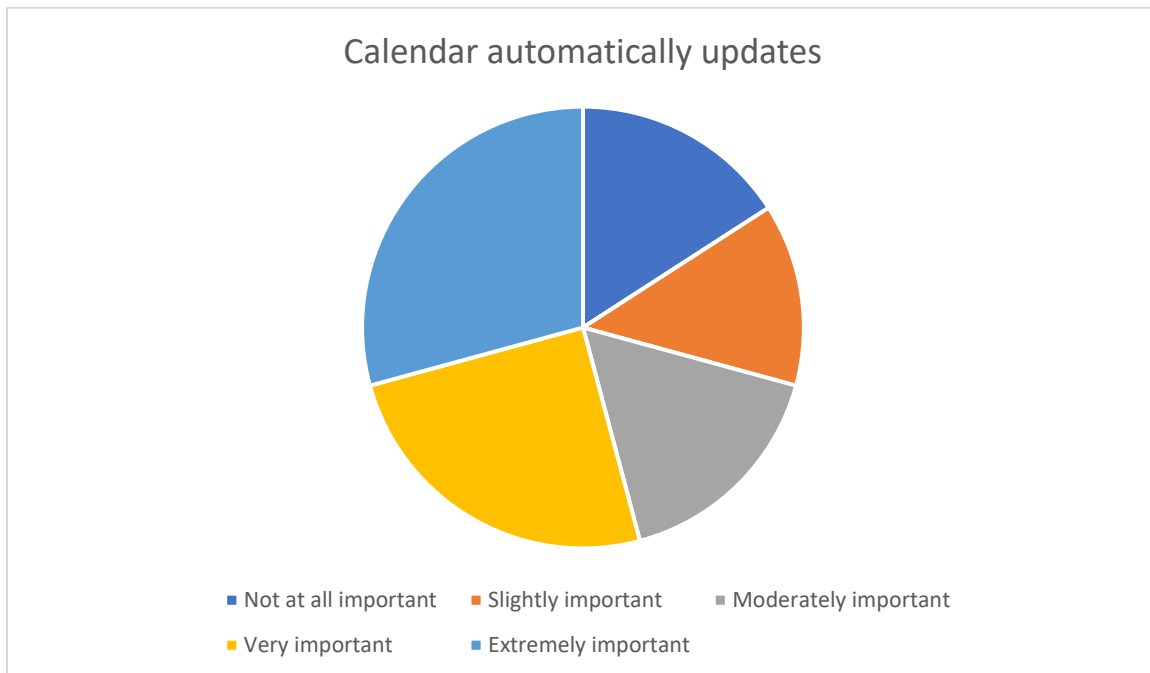
65% of faculty found the ability of the students to access an assignment by clicking on the calendar event to be moderately to extremely important. 278 responded to this question.

Access to assignment through calendar

- Not at all imporant
- Slightly important
- Moderately important
- Very important
- Extremely important

65% of faculty found the ability of the LMS calendar to sync to an outside calendar moderately to extremely important. 276 faculty responded to this question.

Sync capabilities

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
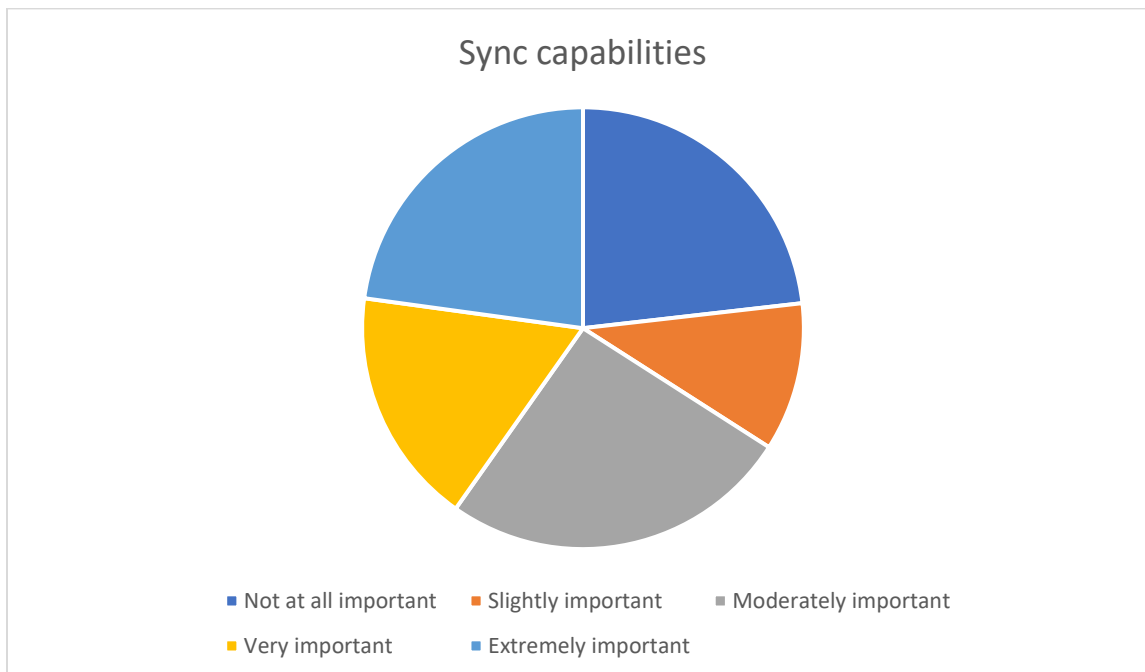
Q25: Comments re: Calendar Function

Only 21.8% of faculty stated they had a comment about the calendar system. 48 faculty responded with comments. 37.5% stated that the calendar function needs to reflect what students

are using. 25% stated it was not user friendly. 20.8% stated that it needed to sync easily to other calendar systems. 16.7% stated it was not needed for their course.

Most comments focused on integrating the LMS calendar to a third-party one, as well as automatic notifications about due-dates. However, several comments noted that students have their own systems or are used to other systems, with the suggestion that IT work with students to discover their needs and uses, with one writing "Whatever the students would use is what we should adopt, it is pointless if they don't."

One comment noted that there might be deviations between the webpage calendar and that from the app: "There is a huge disconnect between the web browser Blackboard experience and the bizarre and truncated "newsfeed" which students see if they use the Blackboard app. They miss assignments because of this difference."

Q26: Use of Creation function

Nearly 90% of the faculty stated that they use the content creation function in their courses.

13 faculty provided comments after stating they did not use the Content Creation tool; 3 responded they were not familiar with it. (It must be noted that the three who stated they were not familiar actually were, but were confused over the question.) For those who responded they do not use the content creation, 25% actually do, stating that they upload material. 25% stated that they use third party software and websites; 25% stated it was not user friendly; 25% stated it was not necessary for their class.

## Q11: Importance of Creation Tools

Most of the faculty surveyed (72.63%) stated that the most important feature was the ability to re-use course material in other courses. Other top concerns were the ability to suppost multiple file types (68.36%), move course content around between folders (67.15%) or sharing material across sections (67.52%). Deemed least important was the ability to import material from a third party (21.25%).

Over 80% of the faculty found the ability to support various file types to be very or extremely important.

Support various file types

- ■ Not at all important
- ■ Slightly important
- ■ Moderately important
- ■ Very important
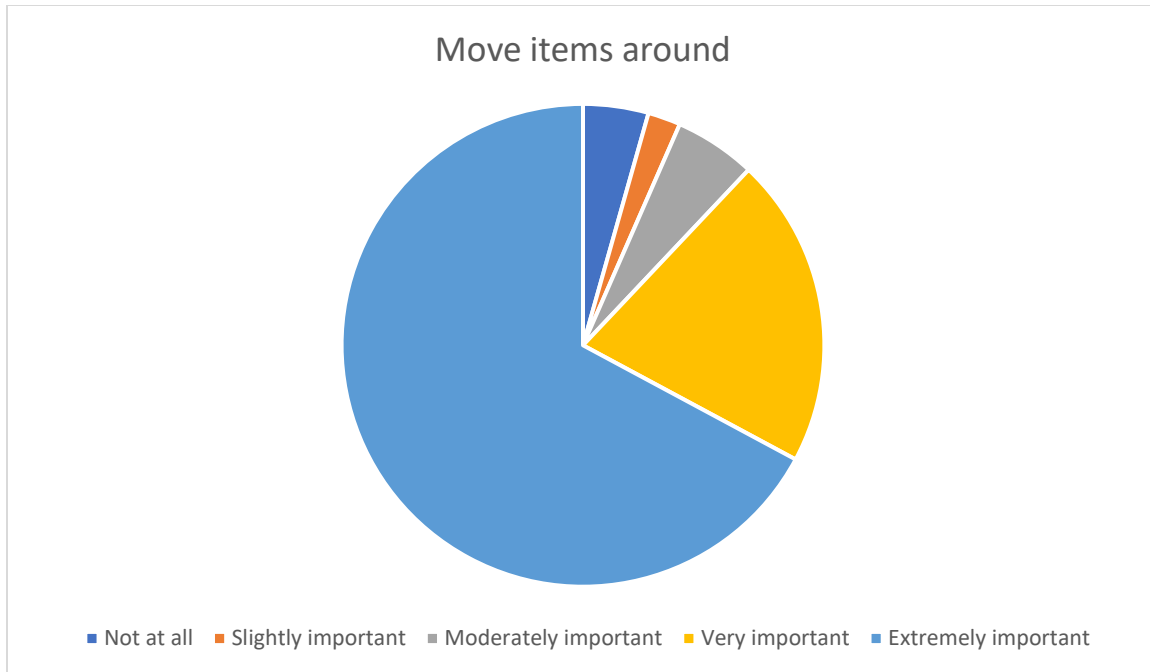- ■ Extremely important
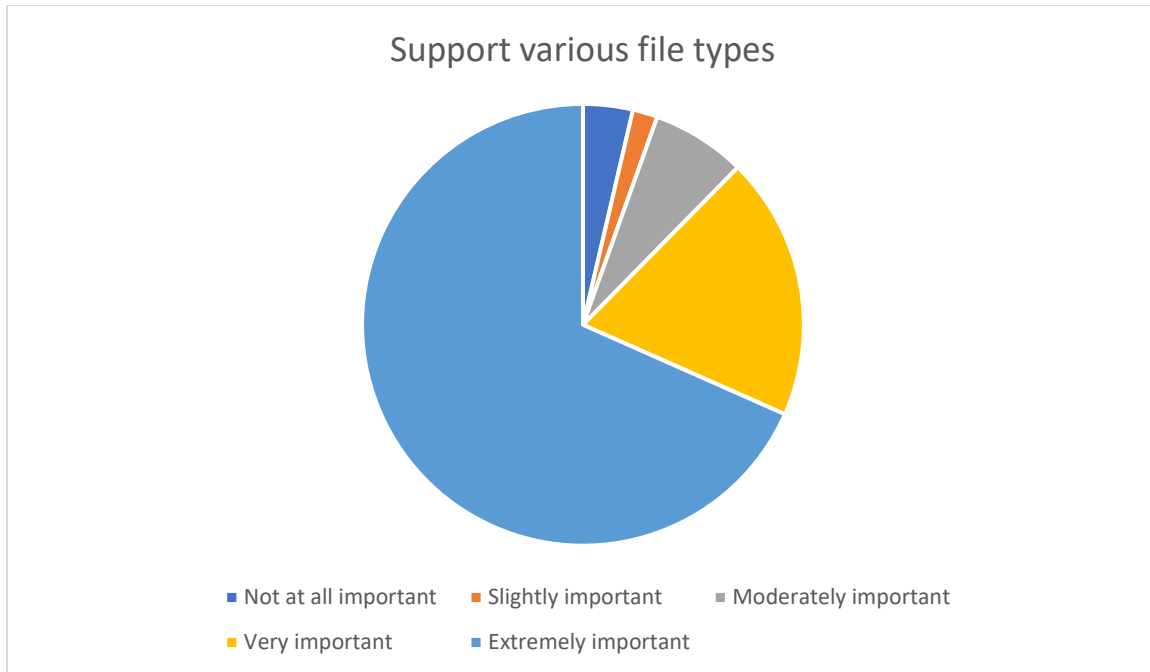
Most faculty (approximately 75%) found the system's ability to release selective items based on multiple criteria to be moderately to extremely important.

Release selective items

- ■ Not at all important
- ■ Slightly important
- ■ Moderately important
- ■ Very important
- ■ Extremely important
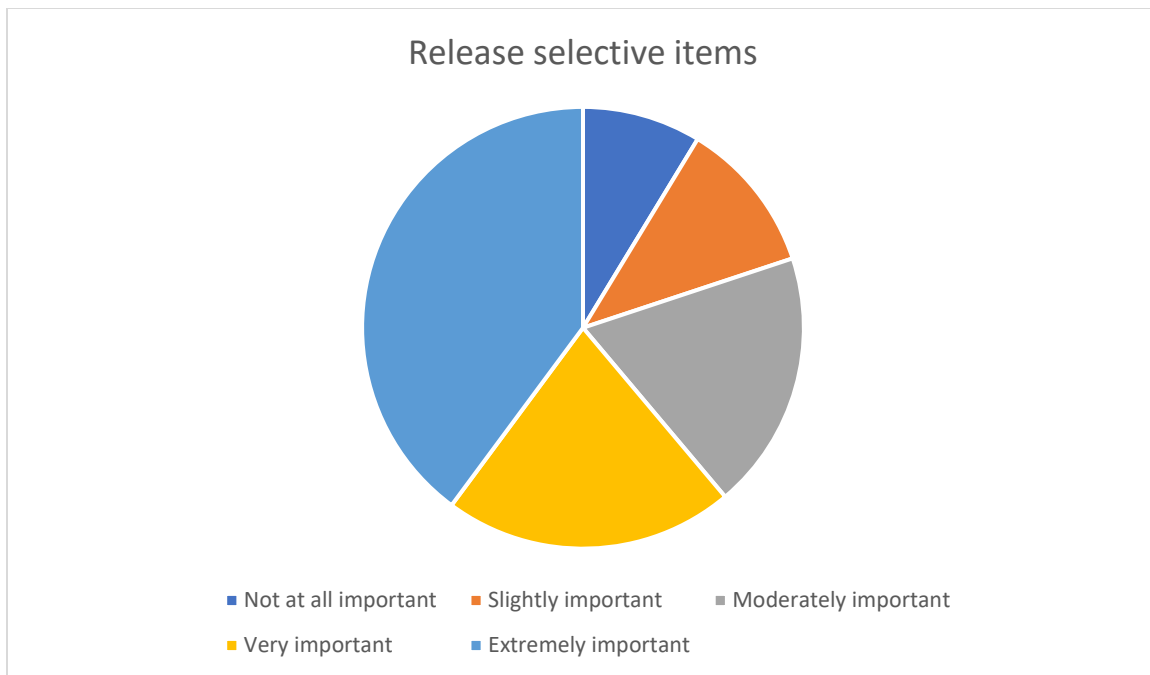
Over 87% of the faculty respondents stated that the ability to easily move items between modules and folders were very or extremely important.

Move items around

Not at all | Slightly important | Moderately important | Very important | Extremely important

Over 83% of the faculty surveyed stated that they valued being able to create assignments across sections.

Assignments across sections

Not at all important | Slightly important | Moderately important
Very important | Extremely important
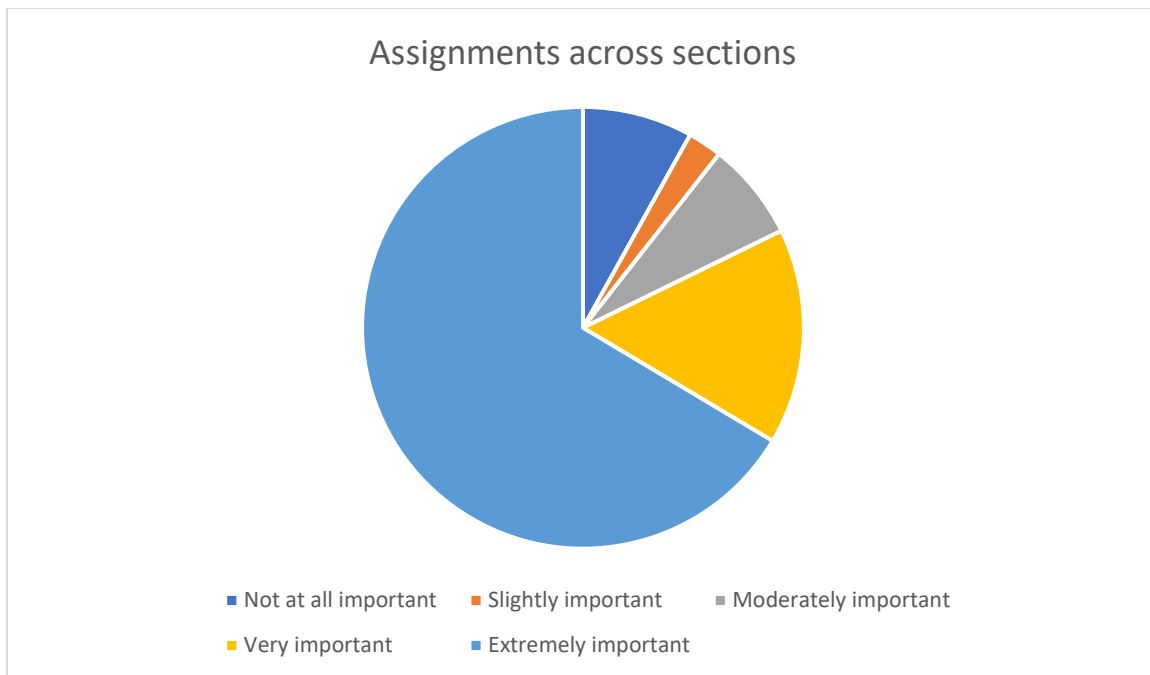
The ability to important from publishers or third-parties was not a necessity, with 50% listing it at not at all important to moderately important.

Insert material from third parties

Legend:
- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
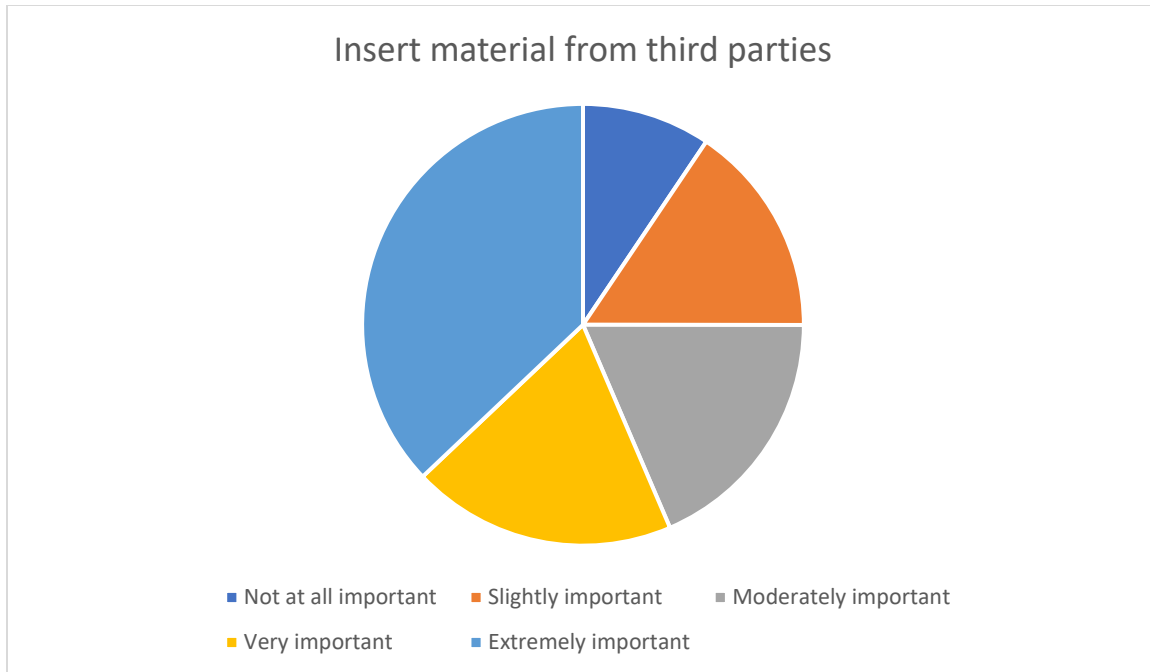
Ability to create courses from previous ones was the most important to surveyed faculty with over 88% rating it as very or extremely important.

Create courses from previous content

Legend:
- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
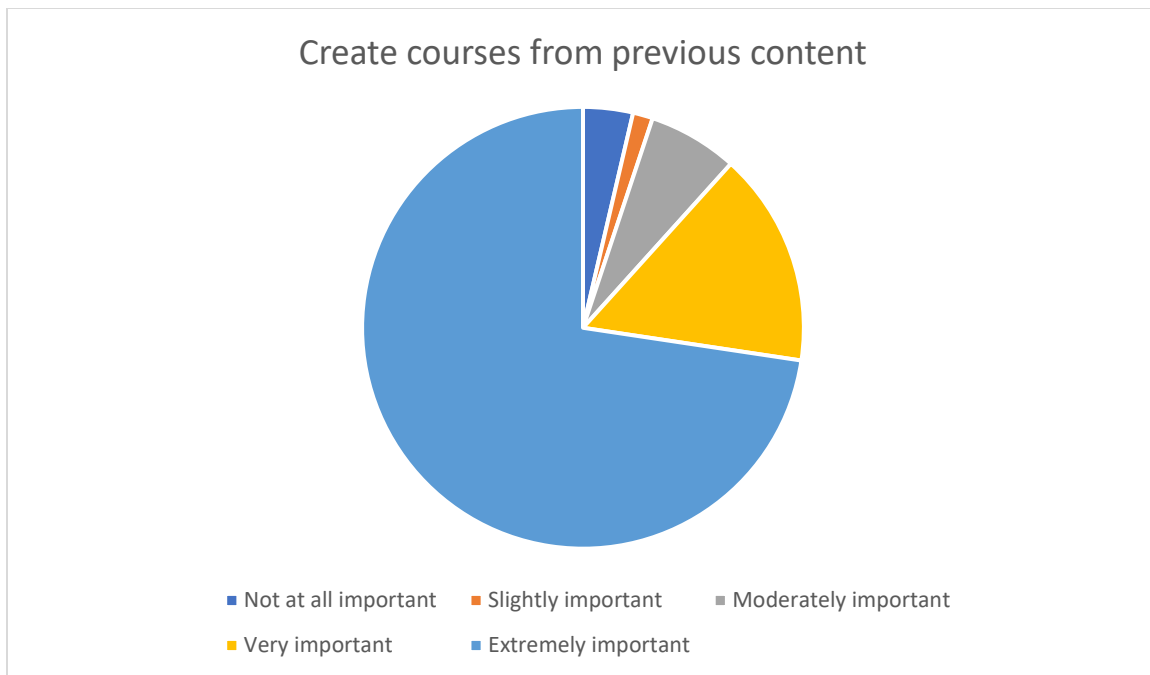
The ability of an LMS to provide a central content repository that allows multiple course sections to point to and/or display the same content object within each course shell was rated as moderately to extremely important by over 78% of the surveyed faculty.

Central repository

Legend
■ Not at all important ■ Slightly important ■ Moderately important
■ Very important ■ Extremely important
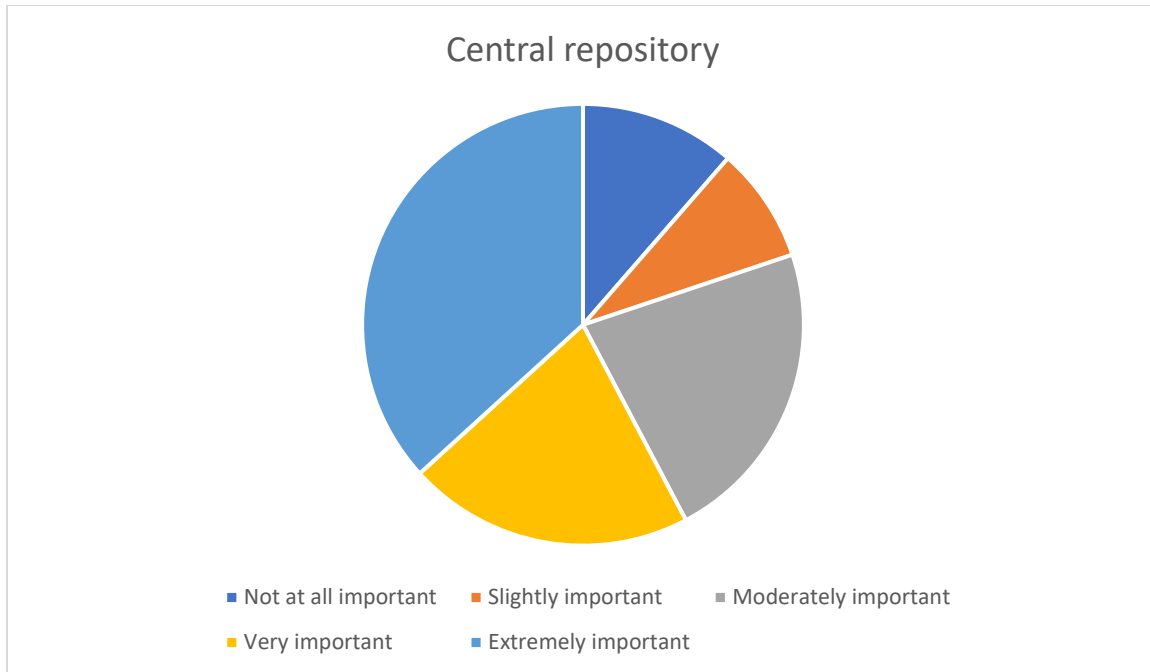
Most faculty did not value the ability to go back to previous editions, with 55% rating it at not at all important to moderately important.

Roll back to previous edition

Legend
■ Not at all important ■ Slightly important ■ Moderately important
■ Very important ■ Extremely important
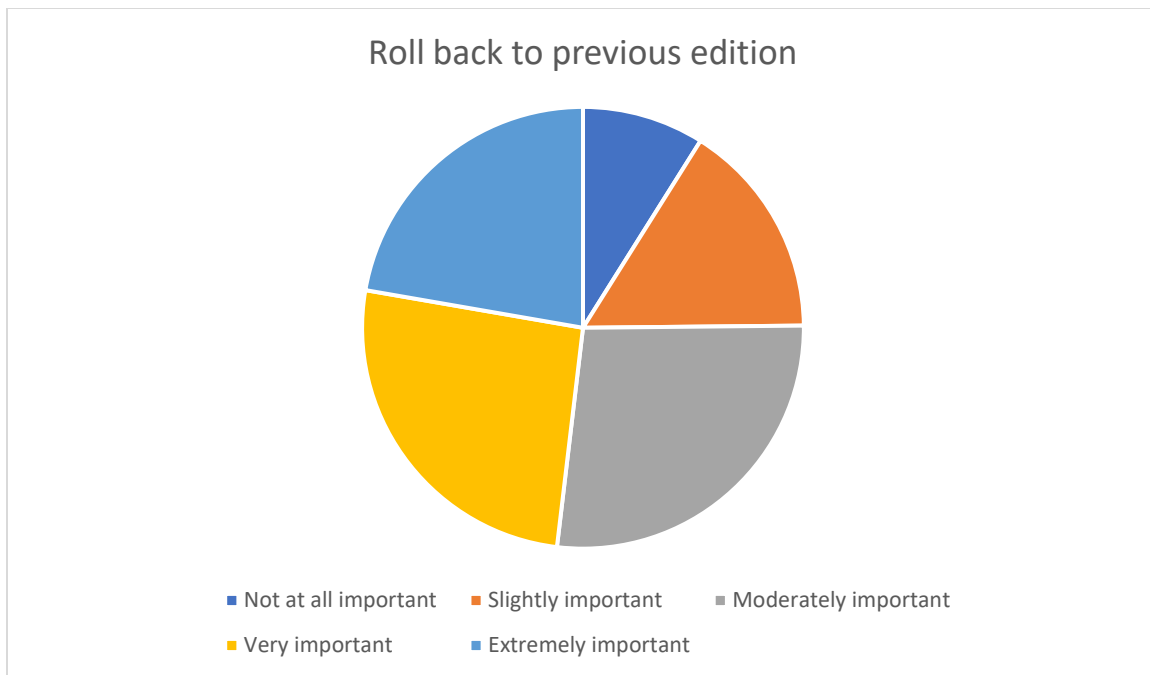
Most faculty found the ability to make changes to different sections in "one fell swoop" with over 78% valuing it as moderately to extremely important.

Change various sections in one go
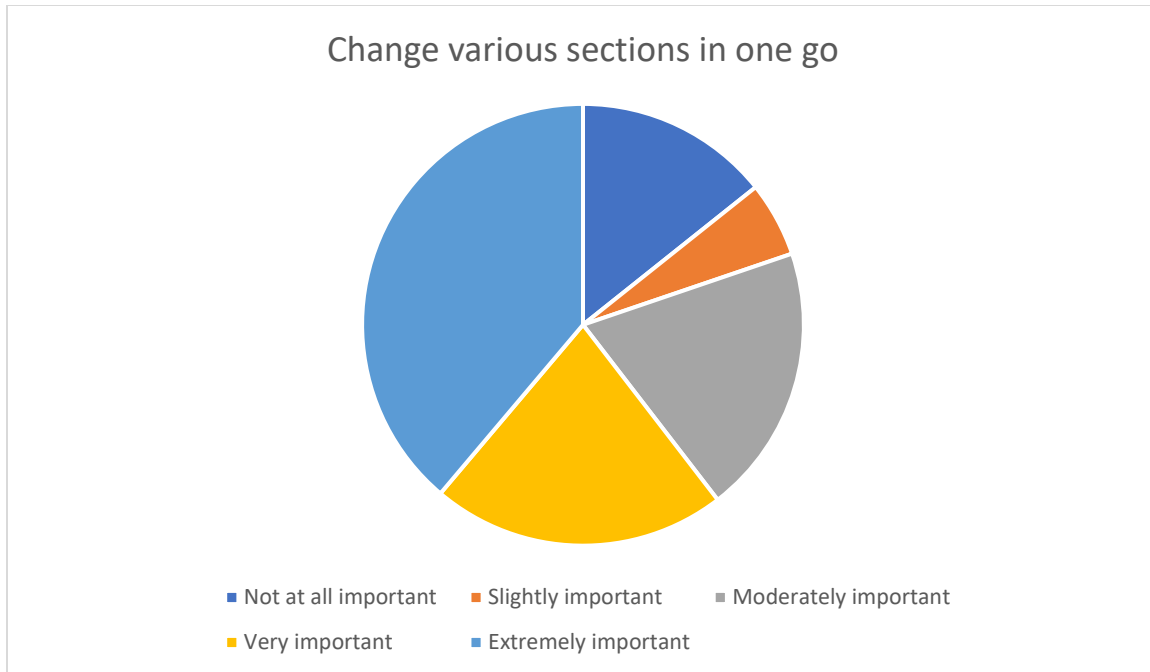
Faculty also valued the ability to create and manage numerous courses at once, with over 70% rating it as moderately to extremely important.

Manage multiple courses at once
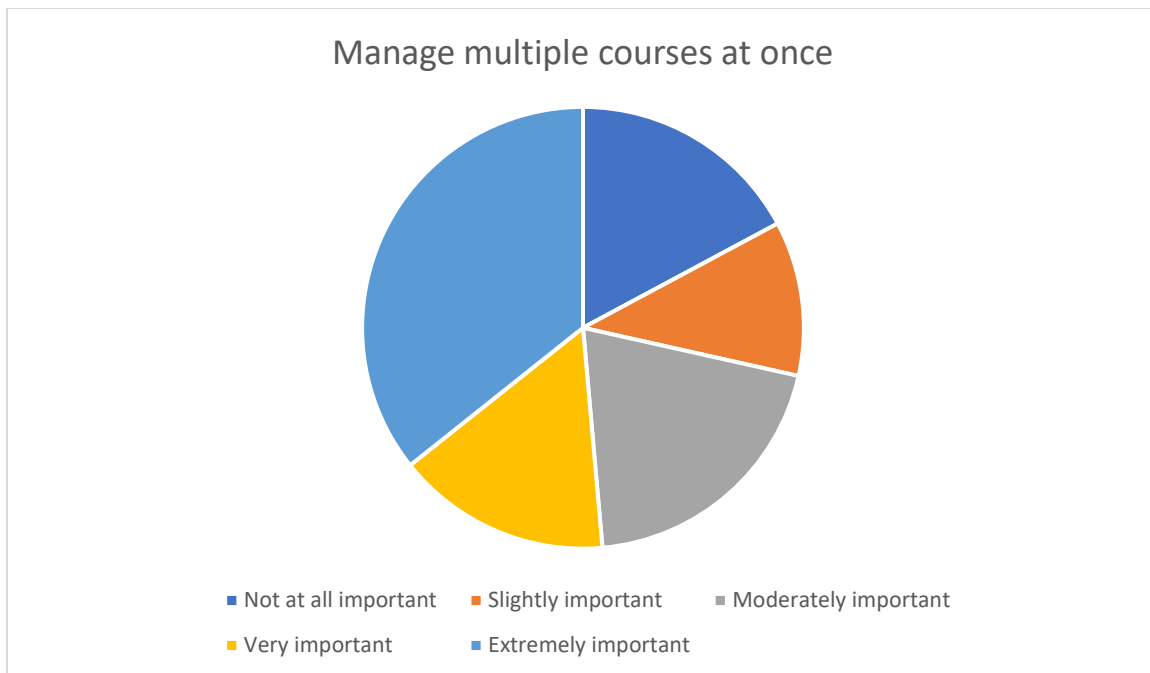
Faculty overwhelming supported an auto-save function, with over 88% stating it was moderately to extremely important.

Auto-save

- ■ Not at all important ■ Slightly important ■ Moderately important
- ■ Very important ■ Extremely important
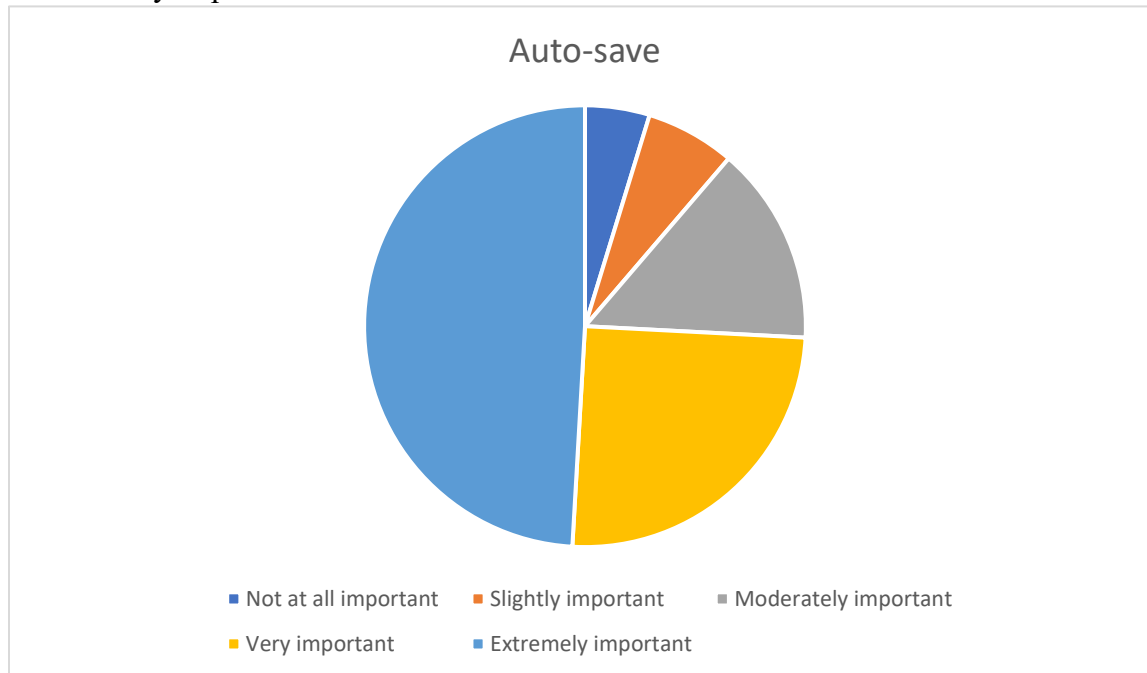
Overwhelmingly, the faculty surveyed valued the ability to make changes across multiple courses or sections and auto-save functions.

Q12: Comments on Content Creation

78.6% of the faculty surveyed stated they did not have comments on the content creation features; however, only 257 faculty responded.

55 faculty provided comments. 45.5% stated that the system was not user friendly. 16.4% stated they wanted the ability to duplicate material, while 10.9% stated they wanted a better archiving/back up system. 12.7% stated that they wanted the LMS to support more file types. 5.5% stated that they wanted more intuitive release times for assessments and assignments.

Most faculty comments reflected the lack of usability for both creators and users, describing it as "cumbersome," and "clunky." Moreover, " It is very difficult to create reliably correct content that looks as the instructor intends. The preview editor and the final view are often very different. Using markup to edit the content directly is by far the best option, but quite painful as the web editor is poor." One response noted that UBLearns does not accept pages, which is a MAC extension.

Another major theme was the ability to move material around. One wrote, "saving content (rubrics, assignments, etc) from one year to the next is super improtant [sic]!" while another wrote "The main issue I have is easily duplicating items many times!"

Other suggestions noted the layout and scaffolding, wanting it to be "more sophisticated" and with a "menu of content options easy for faculty to use."

However, several respondents noted they liked UBLearns and did not want to learn a whole new system.

Q13: Discussion Board

53.99% of the surveyed faculty stated that they did not use discussion boards, with another 2.17% stating that they were not familiar with this feature. However, only 276 faculty responded to this question. Moreover, there was no qualifier on the course modality (online vs. f2f), which is needed to better understand the importance of the discussion board.

107 faculty responded with comments over why they did not use the discussion board. 45.8% stated that the discussion board was not relevant to their classes; 6.5% expressed outright distaste for the function. 19.6% stated it was not user friendly. 19.6% stated that students either do not use it productively or simply do not use it. 16.8% stated that they preferred a third party option, such as Piazza, Discord, or Slack. 10.3% stated that it was too time-consuming, particularly for large classes.

One faculty wrote that they were not familiar with the discussion board feature as it was not needed.

## Q14: Importance of Discussion Board Features

Most of the discussion board features presented received lower scores, with most faculty writing they were not at all important to moderately important. The main concern was for automated grading, with over 63% stating it was moderately to extremely important. Given the comments on the use of discussion boards, this is not at all surprising. However, were this to be given to faculty who teach 100% online, this might change.

Less than 35% of surveyed faculty found the ability to require students to make an initial post before view those of their classmates important. Only 248 faculty responded.

View intital posts before student posts

Not at all important   Slightly important   Moderately important   Very important   Extremely important
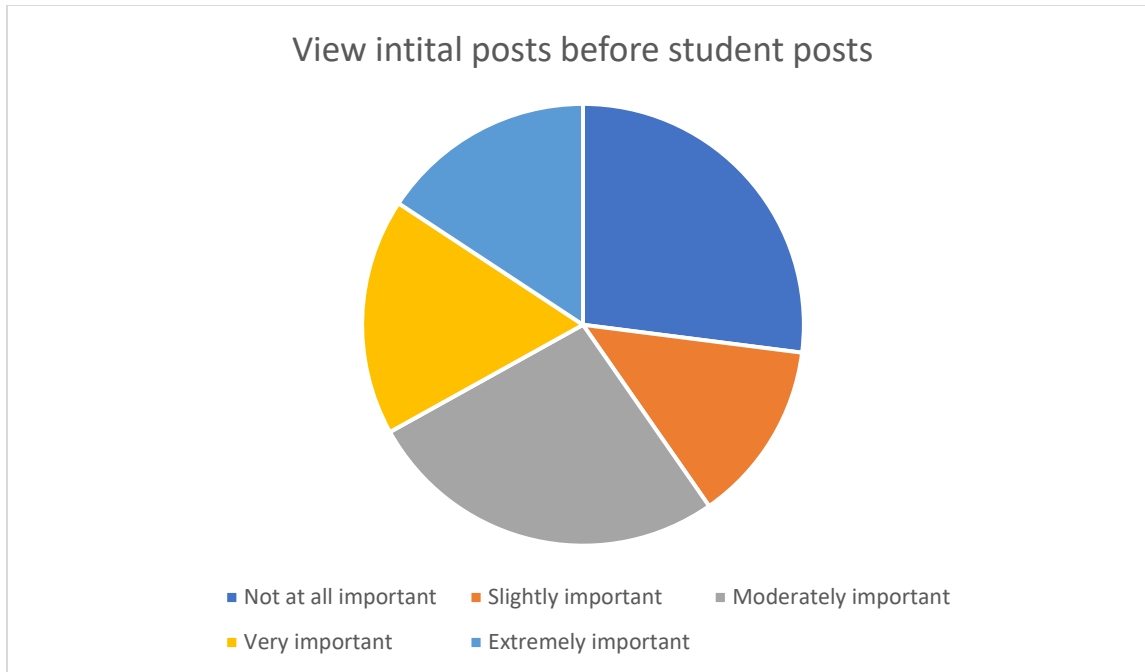
Most faculty were not concerned with having specific time periods for discussions, with only 39% stating it was very or extremely important. Only 249 resonded.
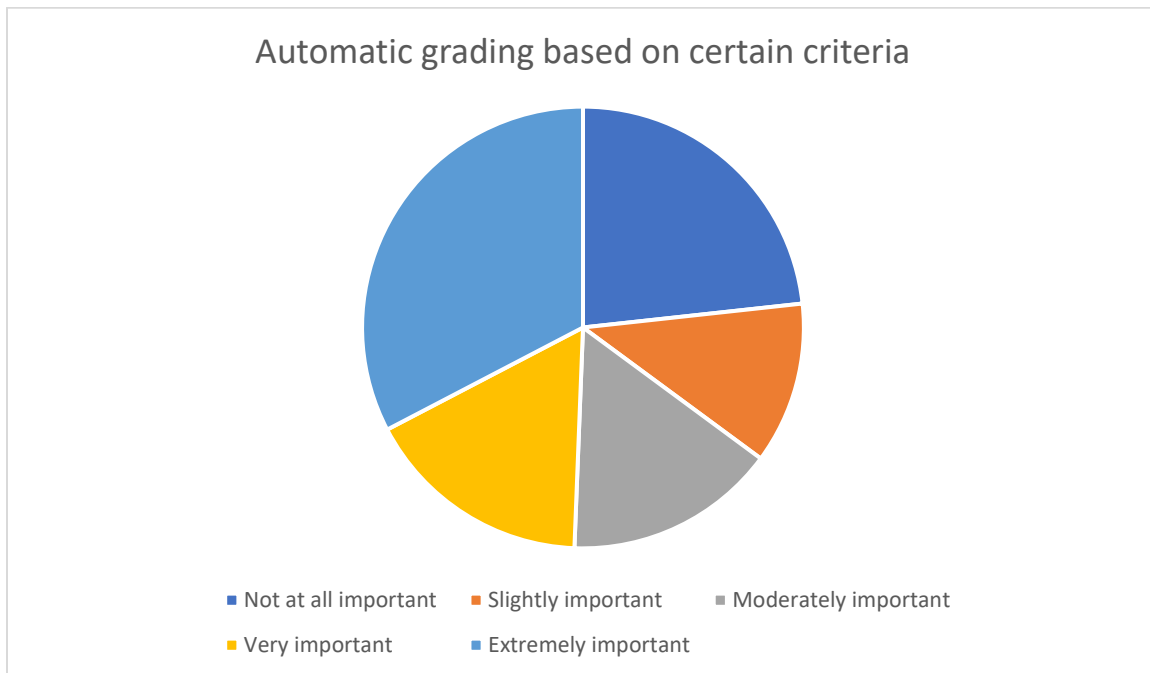
LImit discussion time frames

Not at all important   Slightly important   Moderately important   Very important   Extremely important
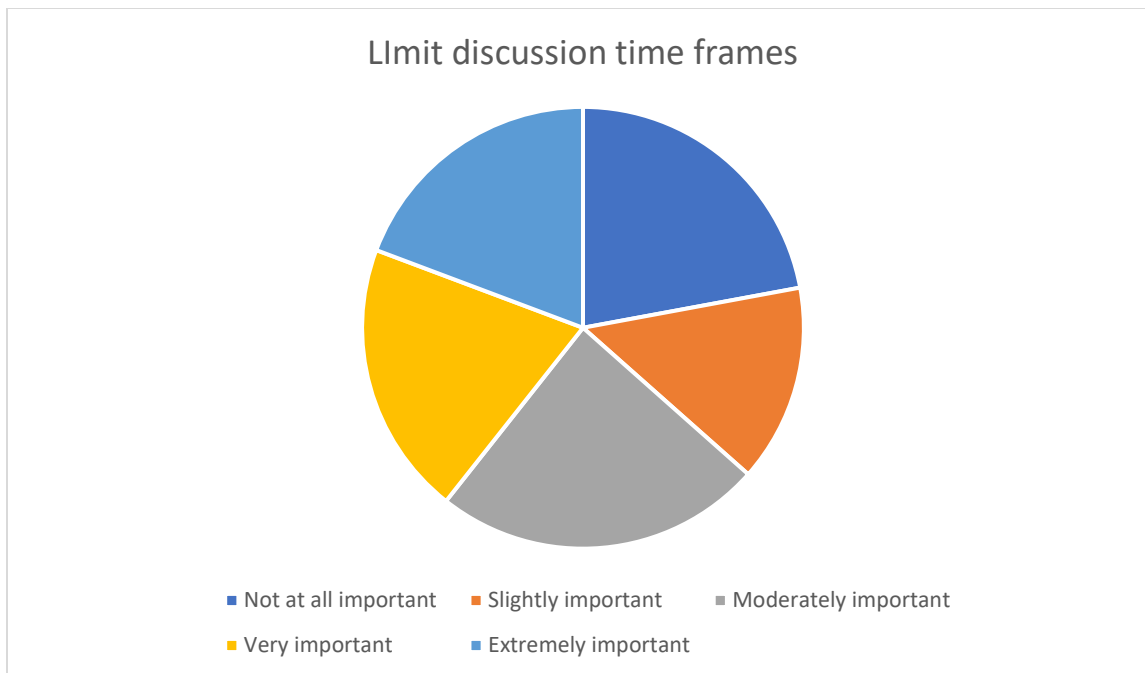
Surveyed faculty were almost evenly divided on being able to see a statistical summary of discussion in order to generate participation grades. Only 249 responded.

Stastical summary

■ Not at all important ■ Slightly important ■ Moderately important
■ Very important ■ Extremely important
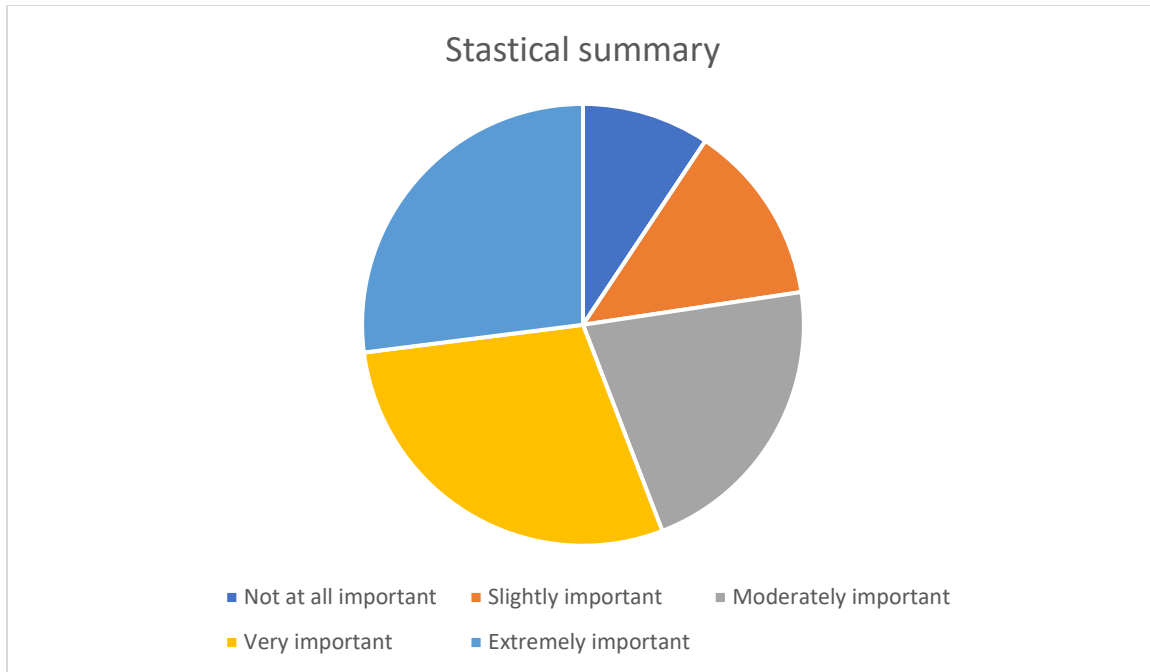
Most faculty valued automated grading based on assignment type. However, nearly a quarter of the respondents found this not at all important. This question also had the lowest response rate, with only 245 respondents.

Automatic grading based on certain criteria

■ Not at all important ■ Slightly important ■ Moderately important
■ Very important ■ Extremely important

Q15: Comments on Discussion Board
86% of respondents did not have a comment on the discussion board.

35 faculty provided comments on the discussion board. 34.3% suggested it was too complicated: 25.7% expressed a desire for a better grading system (such as automatic grading) and11.4%

stated that it was difficult to follow student posts. 11.4% preferred a third party system, such as Piazza or Slack.

A common theme was the need to make the discussion board more adaptable based on instructor needs. One comment suggested being able to have multiple due-dates in one discussion board. Another suggested that faculty should be able to be anonymous when responding and that they be easy to search. Another requested that students automatically be given credit after completing the discussion board.

Several respondents suggested that the discussion board needed to be updated to reflect the current culture: "The Blackboard discussion system sucks. It is very awkward to set up, use and grade. Students are not familiar with this old fashioned type of discussion." One wrote "Being able to follow a twitter hashtag, or integrate with slack or discord would be more useful" while another suggested "I'd like the ability to have users thumbs up responses"

It must be noted, as in other sections, that several respondents suggested the use of Piazza.

Q16: Assessment Features

78.83% of participating faculty stated they used assessment features. 2 wrote that the assessment features were not needed or they had not learned to use them.

39 faculty responded with comments to why they do not use the assessment features. 25.65 stated that these features were not user friendly. 38.5% stated it was not needed for their courses, with 30.8% stating they have alternative assignments. 23% stated they use a third-party system, such as TopHat, Gradescope, Google Docs, or Google Forms, which they stated were much more user friendly.

Q17: Importance of Assessment Feature

For each of the four criteria, more than 60% of the faculty stated these were moderately to extremely important.

The ability of the LMS provides ability to track and log student activities while taking a test/quiz was rated moderately to extremely important by 73% of the faculty. 267 responded to this question.

LMS provides ability to track and log student activities while taking a test/quiz.

■ Not at all important   ■ Slightly important   ■ Moderately important
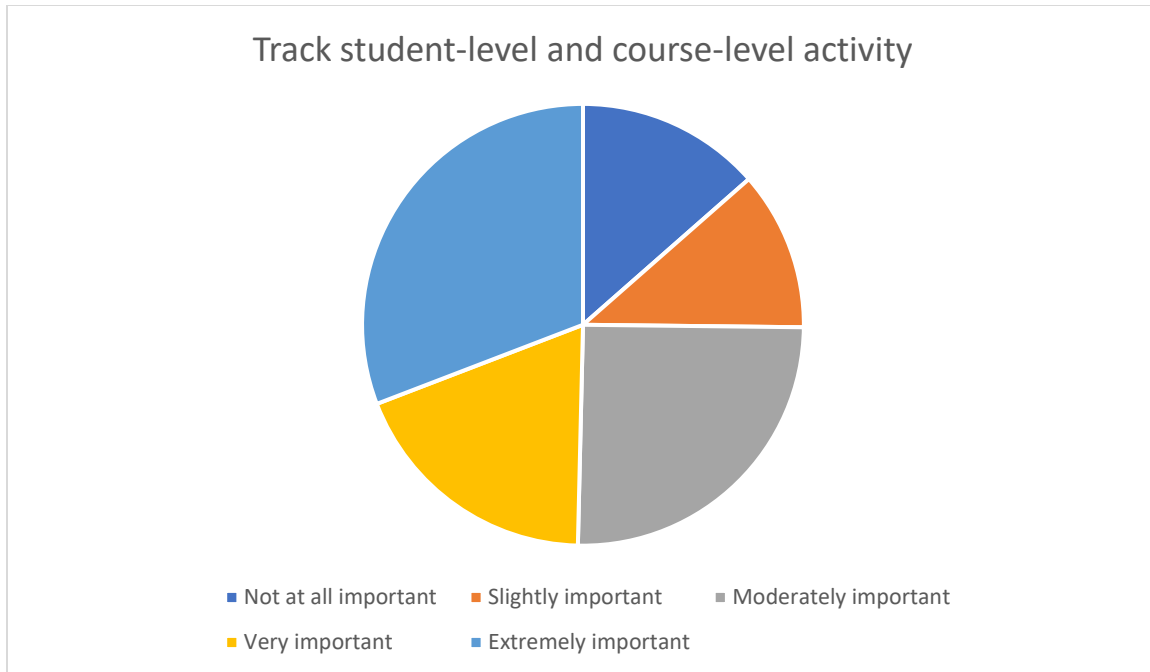■ Very important   ■ Extremely important
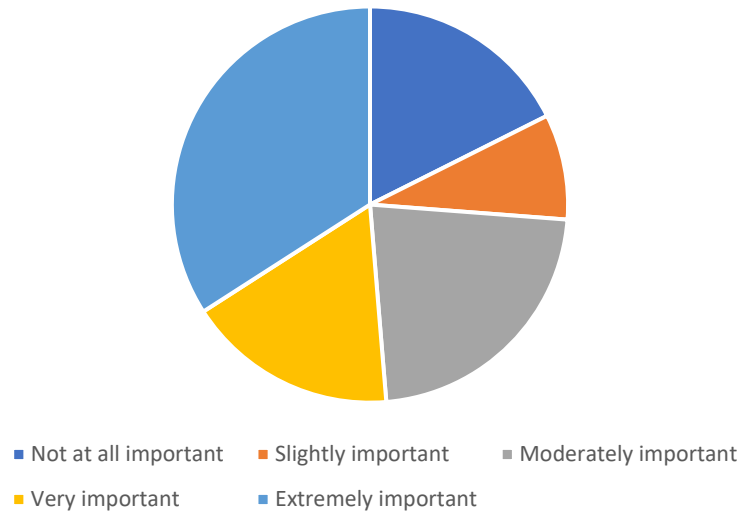
The ability to provide detailed student tracking for each assessment tool was rated to be moderately to extremely important by 70% of respondents. 267 faculty responded to this question.

Detailed tracking for each assessment

■ Not at all important   ■ Slightly important   ■ Moderately important
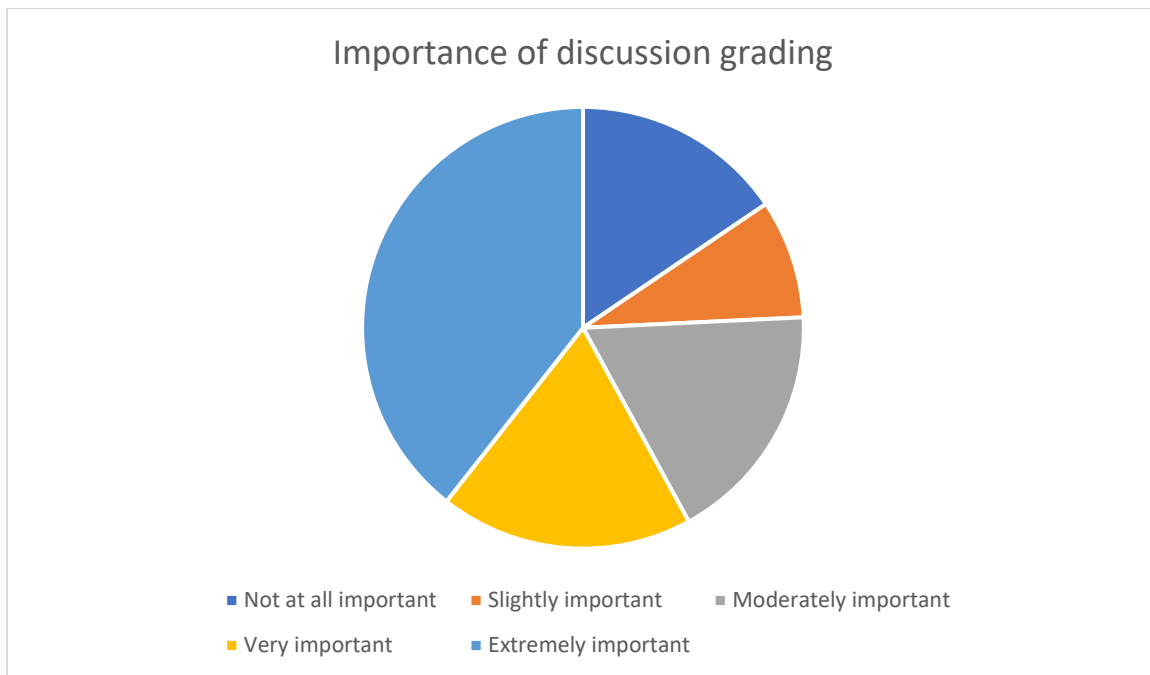■ Very important   ■ Extremey important
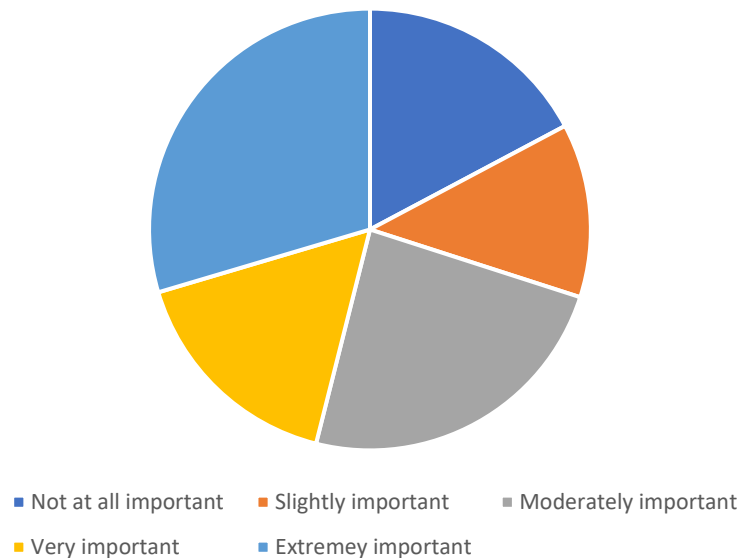
The ability to track individual student-level activity and course-level activity was rated moderately to extremely important by 75% of faculty. 266 responded to this question.

Track student-level and course-level activity

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

75% of faculty valued the ability assess and grade participation moderately to extremely important. This question received the lowest response, with 264 faculty responses.

Importance of discussion grading

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

Q18: Comments on Assessment Tools

24.18% of the 244 respondents stated they did have a comment, while 75.82% said they did not.

58 faculty provided comments. 56.9% stated that it was too difficult to use, both for faculty and students; 10.3% stated it was difficult to duplicate exams or questions.   6.9% stated that the grading system needed to be overhauled. 5.2% wanted the ability to integrate the grading/assessment system with others.

Most comments suggested that the assessment tools are either confusing, inadequate, or clunky. One wrote "Actual features of the assessment tool which badly need to be improved include: - the default font size is *extremely* small on quizzes; should be 4-6 points larger in most cases, or simply give us the opportunity to pick the display font size. - the syntax for "sentence jumbles" doesn't permit a range of special characters which happens to make it impossible to ask certain questions in the phonetic sciences: [ ] are used to indicate a blank to be filled in, but is also shorthand for a range of phonetic notations. - each question is worth, for some reason, 10 entire points (why not a default of 1?)"

Several comments noted the importance of using a variety of flexible rubrics for assignments. "I love being able to give quizzes that are automatically graded & show students explanations. But boy is this a pain to do on Blackboard. Again, it just feels like everything takes too many clicks and too many screens. Things disappear inexplicably. The sequencing of the screens remains a mystery to me; I have to figure out each time how to get from one end to the other. The options (for when to show students which answers, for instance) are worded in a way that does not really resemble normal English, so I have to guess at what it all means. It's all just extremely un-intuitive and time consuming. I would love a system that allowed me to quiz with less time and less stress."

Other comments focused one being able to use assessments across multiple classes, one writing "It's difficult to easily copy assessments that I already have set up with exactly the settings I need and that I maybe just want to tweak slightly in a copied version. I always seem to need to start from scratch with each assignment, which means I have to click through and change a lot of different settings, and if I miss something, it can have a negative impact on the students' experience with the assessment."

There were also concerns about how long assessments can last. One respondent wrote: "On 7 hour exam multiple students end up getting locked out and does not auto save their work. The test taking is just not reliable especially for long tests If student loses internet connection or goes off browser they often lose their test and can't get back in. On 7 hour midterm I had 5 out of 20 students who had to just email me their exam since they got locked out or their answers did not save. This did not happen last year for shorter exams"

Q19: Third Party Integrations

80.73% of the faculty stated that they used third-party integrations. The less than 20% who responded no, or unsure clarified in the questions. Most of the comments stated that they did not use third-party integrations either because they were not necessary this semester or because students found them un-usuable. Three respondents said they use third-party integrations, like Zoom or panopto independent of UBLearns. One wrote that they are not sure how to use these integrations.

## Q20: Important third-party features

When asked which third-party features they felt were important for an LMS, the faculty valued asynchronous recording tools (54.10% rated it extremely important) and synchronous meeting tools (55.81% extremely important). File storage and sharing ranked lower (30.97% and 35.58% as extremely important respectively). Most faculty found classroom feedback tools not at all important to moderately important.

Over 60% of the faculty found academic integrity tools to be important. However, comments (discussed below in Q21) suggest that these tools are either ineffective or cause distress among some students. 268 faculty responded to this question.

Academic integrity tools

- Not at all important
- Slightly important
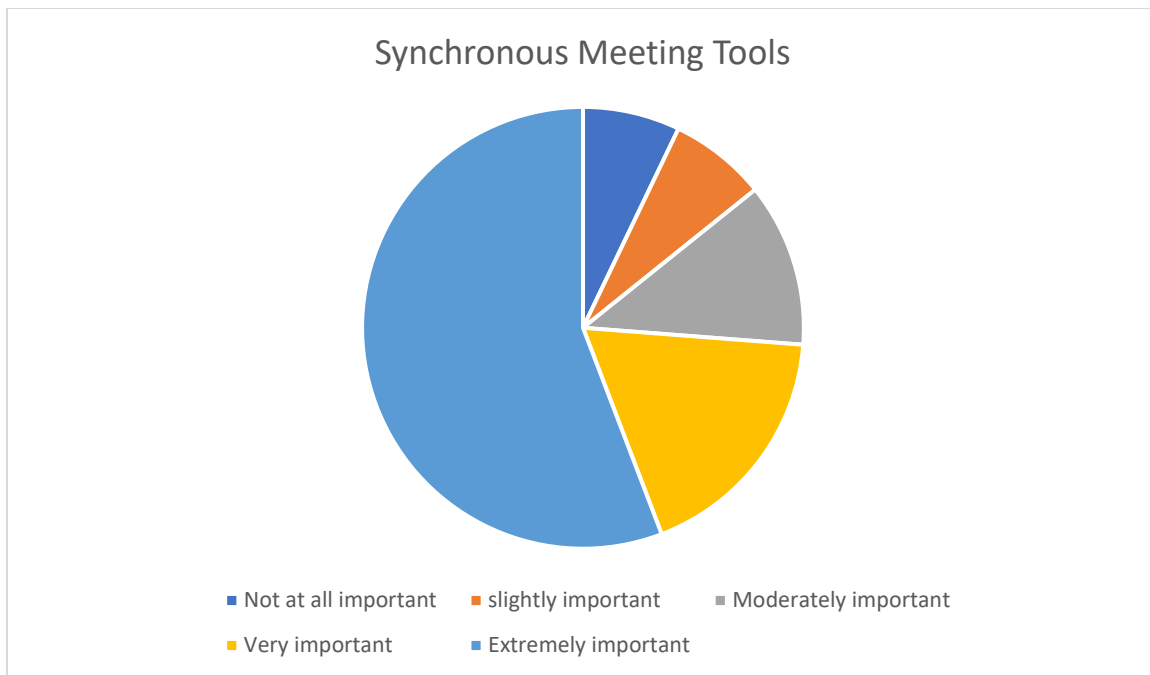- Moderately important
- Very important
- Extremely important
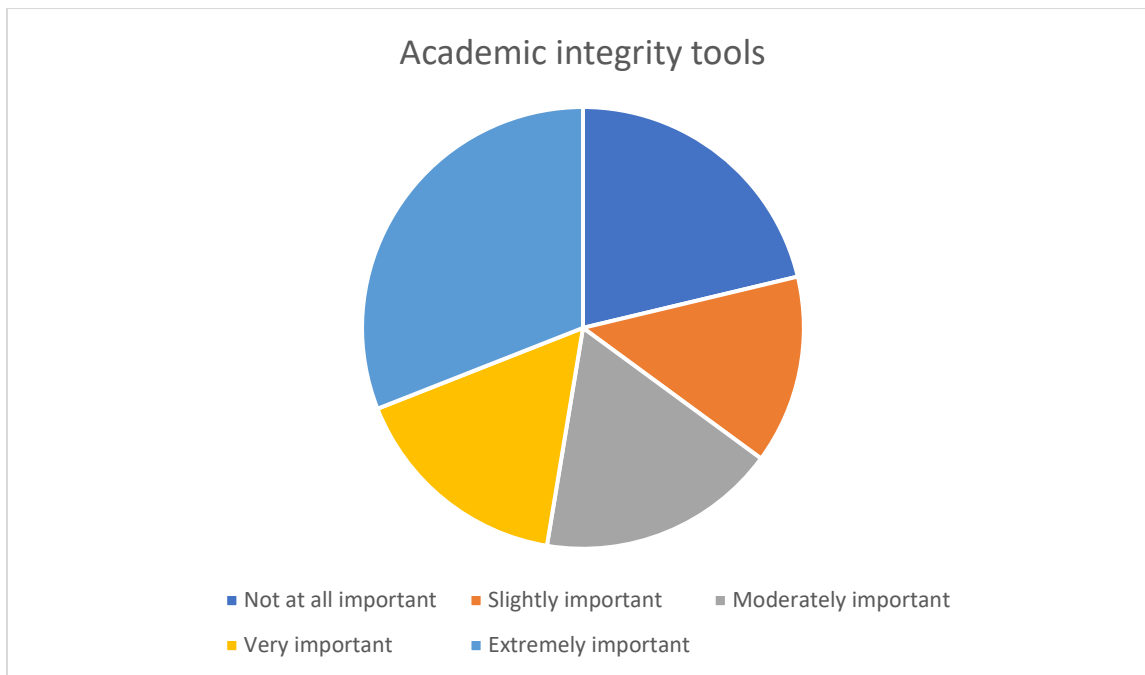
Over 83% of the respondents stated that asynchronous recording tools were moderately important to extremely important. 268 faculty responded to this question.

Asynchronous recording tools
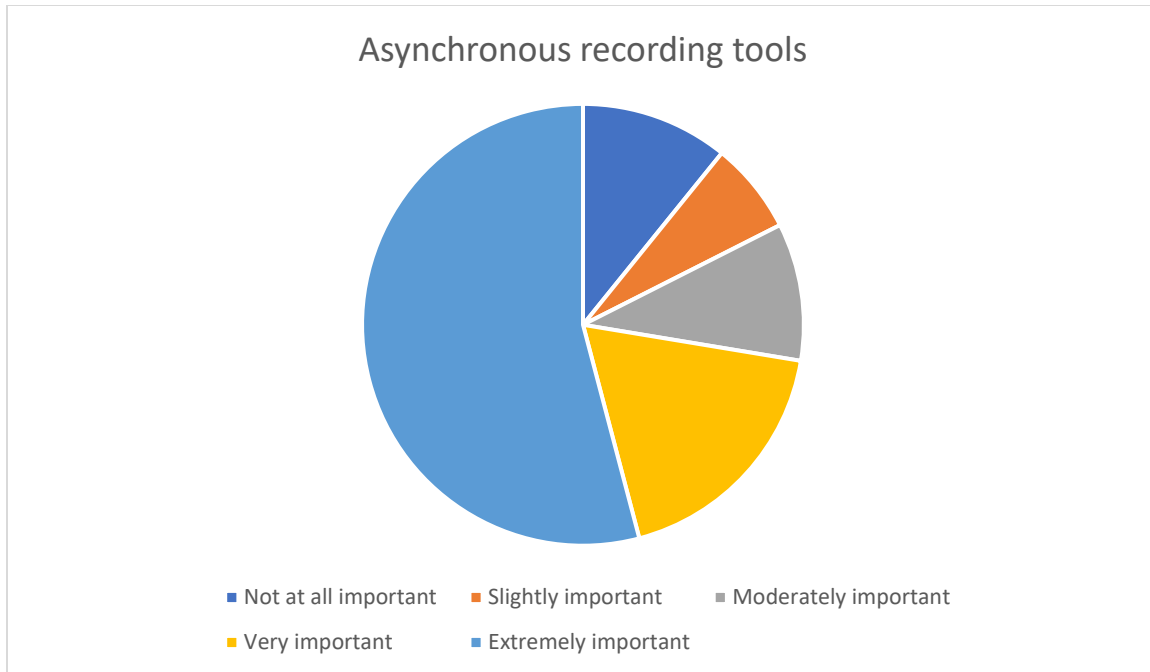
Synchronous meeting tools ranked highest on the concerns of faculty, with over 85% valuing it at moderately important to extremely important. However, only 267 faculty responded.

Synchronous Meeting Tools

Most faculty found classroom feedback systems less important, with over 60% rating it not at all important to moderately important. However, this question had the lowest response rate, with only 265 responses.

Classroom feedback systems

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
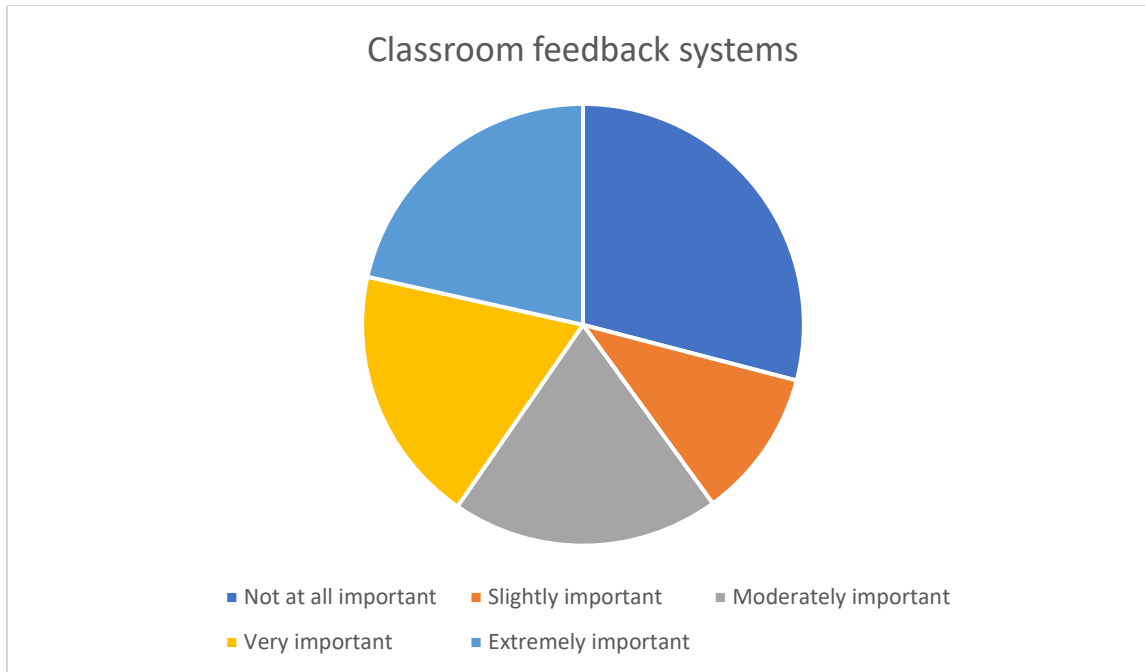
Most of the faculty surveyed found file storage and sharing integration important with over 75% stating it was moderately to extremely important. Only 267 faculty responded to this question.

File storage/sharing

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important
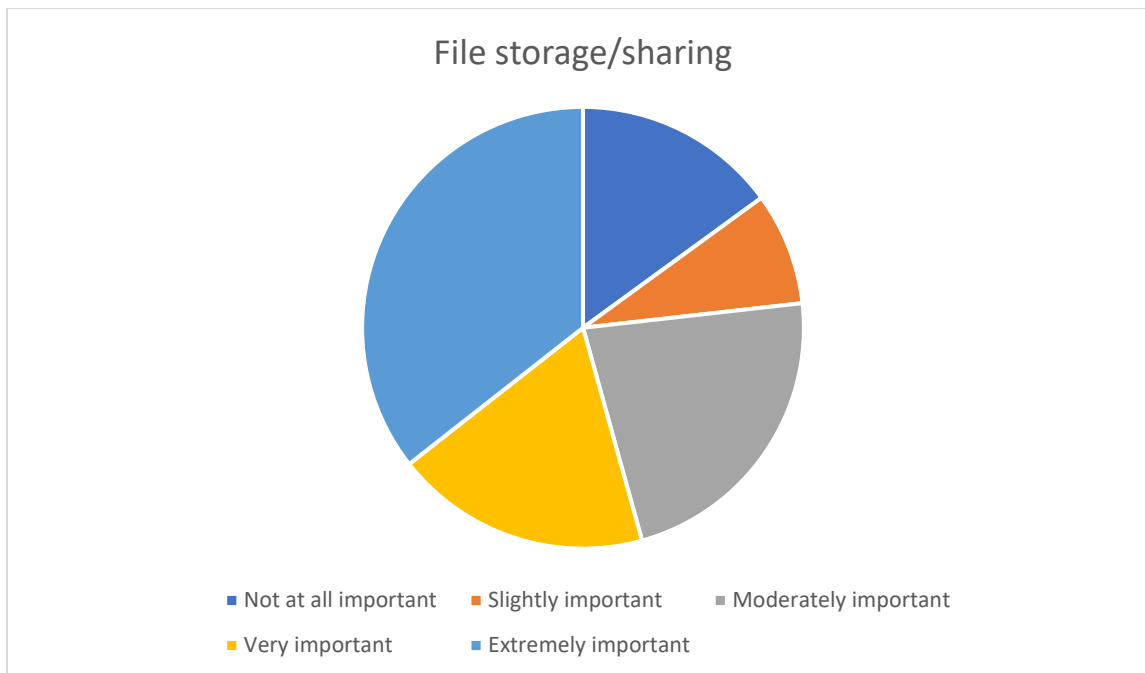
Q21: Comments on Third Party Tools

47 participants provided comments on third party tools. 17.2% on the importance of integrating various tools; 14.9% focused on academic integrity tools; 14.9% on use of panopto and zoom; 12.8% noted that they preferred other platforms, such as Slack, Micro, Piazza. 12.8% also

expressed the desire to customize their UBLearns course sites. Other topics only had a response or two and covered topics such as the use of a shared workspace.

Comments focused primarily on integrating various programs, even those already used. Most were pleased with how well panopto and zoom were integrated into UBLearns. However, several noted the limitations of panopto, particularly how it was no user-friendly, you could not integrate videos across classes, and does not work well with safari.

Others expressed concerns about integrating other third-party tools, not just into the LMS but specific aspects, such as the gradebook. Various comments reflected this: "The ability to integrate with AI tools is extremely important, except that listed tools are rather under-performing. Again, from the CSE perspective integration with tools like MOSS would be very welcome." Another respondent wrote "The "Piazza" integration is just a link, it really isn't integrated in a useful way. There is no API link for us to create custom add ons to support special products. There needs to be support for programming assignment plagerism checking. SafeAssign can be tricked by multiple submissions from the same person. It does not do a good job catching things. There is no option (or at least one that can be found) to submit a file with noted content to ignore."

Comments included not only what to use, but what not to. One respondant wrote "Respondus is spyware and malware and an abomination. I use panopto for classroom recording, and it is fine. Piazza is so much better than ANYTHING that UB offers that it should have a category of its own. It is useful for logistics, for student support, for graded interactions, and many other things. Box and One Drive are both terrible. Google Drive is better. In particular, O365 is difficult to use and often fails to work correctly -- different people editing a document see different versions of teh document, forms and formulas in spreadsheets simply do not work or take literally minutes to open, etc." This suggests that current integrations need to be evaluated, or re-evaluated.

Other concerns were reflected the online environment. Several comments suggested that the university needed to reevaluate its academic integrity software, suggesting a video tool. However, other comments contradicted this sentiment, stating that "I refuse to take part in policing student activity on their own devices or in their own homes using, i.e., Panopto or Respondus. These programs do not actually function as they purport to function and have an unacceptably high rate of "false positives" that generate cheating accusations or lock-outs from exams. Student anxiety is through the roof given the use of these tools and it has had a palpable effect on morale in *my* classroom this semester even though I refuse to use these tools." Another wrote "All of the integrity tools I've seen so far are absolutely unacceptable intrusions into student privacy. This seems impossible to remedy, so I've just shifted to setting up exams with the expectation that they'll have access to all course materials and the internet."

Several comments noted the disparity in office management systems. One noted that BOX was not well integrated. Two comments noted students tend to use google, versus Microsoft and cannot easily set up their Microsoft accounts.

It must be noted that 7 comments suggested that nothing need be added and that they were pleased with the current LMS.

Q22: Familiarity with UBLearns/Blackboard

Most faculty stated that they were moderately to extremely familiar with the UBLearns technology referenced in the survey, with most being mostly familiar (32.48%) or very familiar (40.51%). However, only 274 faculty responded, versus the initial 306, suggesting this data might be slightly off. Moreover, this is question asks faculty to self-identify their familiarity, suggesting they may overestimate or underestimate their skills.

Familiarity with UBLearns/Blackboard

■ Not familiar   ■ Slightly familiar   ■ Moderately familiar   ■ Very familiar   ■ Extremely familiar
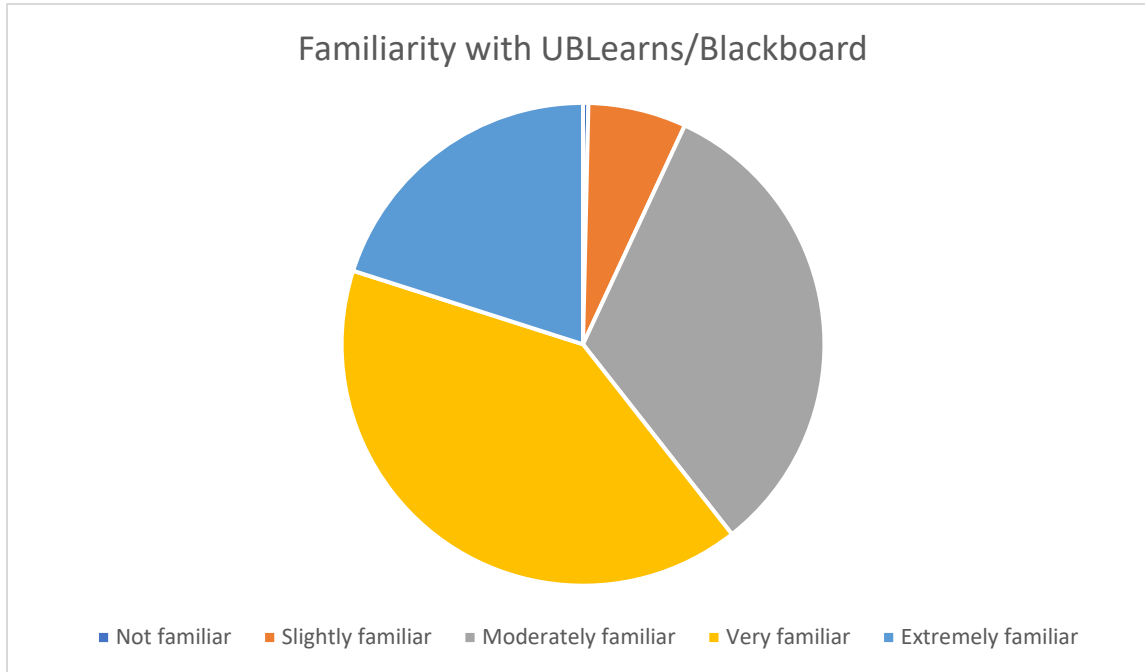
Q23: Focus group

Those faculty who participated were divided on whether they wanted to follow up on the survey. 51.46% said yes; the rest no. However, only 274 faculty responded to this question, suggesting that the number of those disinterested is much higher than suggested.

Conclusions and other comments

Most faculty agree that UBLearns is not user-friendly, making simple tasks difficult. Only a small portion of surveyed faculty were completely satisfied with the LMS.

Responses to other questions suggest that faculty are actively using third-party tools that UB may not license but may be beneficial to faculty. Several reviewers stated a preference for Piazza, with the possibility of integrating it into UBLearns. One wrote (under Q6) that:

> UB-CSE has a subscription to Piazza, a forum-based communications tool intended for use in coursework. I use this tool, combined with HUB for all course-related communication. UB-CSE internally maintains a tool called Autolab that is used for grading. It provides the ability to automatically grade code submissions, while also providing a built-in PDF viewer that can display annotations and inline grading details. Both of these have far more specialized interfaces for their specific use cases and are far cleaner for each of their respective use cases than Blackboard (or, I suspect any other full-stack LMS).

Appendix F

LMS Review Committee Survey

December 7, 2021 12:17 PM EST

Q3 - Academic title
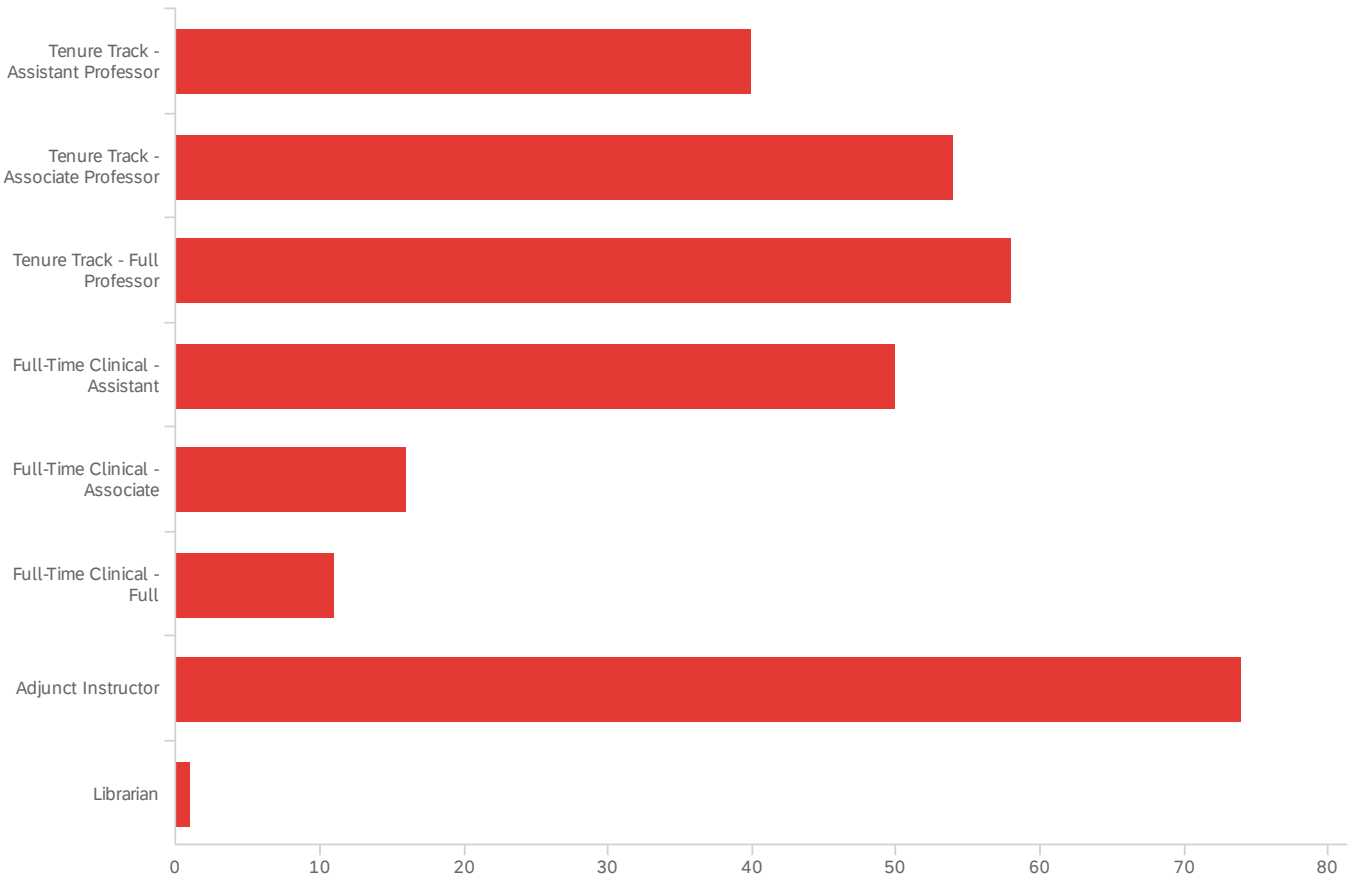
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Academic title	1.00	8.00	3.93	2.13	4.52	304

#	Field	Choice Count	
1	Tenure Track - Assistant Professor	13.16%	40
2	Tenure Track - Associate Professor	17.76%	54

#	Field	Choice Count	
3	Tenure Track - Full Professor	19.08%	58
4	Full-Time Clinical - Assistant	16.45%	50
5	Full-Time Clinical - Associate	5.26%	16
6	Full-Time Clinical - Full	3.62%	11
7	Adjunct Instructor	24.34%	74
8	Librarian	0.33%	1
			304

Showing rows 1 - 9 of 9

Q4 - Academic Department

Academic Department

School of Social work

Linguistics

Art (Actually a TA)

Chemical and Biological Engineering

School of Nursing, Biobehavioral Health & Clinical Sciences

Biostatistics

CDS

Physics Department

English and Global Gender and Sexuality Studies

School of Management

Chemistry

EVS

Chemistry

Physics

physics

Indigenous Studies

Academic Department
Chemistry
Chemistry
Chemistry
Computer Science and Engineering
Chemistry
Mathematics
Computer Science & Engineering
Rehabilitation Science
CAS Chemistry
Pharmacy
ELP
MSS
Engineering Education
Mechanical and Aerospace Engineering
ESL, LIN
Chemical and Biological Engineering
Industrial and Systems Engineering
Pediatrics

Academic Department

Epidemiology and Environmental Health

English Language Institute

Global Gender and Sexuality Studies

Counseling School & Educational Psychology

Jacobs School Undergraduate Education

English Department

Physics

Social Work

UBSIM Singapore

Philosophy

Mathematics

Ob/Gyn

Department of Engineering Education

Interdisciplinary Social Sciences (IDP)

Department of Computational and Data-Enabled Science and Engineering

Biochemistry

Physiology & Biophysics

Computer Science and Engineering

Academic Department

School of Law

Biochemistry

ENS

Oral Diagnostic Sciences

Theatre and Dance

Computer Science and Engineering

History

Chemistry

Classics

Pharmacy Practice

Global Gender and Sexuality Studies

Math

Rehabilitation Science

Economics

Accounting and Law

CSEP

Learning and Instruction

Psychology

Academic Department

Electrical Engg

Nursing

Nursing

Oral Diagnostic Sciences

Architecture

Linguistics

Neurosurgery

Engineering Education

UB Libraries

Engineering Education

Rehab Science

GSE

English

Engineering Education

Department of Information Science

Organization and Human Resources Management

Philosophy

Information Science

Academic Department

Chemistry

Learning and Instruction

Social Work

Geography

School of Management

Theatre and Dance

Physiology and Biophysics

Law

Social Work

Physics

Chemistry

Honors college

Geography

School of Management

Psychology

Computer Science and Engineering

Theatre and Dance

Computational and Data-Enabled Science and Engineering

Academic Department

Mathematics

Educational Leadership and Policy

Psychology

Psychology

Pharmaceutical Sciences

Law

Psychology

Mathematics

Interdisciplinary social Sciences

Management Science and Systems

Computational and Data Analysis

Theatre and Dance

classics

GSE, ELI

SIM-UB

Law School

Chemical and Biological Engineering

Graduate School of Education

Psychology

Psychology

SIM- UB (Singapore)

Civil, Structural and Env. Engineering

English

Economics

Law School

Educational Leadership and Policy

Marketing, School of Management

BCH

Theatre and Dance

Learning and Instruction

Philosophy

Biotechnology and Clinical Lab Science

History

ART

Social Sciences IDP

Geology

Academic Department

English

Psychology

BIO

Oral Diagnostic Sciences

School of Pharmacy and Pharmaceutical Sciences

Political Science

Department of Geography

Pharmacology

Psychology

ART

English

English Language Institute

GSE and School of Management

Pharmacy Practice

Social Work

Music

Epidemiology and Environmental Health

Pharmacology & Toxicology

Academic Department

Management Sciences and Systems

Accounting & Law (School of Management)

Romance Languages and Literatures

Computer Science and Engineering

Pharmacy Practice

Epidemiology & Environmental Health

Learning and Instruction, Information Science

Architecture

Ophthalmology

Biomedical Informatics

Sociology

psychology

Computer Science and Engineering

Operations Management & Strategy

Architecture

Restorative Dentistry

Mathematics

Classics

Academic Department

Philosophy

Communication

Philosophy

Orthodontics

Learning and Instruction

Pediatrics

Biological Sciences

Communication

Music

Pharmacy Practice

Chemical and Biological Engineering

CSE

Industrial & Systems Engineering

Pharmacy Practice

PHC

PHSC

Math

Pharmacy

Academic Department

Counseling, School and Educational Psychology

history

Pharmacology and Toxicology

CSEE

Electrical Engineering

Information Science

CEP

Geology

Political Science

Physiology and Biophysics

Sociology

Pharmacology & Toxicology

Accounting & Law

Biochemistry

Civil, Structural and Environmental Engineering

SOM Finance

GLY

School of Management - Finance

Academic Department

Pathology and Anatomical Sciences

Civil, Structural and Environmental Engineering

Computer Science

Law

Department of Computer Science and Engineering

CDS

SEAS Engineering Education

Physics

Information Science

Accounting & Law

Dept. of Nuclear Medicine

Communicative Disorders and Sciences

Romance Languages & Literatures

Psychology

Learning and Instruction

CSEP

English

Sociology

Academic Department

Office of International Education

Information Science

Romance Laguages and Literatures

CHHB

ens

CDS

Biological Sciences

ROMANCE LANGUAGES & LITERATURES

School of Engineering and Applied Sciences

Economics

Management Science and Systems

Law

EE

Psychology

Mathematics

Communication

Pharmacology and Toxicology

Biological Sciences

Academic Department

Information Science

Epidemiology and Environmental Health

TENURED Associate Dean, Dean's Office

Psychology

Learning and Instruction

CDS

Epidemiology and Environmental Health

MAE

Computer Science and Engineering

Civil, Structural and Environmental Engineering

Linguistics

Biological Sciences

Linguistics

MEDICINE

Music

Linguistics

Urban and Regional Planning

philosophy

Academic Department

Psychology

Chemistry

Computer Science and Engineering

Dept. Biological Sciences

Pharmaceutical Sciences

Psychology

Linguistics

Sociology

Linguistics

Communication

Urban and Regional Planning

Political Science

CSEP

Law

School of Pharmacy and Pharmaceutical Sciences

Community Health & Health Behavior

political science

Information Science

Academic Department

Law

Exercise and Nutrition Sciences

Sociology

Anthropology

Chemistry

English

Learning and Instruction

Linguistics

Sociology

CSEP

Learning & Instruction

English
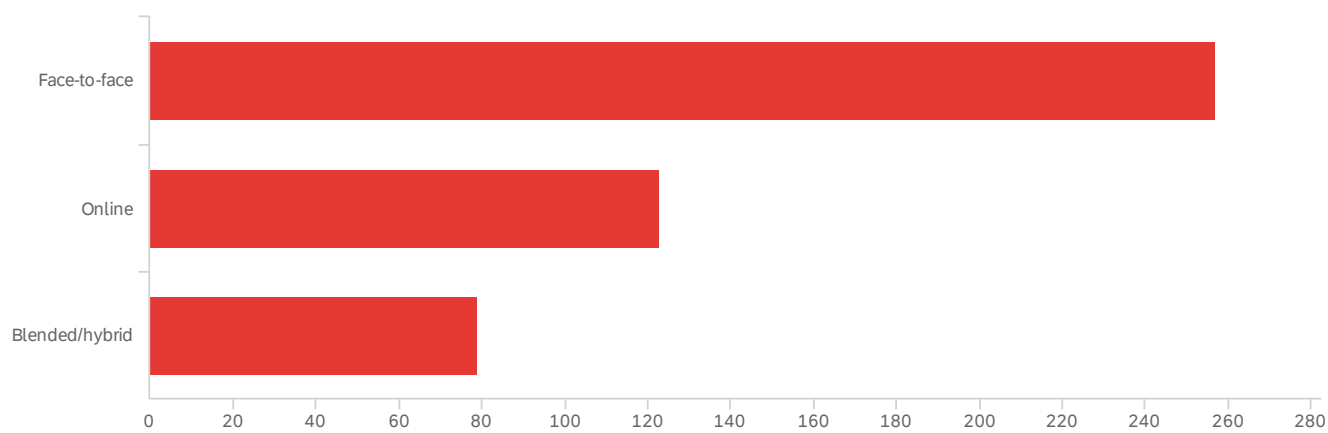
Sociology

Exercise and Nutrition Sciences

Environment & Sustainability

Mathematics

GLY

Microbiology

Q5 - In what modalities are you currently teaching? Check all that apply.

#	Field	Choice Count	
1	Face-to-face	55.99%	257
2	Online	26.80%	123
3	Blended/hybrid	17.21%	79
			459

Showing rows 1 - 4 of 4

Q6 - How often do you use UBlearns/Blackboard during a semester that you are teaching?
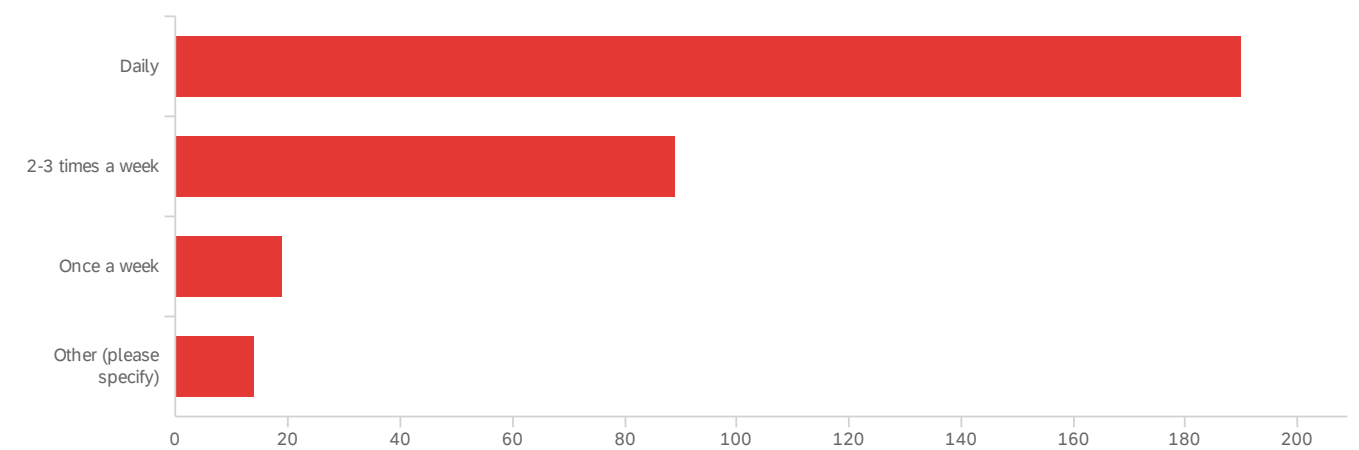
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How often do you use UBlearns/Blackboard during a semester that you are teaching? - Selected Choice	1.00	4.00	1.54	0.80	0.64	312

#	Field	Choice	Count
1	Daily	60.90%	190
2	2-3 times a week	28.53%	89
3	Once a week	6.09%	19
4	Other (please specify)	4.49%	14
			312

Showing rows 1 - 5 of 5

Q6_4_TEXT - Other (please specify)

Only as an interface for panopto (Blackboard sucks)

Weekly but have only used 3-4 times total

In addition to using UBLearns for single courses we also use it for admin courses.

All Course work is done through UBLearns.

2-3 times a week for one month: course is taught by multiple professors.

To post information, sometimes every day, sometimes once a week.

Exactly 2x per semester

I am an Instructional Support Tech. I teach one Print Media course a semester. Except for spring 2020, my class was hybrid, spatial distanced, in person. I would use UBlearns to augment in person instruction.

At the beginning of the semester when posting syllabus, course readings, assignments. Also when posting exam grades and finally, in sending emails from time to time.
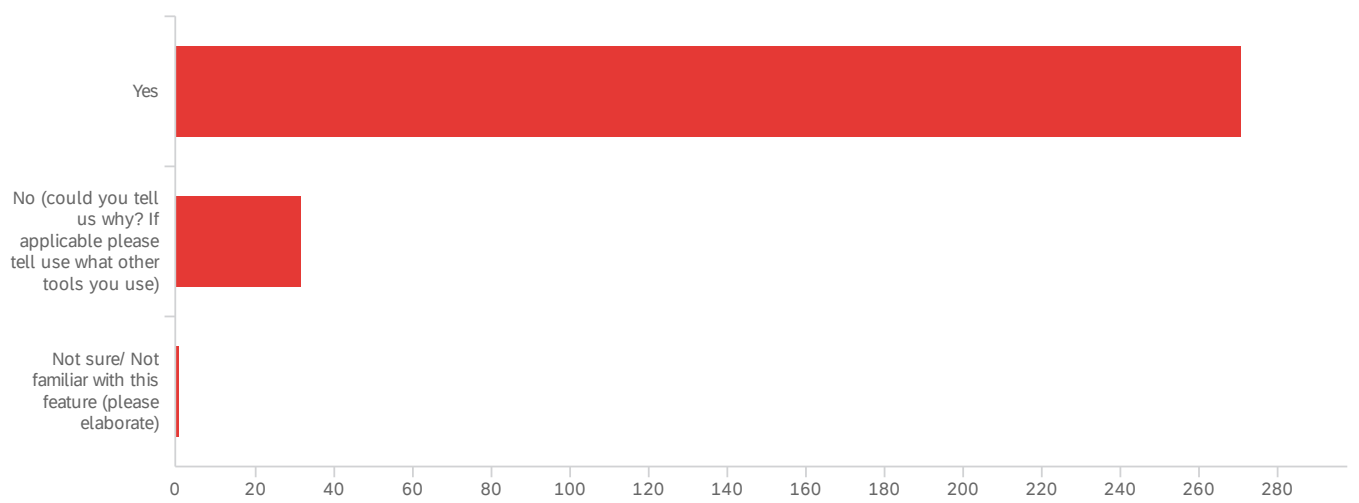
Rarely

1-2 weeks

Throughout the semester for various classes

online: every day. f2f, large classes: after setup, only to upload exam grades. f2f, <=50 students: only to set up with syllabus and readings

never; it's terrible

Q7 - Do you currently use the COMMUNICATION features (e.g., email, announcements, noti…

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use the COMMUNICATION features (e.g., email, announcements, notifications in UB Learns?) - Selected Choice	1.00	3.00	1.11	0.33	0.11	304

#	Field		Choice Count
1	Yes	89.14%	271
2	No (could you tell us why? If applicable please tell use what other tools you use)	10.53%	32
3	Not sure/ Not familiar with this feature (please elaborate)	0.33%	1
			304

Showing rows 1 - 4 of 4

Q7_2_TEXT - No (could you tell us why? If applicable please tell use what other tools y...

Email reminders to freshman students about due dates, guest speakers, etc.

I tend to just email my class directly using outlook.

They're terrible. I use Piazza and UB email directly. I use UBlearns only for initial announcements at the beginning of the semester, when I cannot assume that students have access to Piazza and the roster is changing rapidly enough that a fixed email list is difficult to use.

UB-CSE has a subscription to Piazza, a forum-based communications tool intended for use in coursework. I use this tool, combined with HUB for all course-related communication. UB-CSE internally maintains a tool called Autolab that is used for grading. It provides the ability to automatically grade code submissions, while also providing a built-in PDF viewer that can display annotations and inline grading details. Both of these have far more specialized interfaces for their specific use cases and are far cleaner for each of their respective use cases than Blackboard (or, I suspect any other full-stack LMS)

Email

HUB is much easier and reliable to do the samething.

The interface in UB Learns is so horrible that I do everything I can to not to use it (otherwise I get nervous). Instead I use regular email communication for announcements, etc.

use regular emails not familiar with this feature

I use in-lecture slides & Piazza. These are easier for students to find and more flexible.

I don't like UB Learns. It is very clunky.

I've found the UBlearns - Blackboard interface cumbersome, unintuitive, and inefficient. Much of what I teach is hands on. The effort to get content up and student ready can be frustratingly time consuming. I looked a SLACK as easier alternative method to keep my students engaged in course content and with one another. Teaching one lab course does not require deep LMS communications.

Compared to other LMS I have used (Canvas for example), I don't find the communication features very accessible. It's much easier to simply email from the Faculty HUB, which is what I currently do.

I use Slack. Blackboard's communication features, in my experience, are extremely clunky. Whereas with Slack, I can communicate with my students in an instant, with Blackboard I have to login, click the right sequence of buttons, etc. Students hardly ever respond to Blackboard communications (probably for similar reasons), whereas on Slack I have a healthy and at times vibrant environment of communication and discussion.

Piazza provides a much simpler/better interface for this type of communication at scale.

Have not needed- classes have a small number of students that I see every day

No (could you tell us why? If applicable please tell use what other tools y...

Use Announcements

It is not great.

I am not course director.

But I also created a group email on outlook because it is more convenient.

I find direct emails via UBHub easier.

I don't use the communication features on UB Learns because there is no feature to set up announcements ahead of time and send them as email notifications at the moment that they go live. Each of these options is available separately -- I can force an announcement notification to send right away OR I can set up announcements to send at a later date / time, but I can't do both to make the delayed message show up on UB Learns and in students' inboxes simultaneously. Because of this, I have set up course listservs on Outlook to communicate with students.

I only use announcements.

They are not very intuitive and I worry that the wrong information would be transmitted to the worong people.

I e-mail the entire class through the HUB. I do not use announcements or notifications. I myself ignore messages from UBLearns, and too many e-mails leads to desensitization.

Announcements

Not easy to navigate when you don't use UB learns often

I don't bother with announcements and notifications because enough students don't check them. If I need to spam a course about something, I use the email function built into hub. The email function built into ublearns is hot garbage. It insists on prepending the subject line with a bunch of stuff students don't care about like PSC307LECBAT:Political Parties:221923849 , which means the actual subject isn't visible on their phones.

I only use this for the UB 199 course I am teaching. I do not use this feature for graduate courses.

For full class emails I use the HUB class list.

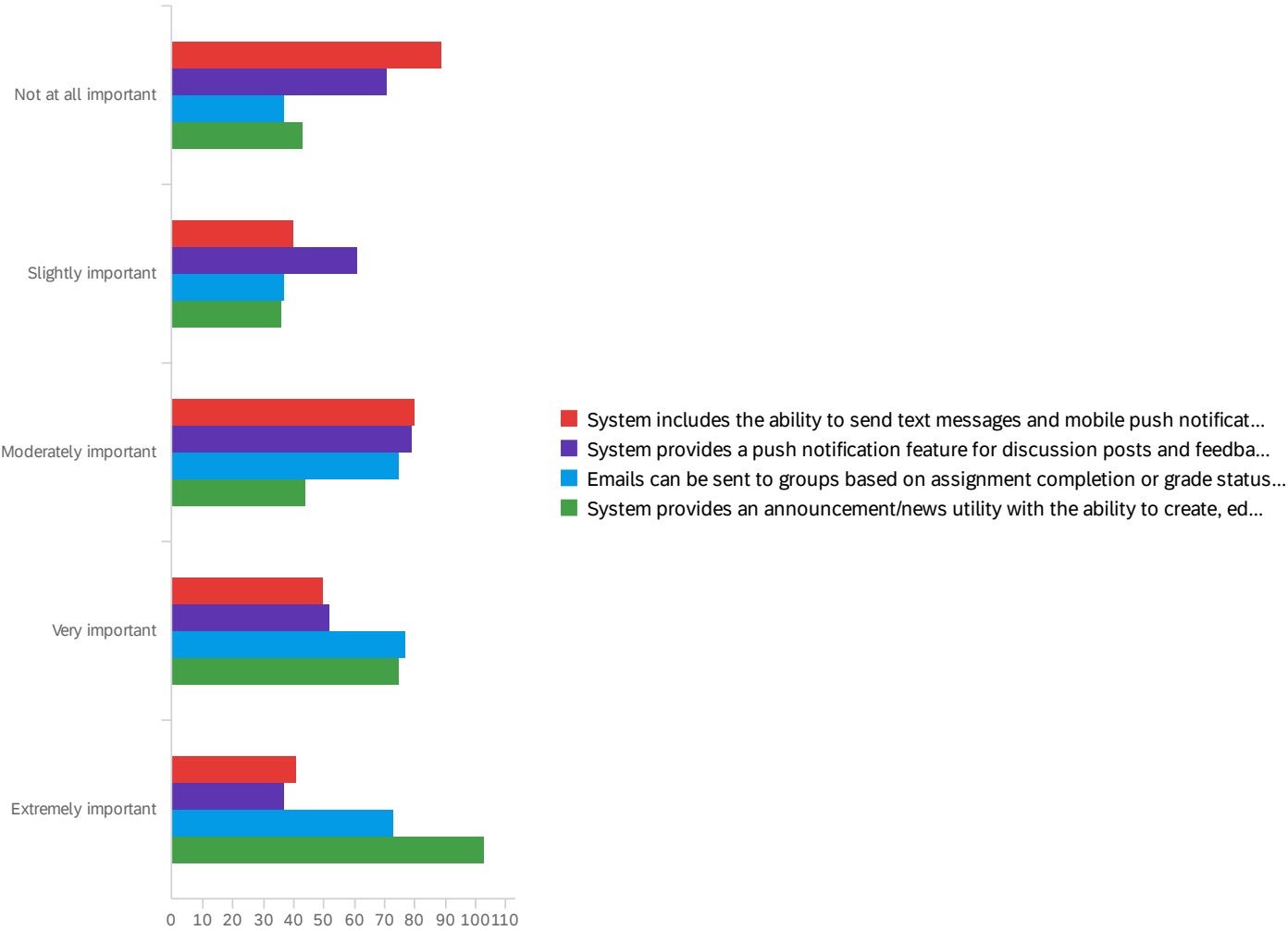please don't eliminate that option, especially from Announcements

Announcements are critical

Q7_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

I just use the email feature. I haven't really checked out the other communication features.

# Q8 - Please rate the importance of the features listed below that you currently use or would l…

- System includes the ability to send text messages and mobile push notificat…
- System provides a push notification feature for discussion posts and feedba…
- Emails can be sent to groups based on assignment completion or grade status…
- System provides an announcement/news utility with the ability to create, ed…

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	System includes the ability to send text messages and mobile push notifications based on student preference.	1.00	5.00	2.71	1.40	1.95	300
2	System provides a push notification feature for discussion posts and feedback (via text, email, etc.).	1.00	5.00	2.74	1.32	1.75	300
3	Emails can be sent to groups based on assignment completion or grade status.	1.00	5.00	3.37	1.31	1.71	299

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
4	System provides an announcement/news utility with the ability to create, edit, and schedule announcements that can differentiate between course and section.	1.00	5.00	3.53	1.42	2.03	301

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	System includes the ability to send text messages and mobile push notifications based on student preference.	29.67%	89	13.33%	40	26.67%	80	16.67%	50	13.67%	41	300
2	System provides a push notification feature for discussion posts and feedback (via text, email, etc.).	23.67%	71	20.33%	61	26.33%	79	17.33%	52	12.33%	37	300
3	Emails can be sent to groups based on assignment completion or grade status.	12.37%	37	12.37%	37	25.08%	75	25.75%	77	24.41%	73	299
4	System provides an announcement/news utility with the ability to create, edit, and schedule announcements that can differentiate between course and section.	14.29%	43	11.96%	36	14.62%	44	24.92%	75	34.22%	103	301

Showing rows 1 - 4 of 4

Q9 - Do you have any comments related to the EMAIL, MESSAGING, ANNOUNCEMENT, o…
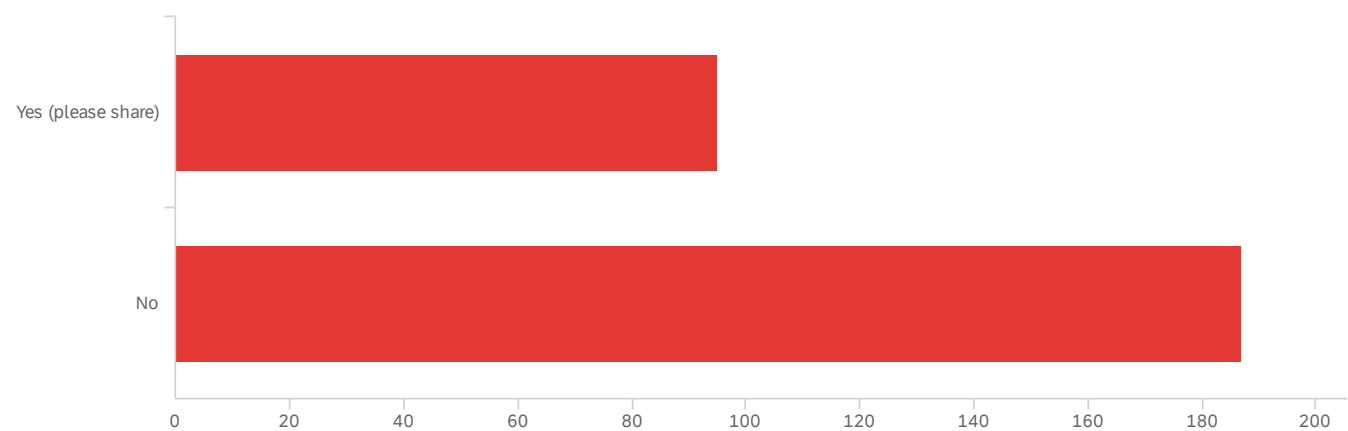
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the EMAIL, MESSAGING, ANNOUNCEMENT, or NOTIFICATIONS tools? - Selected Choice	1.00	2.00	1.66	0.47	0.22	282

#	Field		Choice Count
1	Yes (please share)	33.69%	95
2	No	66.31%	187
			282

Showing rows 1 - 3 of 3

Q9_1_TEXT - Yes (please share)

It will be helpful for text messages to be sent to students instead of email messages only.

I find the communications tools currently available to be sufficient for my needs, however I can see where students may desire text notifications or pushes from a mobile app.

I post announcements (which are then emailed to the course) and occasionally use the email function when I have a large group of students to contact (ex students taking a make-up exam). I have a combined course and would like to NOT have the students contact me via email through the learning system.

Email announcements seem to be the best method of communication with students and is critical. A notification of receipt/reading might be a nice option for some students. The custom group/subgroup (reminder) email feature would be quite useful.

Piazza is better than UBlearns in every way. If we cannot have a tool that has a communication forum as good as Piazza, we should just plan to use Piazza instead.

I would like the default on announcements to be that a message is also sent

My answers above are specifically with respect to the fact that CSE has Piazza and Autolab, and these features are unnecessary in an LMS, for me.

In my experience, students use email less, so having the ability to use a push or text notification would help make sure they are receiving important information in a timely manner.

Is there a way to download the students UBIT name/email from UBLearns rather than just via MyUB.

The current system that allows me to email specific students is useful.

Email to group from UBLearns is useful, however, I cannot respond (or resend) to an email that I sent to a group from within my own email program (if I sent it originally in UBLearns). I find that very frustrating.

It is very easy to use all of these in Blackboard, except perhaps the text aspects. Not sure if the current blackboard lets students set that option. But that is not enough reason to switch to another setup.

It is important that in addition to being a messaging technology allowing us to send messages to students, the LMS also SHOW the students' email addresses. It is also important that the LMS give the students the ability to message ONE ANOTHER by name, individually or to address the whole class (if the instructor enables this).

customizing announcement settings per section would be helpful.IT can be challenging enough to get students to read messages.

It is vital that we meet students where they are at. UBLearns (BlackBoard) has not substantially changed since I was an undergrad in 2002.

Yes (please share)

I hope we are gathering data on how students want to be communicated with. So many do not read the emails and/or announcements. If text gets the message read - then I am all for it!

Piazza works better than UB Learns for organizing announcements and allowing interactions. Notifications of messages in UB Learns is horrible, I have the feature turned off in my courses

Email in Blackboard fine for my needs.

From my point of view, this is feature of medium importance.

it works great, please don't change anything.

UBLearns' coomunication tools can be difficult to navigate. I would appreciate being able to reply to an email sent out by UBLearns, for example. Instructors can locate students' email addresses, but students cannot. It makes organizing group work outside of class challenging.

I wish to be able to submit an announcement while its content is automatically sent by email to students also.

Announcements must have options to attach document as in the email. The Announcement tool should have an option to send the notifications to all class sections even if the class sections are not combined.

When groups are established for emails in UB learns, I cannot add another person outside the group

I like to use the email in UB Learns

It would be great if the students could also identify other students' email addresses quickly.

More tedious than traditional email. Not worth the time when you have small class size

It would be nice for the subject line to not be so garbled as it is currently in UB Learns.

Ability to send email in same way that we do with Blackboard/UBLearns would be helpful

Only that it is essential, convenient and easy to use In its present form snd doesn't need to change

It is very important to be able to link to course documents and assignments in announcements.

I like Piazza because students can post questions anonymously and other students can respond. This helps students learn more and not feel shy.

Yes (please share)

The current Email function does not show the email but shows the student name only. Students frequently email me to ask the email address to communicate with one another.

Occasionally, I was not sure if messages were being sent/received and I would reach out to recipients to confirm via direct messages on email (or querying in class).

Being able to set up the announcements ahead of time is great - but it has always seemed silly to me that Blackboard will not send an email once the announcement is visible. I have to go in and do that manually if I want an email generated

All I want is a SIMPLE interface so that I can send email to the class.

My students and I only started utilising the email function on UBlearns but there are times I miss their emails that are sent through UBlearns unless I log in.

They work well for me. At least once a week, I post an announcement on UB Learns and click the box that immediately sends students an email of the announcement.

I would appreciate the ability to control layout, font, color, and include an image.

I need the LMS to be completely connected to email and I need to NOT have to respond to emails/messages in the LMS, but rather through my centralized email. I would love flexibility with notifications and to be able to force students to contact me via email, but control how they interact with each other.

Current email feature works fine. Additional "channels of communication" are not going to resolve systemic teaching deficits.

It would be ideal if I could use the LMS to communicate with students.

I use only announcements. I'm not fond of the other notifications as they don't seem to accurately pull in due dates.

Currently UBlearns 'strips' URL's, formatting and links out of announcements which would be extremely useful. Test that out in a new system

The text notification features sounds interesting, but students still need to be responsible for checking email, and, I suspect that texts may be easier to ignore/miss.

Please make it easy and usable by faculty. All the information needed should be in one place.

It would be nice if announcements could be copied from course to course. Right now, it's not possible to do that (unless there's a way that I don't know about).

At this stage, when sending an announcement as an email, the subject of the email is extremely confusing with codes and letters that speak little of the topic of the announcement

It would be nice if the LMS just generated email lists that I could then use from a normal email client.

It would be nice to be able to do BOTH schedule announcement for future AND send via email. Currently, you can choose one or the other.

For how I use it, it's easy to use and I have never had an issue.

For my graduate course, online discussion might be somewhat helpful. For my large Pharmacy professional program course, I don't see us managing discussions online. I think there would be too much traffic and would deaden student value

The Announcements section currently does not allow attachments to be added. It would be good to have the ability to attach a file instead of just a course link. This way when the announcement copy is emailed to students, they can directly download the file. While the Email feature would do something similar, it does not create a history like the announcements. Students easily lose emails, but the announcements page keeps a log of all past announcements, if the attachment is directly accessible from there, it will make downloading the content easy.

I really liked announcements in the "old" Bb and I hate them in Bb Ultra. I liked having the announcements page as the landing page for the course, and having the full text of the announcement visible. It was my primary way of communicating with the class and giving new course content. In Bb Ultra the announcements only really function as a mass email and one-time pop-up on Bb, then are hidden away and hard for students to refer to.

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is not at the top of the list.

Most of the these options were unknown to me.

all are working fine.

It would be nice to have a chat function, too, like "slack.com"

useful to be able to write/send announcements. The features detailed above aren't important for the classes I teach.

functionality of writing an email must be easy. UB Learns format and input is not as easy as using Outlook

email interface in blackboard is not user friendly for modifying font, editing signature, inserting images

Emails are sent to students with a clunky and difficult-to-understand subject line. There is also no provision that I know of for instructors to insert their usual signature blocks. Emails to the class should be easily sendable from the prof's own email identity.

I usually prefer sending emails either directly from my UB mail or through the LMS to the students for any announcement or related discussion posts. It is important that they can directly reply to the email from any mail client. It makes communicating with students easier and with less chance of getting missed or ignored. I would avoid anything that requires one to install an app to receive push notifications (by default or mandatory). Many would avoid installing an additional app and its notification may be blocked by the phone or buried in many other apps' notification.

Yes (please share)

Only issue was that there seemed to be a new "messages" feature which was independent from email. This is inconvenient because it's another place to check and they weren't sent to my email

The Blackboard LMS is "clunky" relative to these tools.

Implement a "Preview" functionality before an e-mail is sent.

It would be helpful to see improvement in the announcement feature in Blackboard so that attachments could be reliability sent with announcements being posted and sent as an email (with the attachment being attached to the email).

Currently, on ublearns, the email addresses of the recipients are removed, this makes hard to send a follow up email. It would be helpful to keep the email addresses.

Perhaps it's that I don't know how to do it, but I don't know if there's a way to email both or all classes simultaneously with just one email/announcements

I post weekly Announcements to my students via UBLearns that are vital to the course.

It should be easier to include images and attachments with the Blackboard UBLearns Announcement feature.

It would be nice to be able to differentiate between my cross-listed courses for email information.

Please see previous comment. In case it is not easily visible, here it is again: I don't use the communication features on UB Learns because there is no feature to set up announcements ahead of time and send them as email notifications at the moment that they go live. Each of these options is available separately -- I can force an announcement notification to send right away OR I can set up announcements to send at a later date / time, but I can't do both to make the delayed message show up on UB Learns and in students' inboxes simultaneously. Because of this, I have set up course listservs on Outlook to communicate with students.

I do use announcements and all-student messages on Blackboard, but I prefer to use email when I can. The formatting on Blackboard is ugly and hard to manage -- there are lots of weird extra carriage returns and I don't trust the italics. It just seems clunky.

Should be accessible via checkbox from the roster or similar filtering method

These tools are extremely important for maintaining continuity with all students and to address ongoing activities.

It looks like UBLearns' announcement was not sending emails to students (or at least by default), which was quite a surprise to me.

I fail to see the difference between announcements and notifications. The email feature is good, but announcements are useless since you can not attach a file to them if you choose the option to email students. Sometimes an announcement could be a new assignment, but I avoid using this feature since I can't include attachments.

I only use the class email tool (not course messages, not announcements, etc.)

I just want to be able to send messages to students. Drowning in features isn't productive, and makes interfaces difficult to use.

Currently the announcement feature on UB Learns has limited ability to develop a succinct and targeted subject line. This is due to the default messaging setup. Why cant it just list the short course code and/or be editable?

I mainly use the announcement to feature on BB to send out emails to all students in a lecture course

I have used myCourses in a previous life and it is more flexible to use that UBLearns/blackboard.

It's fine. Please don't switch.

Please get rid of the "must check a box to actually email the announcement to students" feature - I have never once wanted an announcement to *not* be emailed immediately.

I have had issues sending emails to individual users in my classes via UB Learns, whereby the email never reached the recipient. Due to that, I tend to use UB Mail instead, thus I would like a system that is synced with Gmail.

I use the email tool in UBLearns regularly.

It would be nicer if there was a way to attach multiple documents/items at once to emails. Blackboard's current system of one at a time is a bit tedious. I do like how it sends the instructor a copy of all emails, I like

Does not inform me if students emails on UBlearns. Email feature basically does not work

UBLearns options and features are limited at best; formatting is terrible (even with efforts to make it better)

we need the ability to attach files too any e-mail notification to a single student or larger group including all

I would like to be able to schedule announcements that also email out when released. Blackboard doesn't have this feature.

Announcement tool should have the ability to attach multiple files and insert course hyperlinks. Brightspace has a much better functionality for this than Blackboard.

It is frustrating that you cannot do attachments to announcements in UBLearns. It is often easier in the platform to post an announcement rather than send an email since the email interface is so clunky, but it is impossible to send an announcement that contains a PDF flier for example.

I often use regular email (GMail) to make announcements to my class. But Blackboard's "Announcements" tool is nice for *some* announcements, because they become permanently accessible from the UBLearns home page. This would be a nice feature to retain, whichever LMS we end up with.

Q10 - Do you currently use the CALENDAR/SCHEDULING features in UBLearns?
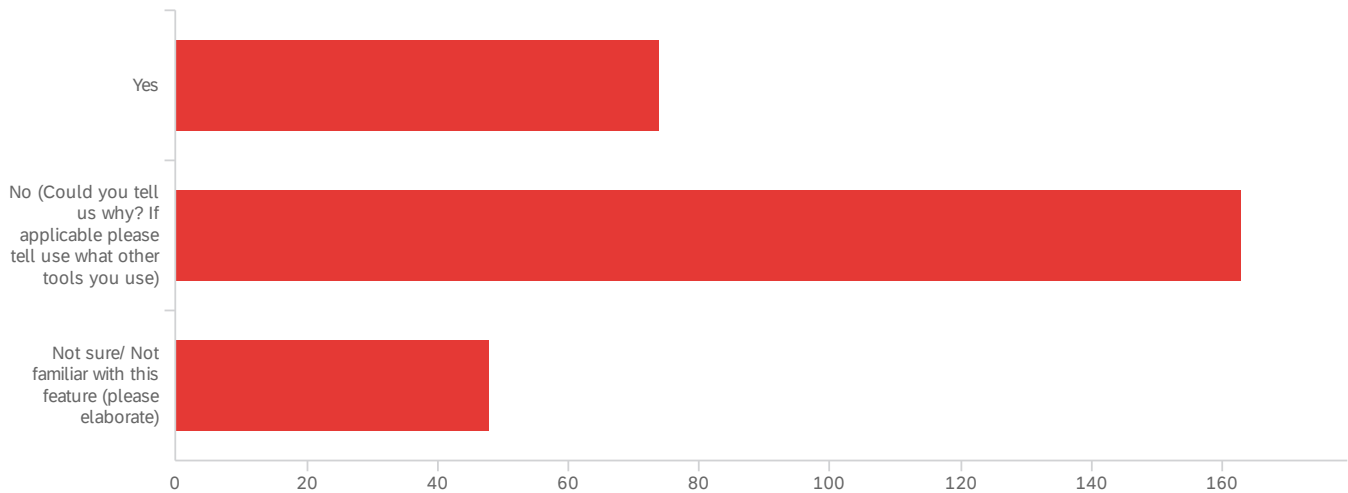
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use the CALENDAR/SCHEDULING features in UBLearns? - Selected Choice	1.00	3.00	1.91	0.65	0.42	285

#	Field	Choice Count	
1	Yes	25.96%	74
2	No (Could you tell us why? If applicable please tell use what other tools you use)	57.19%	163
3	Not sure/ Not familiar with this feature (please elaborate)	16.84%	48
			285

Showing rows 1 - 4 of 4

Q10_2_TEXT - No (Could you tell us why? If applicable please tell use what other tools y...

Teach in person class with physical assignments. Not really set up to assist with this

Not really needed. All deadlines are in the syllabus and communicated via messages

I have no experience using this feature. Is it for due dates and exam schedules? I suppose it could be helpful but I tend to put this info directly in my syllabus.

This is my first semester teaching so I'm still familiarizing myself with all the features.

Don't see the need. All dates for homework and exams are already in the syllabus

My electronic homework system currently automatically places the assignments into the student calendar. It take extra time and just haven't used it to input quizzes and exams.

The syllabus usually contains this information; placing it into a schedule ahead of time reduces flexibility. I also use class announcements as an inducement to attend lectures...

I use MyMathLab to schedule assignments

No. It's too painful to maintain multiple calendars for the class. I post deadlines, and it's up to the students to keep track of dates. Notably, Piazza has an easy way to associate an uploaded project description with a deadline.

Never considered looking at them.

it is not integrated to student's calendars (the one they use in their phones)

I generally do not though I may if I am zooming every week in a synchronistic fashion.

I cannot see any upside to their use.

I was not aware of this feature

I do look at and double-check due dates for assignments, but in general I don't have a need for additional calendar options.

Due dates are in the syllabus

The deadlines are loaded into the assignments but the notification/calendar elements for the dates is not reliable and does not work with adaptive release

My syllabus is a very long document with all the information in it.

Feedback from students showed that they didn't look at this function. Also, this never seemed user friendly as I wanted it to auto-create as I created assignments with due dates. It took too many steps.

As previously, UB Learns is so broken that I am not using it. Even though this feature is very useful.

It's not intuitive and students generally are unfamiliar with it. The learning curve is too high for something they don't use in other classes as well.

I don't need it

I stick pretty close the syllabus. The students can see the class's schedule in the syllabus.

It is not easy to set up these tools.

Aiming for the course to feel more like human interaction rather than transactional. I want the LMS to provide static resources for students, but do not want to communicate with them through the LMS, have them submit work through it, etc. Too many rules and permissions, no room for nuance or negotiation. This won't work for everyone; I don't teach large courses.

It's difficult to have items that the students don't have to upload (e.g., an in-person exam) on the schedule because if you set a due date to have it on the calendar, it will give them a warning that it is late (even if they don't have to submit anything). I believe there is a new way around this in Ultra but I haven't explored it yet.

no reason

complex in UBLearns. We utilize Miro

I use discussion boards which need two due dates, which UB Learns does not allow. This means using the calendar feature would require manually entering dates, which is time-consuming.

I put things into UB learns that have due dates and populate the calendar but I do not specifically use the calendar feature because I don't really need it.

I email students reminders about weekly activities.

Not familiar with it.

Never learned how to use it.

I'm honestly not familiar with the calendar/scheduling feature – it certainly wasn't salient to me when I explored UBLearns. I know the calendar feature is MUCH more accessible on Canvas.

Haven't seen the need to use it.

I am interested in using it in the future. Currently, due dates are shown on a separate document or in the modules section.

In part because I'm not as familiar with how it works but I think mainly because it is yet another place you have to list out all the dates and therefore need to correct the dates.It may be that this would be more useful even in the current LMS and that I need to think more on how to use it effeciently

Deadlines are posted on syllabus, in announcements, within assignments. Calendar feature not necessary.

I've never mastered it and don't really want to take the time to program assignments outside of UBLearns into this feature. It's also a pain to change due dates in the gradebook each time I copy a course

Non-intuitive. I just email the students/groups directly and figure out times to meet.

I use other calendars outside of UBLearns. I just haven't checked it out.

Use the zoom scheduler to schedule the meetings

I use my own calendar for scheduling. (hard copy)

has not been relevant

I don't know what those are.

It took too much time away from other responsibilities.

I do most of that on Tophat.

It is somewhat useless. I previously used The Writing Studio from Colorado State University but got tired of directing my students to multiple sites.

Just super clunky and don't seem to gain much beyond my current practices.

Dates are listed on syllabus as well as on Course Tracker, a document I created as a result of the mid-semester transition to online learning

Not relevant to my teaching activities.

Google calendar

Not needed for my class. I just make announcements in class or send an email about upcoming things.

Again, doesn't seem to integrate correctly with some of our e-texts

Not useful if doesnt coordinate with students Google calendars, outlook etc. Calendar should allow students/faculty to sync and be able to control that functionality

I'm unfamiliar with the feature.

Two reasons: I don't see much use for doing so. I can easily communicate any scheduling that departs from the syllabus to students over email. And the Blackboard scheduling/calendar feature is so terrible that it's clearly not worth putting in the work to add this to my class.

information is in syllabus. Students need to take some responsibility

I never played around with it/had exposure to it.

Found it awkward/time consuming to do so in UBLearns.

To complex to manage multiple calendars. No feedback from students that this is something that they use.

Seems to be too complicated for the value that it provides.

Too cumbersome and doesn't synch with my Outlook calendar app. I can't be dealing with two sets of calendars. Students would not use it either unless it syncs with their calendars.

not needed for my particular use

Really don't need to use it.

I do not need it

Use email to keep in contact with the students that I teach

The calendar for the course is in the syllabus. I give the students updates and reminders about upcoming due dates in class and via email.

It is a professional program not a requirement.

Probably should. There was only so much UBlearns I had time to learn during our 3 remote semesters, with all the other technology that we had to master as well. Students probably would appreciate a calendared due-date list.

Too many features to learn and if you don't use them regularly you have to re-learn how to use them.

Admin. assistant not me does scheduling.

Not clear how to use it.

not needed

Don't feel it is worth figuring out and the value it would provide

I use outlook and am not familiar with this in LMS

Many students don't use the UBlearns calendar tool. Rough schedule (i.e., resolution down to weeks not days) listed in syllabus allows easy adjustment with class performance. Assignments are not set up at once at the beginning of the semester. If there's a push across campus for all courses to use this tool, then it'd be worth using it.

I'm using my Google Calendar

I host my own webpage for course schedules, where it may list additional information that I might change throughout the semester. It's more convenient and reliable than publishing it through an internet calendar.

I've never been confident that assignments and due dates were correctly entered into the calendar feature. Seemed like sometimes assignments with due dates weren't entered on the calendar.

The class schedule is set in the beginning of the semester and does not change (almost)

Not necessary. I use weekly content pages to give students an ability to see what is coming up (consistent with the schedule already provided in the syllabus).

I use Google calendar to schedule all my activities. I am not aware what this feature offers on ublearns.

I use an external calendar for my own reference. I have not considered this for the student perspective and if they would find it valuable

I don't need it

Guess I didn't know this was a feature. I just email students reminders of due dates.

I maintain an external calendar for the students that does not depend on them or me opening Blackboard to view.

I think I should probably use these features. But I don't currently. I teach masters students, so I guess I expect them to put the assignment due dates in their calendar.

I make assignment due dates but I have no clue how to put them in the calendar - I've tried a few different times and had little success with it.

don't need it.

I never figured out how to use it.

It seemed like it would take some effort to learn and manage but I didn't see what the payoff would be. It's also visually not attractive so I was never drawn to fiddle around with it.

course calendar would usually suffice and it feels like it is troublesome to set up the calendar

Scheduling and daily lecture contents are established as independent menu items.

For sign-ups, I currently use Doodle, but something embedded in the LMS would be nice.

No need. I add a Word calendar.

Don't need it

Didn't know about it

Do not need it

Not sure how to use it

No need. Deadlines are posted as announcements, like any other announcement. And students, being adults, are expected to keep tabs on them. Sometimes a post concerning a deadline is adjacent to a post related to the deadline, contextualizing exceptions and so on. So, all information is concentrated on the same place, rather than scattered. Again, drowning in features creates usability problems.

It is difficult to use and does not have the functionality that I need. I have used the feature in a canvas corse management platform and that met my needs much better.

I know nothing about it. I didn't know it existed.

Not needed

Not intuitive

I never felt a need for it, whatever it is.

I manage my schedule in Outlook

Because I find UBLearns to be a very awkward system to use, and because of its proprietary nature and unpredictable changes in behavior across versions, I have been reluctant to use much of its functionality.

I typically poll my class at the beginning of the semester to ask which features they appreciate. Across multiple semesters, the calendar/scheduling feature was not one that was applicable.

Should have features like calendarly to schedule office hours online

Not easy to navigate when you don't use UB learns often.

Too much of a hassle to set up and execute

hate such things

It's in the syllabus and students want various modes of calendar. Some like electronic on their phones and some still do paper calendars.

Have not needed to, since the majority of my courses have been in-person or I have been teaching a section and another instructor managed the LMS for the whole class.

Schedule is fully in the syllabus.

I tried to use the calendar but it was not intuitive and I have not yet taken the time to research how to set it up.

Not sure how to use them

Students don't use it, difficult to program in so just not worth the effort.

I teach a first year doctoral course. I provide a schedule in the syllabus. Each folder I provide is dated (i.e. Week #1: September 3, 2021), each assignment date is provided at the beginning of the semester and the assignment is published with the date at the beginning of the semester.

I find that Google calendar and Google sheets are easier to use than the current UBLearns system, and more familiar to students. However, these are working a little less well now that students have Outlook instead of GMail, so I may be experimenting with scheduling in UBLearns.

I organize my UBLearns course by week from the start and no calendar modifications are necessary

I just keep my calendar in the syllabus, which is a live google doc. It's embedded in my UBLearns course sites. I also use TopHat for assignments, which keeps students appraised of due dates.

Q10_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

Not sure if you mean the due dates on Assignments? Or if there is a specific Scheduling function. If so, I have never come across it.

Not familiar with it.

I update dates for assignments on my home page.

I have assingments listed with deadlines, but that's the only scheduling feature I use.

I cannot see it.

don't use it, not sure how I would use it

Not familiar/ unaware

Never had to since all class schedule is pre-determined at the beginning of the semester.

Are you referring to the ability to make an assignment show up at a certain time? Then yes.

I've never had a reason to look for this type of feature, so I didn't know it existed or what the benefits would be.

I was unaware of this feature.

Scheduling is based on my syllabus as amended.

Don't have much need, but when I do I use Doodle or Calendly (for scheduling personal meetings with students). Not sure if that's what you are referring to?

I've never learned how to use it. I post information in the Announcements section.

Not sure what it can do

I am not sure how to use this feature

I'm not familiar with this feature.

Not familiar

This sounds like a Course Director's feature.

not sure what this means? I input due dates on assignments...no idea whether the students get notifications related to due dates.

Oh, is this visible from the student perspective? I never look at it from the teacher perspective. I of course put in due dates for everything, but sometimes the LMS makes mistakes.

I sometimes use it, but it's not clear how much students pay attention to it.

Do not actively use the calendar feature - difficult to find and update (though some students like it) Regularly use the post and assignment scheduling feature

Don't know enough about it.

Is this for scheduling the availability of items in my class? For ex. - scheduling an assignment to be visible during a certain time period? If so, I do use that.

Not familiar

Deadlines are on the syllabus and since faculty have to ensure that the syllabus is very detailed and approved by the department, what incentive is there for faculty to put down deadlines in another location for students? Is the syllabus important or should we just put everything on UB Learns?

Do you mean just having deadlines on assignments, or something more?

I schedule zoom meetings in UBlearns, is this the feature being referred to?

depends on how you define "scheduling" - I do use due dates to make sure things show up on students' "activity feed" and I use scheduled availability of items heavily

Q24 - Please rate the importance of the features listed below that you currently use or would…

Legend:
- LMS notifies students of upcoming and past due dates based on assessments c…
- System has a robust calendar feature that contains course events and tasks …
- System has a robust calendar feature that is automatically updated when an …
- System has a robust calendar feature that allows students to access assignm…
- System has a robust calendar feature that can be synced with an outside cal…
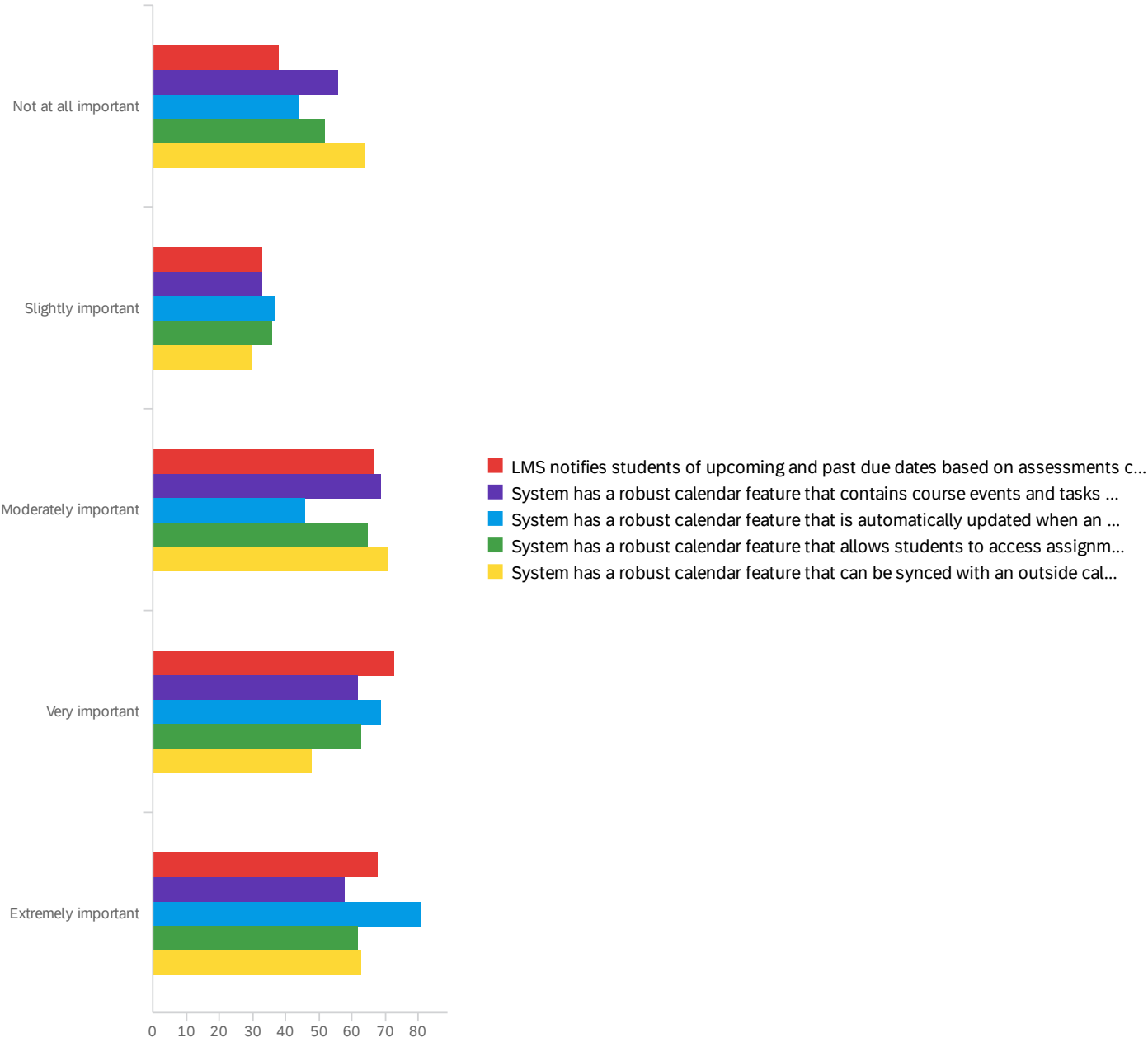
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	LMS notifies students of upcoming and past due dates based on assessments created within the course (e.g., assignments, texts, discussions, or other items included in the Grade Book).	1.00	5.00	3.36	1.33	1.77	279

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
2	System has a robust calendar feature that contains course events and tasks from all courses, differentiated clearly by course and/or section (such as by color).	1.00	5.00	3.12	1.40	1.97	278
3	System has a robust calendar feature that is automatically updated when an assignment due date is entered or updated in a course.	1.00	5.00	3.38	1.43	2.04	277
4	System has a robust calendar feature that allows students to access assignments by clicking on them within the calendar.	1.00	5.00	3.17	1.40	1.97	278
5	System has a robust calendar feature that can be synced with an outside calendar via automatic feed.	1.00	5.00	3.06	1.46	2.12	276

| #	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	LMS notifies students of upcoming and past due dates based on assessments created within the course (e.g., assignments, texts, discussions, or other items included in the Grade Book).	13.62%	38	11.83%	33	24.01%	67	26.16%	73	24.37%	68	279
2	System has a robust calendar feature that contains course events and tasks from all courses, differentiated clearly by course and/or section (such as by color).	20.14%	56	11.87%	33	24.82%	69	22.30%	62	20.86%	58	278
3	System has a robust calendar feature that is automatically updated when an assignment due date is entered or updated in a course.	15.88%	44	13.36%	37	16.61%	46	24.91%	69	29.24%	81	277

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
4	System has a robust calendar feature that allows students to access assignments by clicking on them within the calendar.	18.71%	52	12.95%	36	23.38%	65	22.66%	63	22.30%	62	278
5	System has a robust calendar feature that can be synced with an outside calendar via automatic feed.	23.19%	64	10.87%	30	25.72%	71	17.39%	48	22.83%	63	276

Showing rows 1 - 5 of 5

Q25 - Do you have any comments related to the CALENDAR/SCHEDULING features?
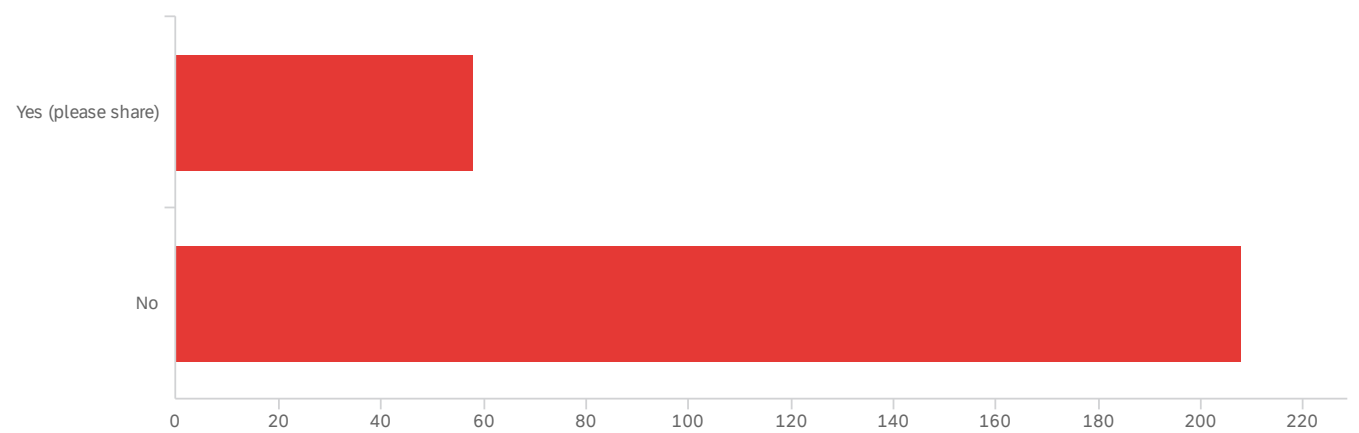
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the CALENDAR/SCHEDULING features? - Selected Choice	1.00	2.00	1.78	0.41	0.17	266

#	Field		Choice Count
1	Yes (please share)	21.80%	58
2	No	78.20%	208
			266

Showing rows 1 - 3 of 3

Q25_1_TEXT - Yes (please share)

It will be best if the calendar function in the new LMS function will sync with other calendars such as Outlook, Google Calendar, etc.

While I can see the attraction of having a sync'd calendar for student assignments and due dates, I am a bit leery of a system that would be responsible for keeping student assignment dates as an official process; I would suggest that time management is a key component of student training and this might be considered so automatic that it becomes a crutch. That said, since this is a voluntary component, there is little harm offering it to those that want it.

The UBlearns calendar (and TODO) appears to be hard for students to use. I don't know why, it seems straightforward to me. They frequently ask when things are due, despite the TODO list and calendar, however.

Again... Piazza does most of this stuff without it being a specific feature.

I am not sure how much younger students use calendar functions, but if the tech is there, it is something we could incorporate training on in intro courses.

The sync feature is a must. Students have to be able to sync the calendar function with their mobile device or it will get lost. One more item for them to check and they won't.

It would be helpful if this could be "moved forward" each semester with new dates so that we don't have to start from scratch each semester.

I don't see the importance of this. I make all dates clear on the home page. It's very simple. I don't see the need for a complicated system.

I display the due dates in so many places already - syllabus, bolded on the assignments themselves, posted in an announcement as a reminder. I kind of go overboard so that students can't say they didn't know what the due date was. If better calendaring is helpful for students, then I support more features. For me as faculty, not important to me.

Linking to an external personal calendar would be really helpful

Making assignments available or not is useful to me.

Functionalities built around calendar are extremely important. The good LMS should support them using OPEN STANDARDS such that calendar integration works seamlessly with ANY third party calendar app/system (e.g., using ics format). The worst option is if LMS calendar integration works only with selected "correct" system (say Outlook/Office365).

I don't use it

I would like a system where I could post appointments for one-on-one office hours and then students could sign up for one of these appointments. I would like the system to limit the appointment to one student at a time and to show the students the current availability. This would be like Calendly built into the LMS.

Yes (please share)

It'd be nice to be able to schedule everything and item by item select which notifies students of lateness or to select a type of assignment (like an in-person or offline assignment) that doesn't notify of past due.

I think the calendar is more useful to the students but would link it to my outlook calendar if I had clear control over what items where linked (aka I don't want every submission or post linked to my outlook)

I am planning to use this feature more often in the following semester.

Putting too many dates into the calendar leaves me open to problems down the road if a date needs to change. The more "places" the dates are in the more likely it is that one date will not be updated and lead to confusion.

Display the due date on the instructor view without needing to check the assignment property

My impressions - as listed in the scales above - are largely derived from my discussions with students about what they would like to have the course webpage do or based on how difficult it would be to manage

The calendar in Blackboard is often broken, and gives students the wrong due dates. Students also often cannot see assignments until they are past due. That makes this calendar fairly awful in my experience. Students also come to rely on the calendar outside of their courses and are missing announcements and important course structure within the course itself. I would rather see it link to the location of the assignment in the course itself, rather than directly to the assignment, so that they see these announcements.

My school aged children have these basic tools. It would make sense that the University is offering a system that is at least as good as what incoming students are used to.

This function isn't important to this system. Students use their own preferred calendaring systems and trying to put it in here is duplicative.

I've used D2L, Canvas, and UBLearns as an instructor at multiple universities. The calendar in Canvas was the most robust and easiest to update year-to-year.

The above seem very useful although have not been necessary for the course I teach

Students should have the ability to make all the above choices - including color - for themselves.

Some of these questions are irrelevant if I'm teaching just one class in a semester.

The calendar I used to use was very effective in keeping my students focused and apprised of course expectations. The Blackboard calendar has terrible functionality.

Teaching and learning is not about calendars and scheduling.

I provide a syllabus with due dates. I also create weekly folders with assignment descriptions and due dates. I think this is enough for students to take responsibility for their own calendar.

Yes (please share)

Time mgmt 101 teaches that individuals should keep only 1 calendar. The ability to sync to their personal calendar is paramount.

I never really tried to use the UB Learns calendar. One other problem is that I have a one page schedule for each course and updating both the schedule and the calendar would be a pain and prone to error. The calendar feature should provide an overview of each course in list form too so students and faculty can see the overall schedule at a glance.

I don't do many assignments from within Blackboard itself, so students being able to access assignments through a calendar/link isn't a big deal for me.

It is essential that the calendar features can be synced via standard protocols to an outside calendar application. And that should be made obvious how to do it.

While all the items above sound great, they aren't needed. I wouldn't want to have the hassle of learning and building a whole new system just for these calendar features/functions.

These positive comments are **contingent** upon the calendaring being implemented in our courses, and also upon how this feature stacks up against key features that might be (software) platform-dependent

Student should develop their own calendar/reminder based on the deadline provided on the syllabus.

Students request that reminders about assignment due dates be sent to them. It would be nice to have this feature made so that it is enabled/disabled by the student.

The functions listed above sound great, but the critical need would be that the calendar updates automatically when due dates are put elsewhere on Bb. If I have to write a whole calendar for the syllabus AND input all the assignments into Bb, I'm not going to make an entirely new calendar on Bb. (E.g. if I make a discussion board and set a due date of 11/15, that should populate into the calendar on Nov. 15th automatically.)

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is not at the top of the list.

features described above would be neat to have

This feature is extremely important to students in guiding them through the semester.

I am not sure if I will use it much because I already have a calendar (Google) for organizing my activities.

The features above make it clear why a calendar feature would be useful. I would already like to look into this more

If we get robust Calendar / Scheduling features with UB Learns, please host short workshops to teach faculty how to use them. The fact that students can't depend on the calendar from course to course (if faculty don't consistently use it) impacts the usefulness of the feature.

Yes (please share)

I use scheduling to track assignment due dates (e.g., identifying late assignments) and make it clear when things are due (removing excuses)

Allow ability to distinguish All Day tasks from specific time based deadlines

Not a fan of student relying on the UB Learns calendar because students will miss anything that isn't meant to be handed in through UB Learns in the first place

Please see above. The current calendar function is not adequate.

I have no idea what this feature of BB is.

It's fine. Please don't switch.

Students are not likely to use external calendar integrations, so that part should likely not be prioritized.

I have only a basic understanding of the scheduling/calendar system in UB Learns. I know how to "hide" and "reveal" assignments after specific dates, which is really useful, but I would like more comprehensive and extensive calendar features. But would the students use them? Or know how to use them as well?

Can't schedule office hours like calendarlh where students can see schedule and schedule hours when you are around

It's 2021, almost 2022. All the features above should be givens, not requests.

It'd be nice if I were to just upload my syllabus and the LMS could pick out the assignment due dates and populate a calendar (Canvas does this I think - I used it at my previous institution).

There is a huge disconnect between the web browser Blackboard experience and the bizarre and truncated "newsfeed" which students see if they use the Blackboard app. They miss assignments because of this difference

Whatever the students would use is what we should adopt, it is pointless if they don't.

Q26 - Do you currently use the CONTENT CREATION features (e.g., to add/share files, doc…
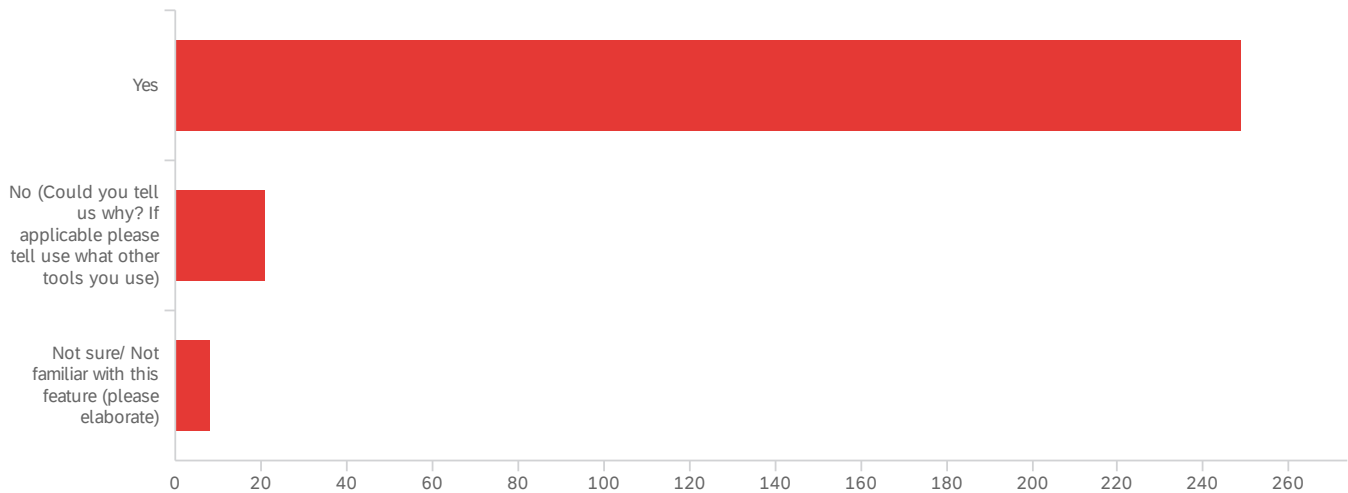
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use the CONTENT CREATION features (e.g., to add/share files, documents, multimedia, etc.) in UBLearns? - Selected Choice	1.00	3.00	1.13	0.42	0.17	278

#	Field		Choice Count
1	Yes	89.57%	249
2	No (Could you tell us why? If applicable please tell use what other tools you use)	7.55%	21
3	Not sure/ Not familiar with this feature (please elaborate)	2.88%	8
			278

Showing rows 1 - 4 of 4

Q26_2_TEXT - No (Could you tell us why? If applicable please tell use what other tools y…

No (Could you tell us why? If applicable please tell use what other tools y...

I have my own content creation tools. I post slides, etc... directly.

I would love to. But UB Learns is so broken that...

I use this to upload all relevant course material, including lecture slides, writing tools and resources, and assignment guidelines.

Once again, unlike other available utilities like Slack or Google Drive, to add an assignment to Blackboard is a confusing, multi-click process. I see no benefit over those other options.

I use panopto to share videos, and Piazza to share lecture slides and other content. The interface is much better (simpler, easier to customize and define, faster)

No need

Haven't needed to use this feature

We usually host the course materials on our own webpage, which may be better customized to enable the students to find information needed. It also allows the students to find the information needed (e.g., a syllabus) even after they lose access to the LMS. In addition, for coding course projects, it is easier to distribute files, creating documents or grading submissions entirely using shell scripts and version control systems (e.g., Github) rather than using an LMS.

I include all my lecture handouts under Course Documents.

It's too hard to synchronize. I use a shared Dropbox folder instead.

Not needed

We ended up having a separate website for our content creation to provide us the flexibility we needed to update content and arrange them in a format useful to us, rather the forced ones from UBLearns. In a previous class I used piazza because it was also more flexible than UBLearns

Not easy to navigate when you don't use UB learns often

My secretary does this for me

Q26_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

I embed a lot of my documents in content pages and modules.

Does "CONTENT CREATION" refer to a specific menu, or are you referring, for example, to the "Build Content" option within Assignments? If the latter, then I do use them.

Not sure what you're asking. I put content on ublearns, like the syllabus and slide decks. I create them externally, typically in latex. I used to create exams using their tools, but have switched to writing text files and using online conversion tools. Only circumstance where I'd switch back are open-ended math(ish) questions.

Q11 - Please rate the importance of the features listed below that you currently use or would…

- System supports file types such as text, multimedia, image, and object file…
- System allows selective release of content items to individual students and…
- Ability to move and/or copy items easily from one module or folder to anoth…
- Ability for creation, editing, and sharing across sections/courses/years of…
- Instructors can import content packages and text banks from publishers or v…
- Provides ability to create courses from previous course content and from te…
- Provides a central content repository that allows multiple course sections …
- Provides the ability to roll individual items back to a previous version.
- Ability to make changes throughout different sections of courses in "one fe…
- Provision of a utility to create and manage numerous courses at once.
- Provision of an auto-save function so that in-progress work is not lost in …

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	System supports file types such as text, multimedia, image, and object files.	1.00	5.00	4.47	0.97	0.93	275
2	System allows selective release of content items to individual students and/or groups based on multiple criteria (e.g., how long an item is available to a specific student or group, selection criteria based on membership in a group and/or completion criteria).	1.00	5.00	3.57	1.43	2.04	274
3	Ability to move and/or copy items easily from one module or folder to another.	1.00	5.00	4.44	1.01	1.01	274
4	Ability for creation, editing, and sharing across sections/courses/years of tests, surveys, and test banks.	1.00	5.00	4.35	1.15	1.32	274

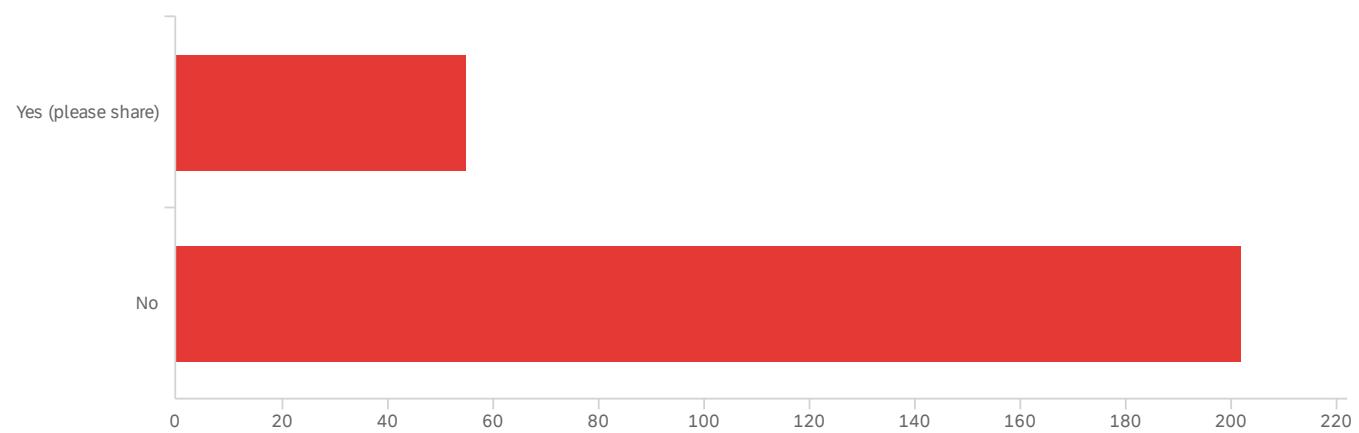| #	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
5	Instructors can import content packages and text banks from publishers or validated third parties.	1.00	5.00	3.25	1.54	2.38	273
6	Provides ability to create courses from previous course content and from templates.	1.00	5.00	4.52	0.95	0.91	274
7	Provides a central content repository that allows multiple course sections to point to and/or display the same content object within each course shell.	1.00	5.00	3.63	1.35	1.82	272
8	Provides the ability to roll individual items back to a previous version.	1.00	5.00	3.17	1.35	1.83	274
9	Ability to make changes throughout different sections of courses in "one fell swoop".	1.00	5.00	3.65	1.40	1.97	273
10	Provision of a utility to create and manage numerous courses at once.	1.00	5.00	3.40	1.49	2.21	272
11	Provision of an auto-save function so that in-progress work is not lost in the event of an unexpected system outage.	1.00	5.00	4.07	1.15	1.32	275

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	System supports file types such as text, multimedia, image, and object files.	3.64%	10	1.82%	5	6.91%	19	19.27%	53	68.36%	188	275

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
2	System allows selective release of content items to individual students and/or groups based on multiple criteria (e.g., how long an item is available to a specific student or group, selection criteria based on membership in a group and/or completion criteria).	13.87%	38	10.58%	29	17.88%	49	20.07%	55	37.59%	103	274
3	Ability to move and/or copy items easily from one module or folder to another.	4.38%	12	2.19%	6	5.47%	15	20.80%	57	67.15%	184	274
4	Ability for creation, editing, and sharing across sections/courses/years of tests, surveys, and test banks.	6.57%	18	2.55%	7	7.30%	20	16.06%	44	67.52%	185	274
5	Instructors can import content packages and text banks from publishers or validated third parties.	21.25%	58	13.55%	37	16.12%	44	16.85%	46	32.23%	88	273
6	Provides ability to create courses from previous course content and from templates.	3.65%	10	1.46%	4	6.57%	18	15.69%	43	72.63%	199	274
7	Provides a central content repository that allows multiple course sections to point to and/or display the same content object within each course shell.	11.40%	31	8.46%	23	22.43%	61	20.96%	57	36.76%	100	272
8	Provides the ability to roll individual items back to a previous version.	16.42%	45	14.60%	40	24.82%	68	23.72%	65	20.44%	56	274

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
9	Ability to make changes throughout different sections of courses in "one fell swoop".	14.29%	39	5.49%	15	19.78%	54	21.61%	59	38.83%	106	273
10	Provision of a utility to create and manage numerous courses at once.	17.28%	47	11.40%	31	20.22%	55	15.81%	43	35.29%	96	272
11	Provision of an auto-save function so that in-progress work is not lost in the event of an unexpected system outage.	4.73%	13	6.55%	18	14.55%	40	25.09%	69	49.09%	135	275

Showing rows 1 - 11 of 11

Q12 - Do you have any comments related to the CONTENT CREATION features?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the CONTENT CREATION features? - Selected Choice	1.00	2.00	1.79	0.41	0.17	257

#	Field		Choice Count
1	Yes (please share)	21.40%	55
2	No	78.60%	202
			257

Showing rows 1 - 3 of 3

Q12_1_TEXT - Yes (please share)

Yes (please share)

The adaptive release will need to work with different start and stop times for assignments. Currently, if I have a 30 minute quiz starting at 3pm, I can't use the adeaptive release due to students needing additional time or a different start time. The adaptive release feature flat out states that if "exceptions" are added to the assessment, students "may" gain access to my quiz before they are supposed to.

This is a central component of any LMS, it can be invaluable as a content host/archive and is probably underutilized as a content creator. I see this as one of the most important aspects of the system.

Content creation on UBlearns is terrible. It is very difficult to create reliably correct content that looks as the instructor intends. The preview editor and the final view are often very different. Using markup to edit the content directly is by far the best option, but quite painful as the web editor is poor. Copying and managing questions, question pools, and tests between semesters is very clumsy and difficult. There is no good way to copy tests en masse without copying over everything including schedules and gradebook entries and the like. There is no good way when importing from a question pool to a test to understand which questions have already been imported. It's a horrible mess.

I don't generally manage content in a specific tool. Online tools are far more cumbersome than the workflows and tools that I've developed for myself.

UB Learns is very clunky for the students to use. They often complain about how difficult it is to get work to format correctly.

Would like a function to duplicate a created content. For example, I have students submit each problem from a HW set individually for grading e.g. HW9.1, HW9.2, etc... Having to make 4 of these with adaptive release settings could be streamlined if I could copy/paste and rename the created content.

Fewer clicks to get the job done would be ideal.

With the exception of sometimes losing comments while grading if the power goes off or the system suddenly times out, I am very happy with all the other features on Blackboard. Once we learn it, it is easy to use.

I probably don't understand what this is about. The language used here is unfamiliar to me.

While I don't know what I don't know - I find the content features of Blackboard to be very easy to use and do everything that I need it to do. I would hate to have to learn all the ins and outs of content management - if we drop Blackboard - especially because I spend the bulk of my time in the content areas for my online courses.

Cloning of assignments and moving elements between courses is horrible to navigate and difficult to use.

All above features are important. And one can argue that UB Learns supports many of them. However the problem is not in whether a system supports given feature but HOW does it support. The main problem with the current system is obsolete, obstructive, inefficient, and buggy user interface from the era of Web 1.0. Add to this poor integration with the existing UB infrastructure (e.g., UB Learns not being able to display a course name in a human readable form), and you have the current disaster called UB Learns...

I much prefer the aesthetics of Canvas which allows custom HTML as well as more visually appealing embedded media. The "learning module" content areas in blackboard are clunky and ugly.

This feature is very important

Open infrastructure is important. This means standard import and export formats, ability to backup and restore courses, and LTI interoperability.

Ease of use and decreasing clicks needed to build a course would be very helpful.

This has become very important.

The current layout is so confusing that students mostly give up on finding class material and rely on obtaining the handouts from their classmates and instructors. A simpler interface would increase participation.

I honestly find the content creation features of Blackboard to be rather hard to use. Copy/pasting content from other sources (e.g., drafting text in a word processor and then copying into UBLearns) often results in HTML code that screws up the layout, requiring manual fixes. Drafting in UBLearns often has resulted in data loss for me, and there is no autosave feature. Not all content can easily be embedded, and the layout of content items with attached files is not intuitive.

I have worked with D2L It was cumbersome and difficult

Must be rich text (HTML/CSS) enabled.

UBLearns is very cumbersome for bulk edits and lacks drag and drop functionality. After using Canvas at a another university, UBLearns has been quite limited and unintuitive.

I care more about ease of adaptive release to the whole class than to specific students. The easier it it to set timed release, the better

Keep it simple.

I'm assuming you are NOT talking about the ability to post a document created in a separate program (Word, etc.)

We NEED the ability to create multiple course templates and much more sophisticated looking content and pages such as scaffolding content, branching content, control of media embedding, sizing pictures, picture wrapping etc. WITHOUT being HTML experts. A "menu' of content options easy for faculty to use

The ability to make changes through different courses would make my life SO MUCH easier.

Should allow images and links to video to be inserted into documents.

Yes (please share)

I find this to be a rather important feature of this type of platform

Include Jupyter Notebooks and other code based and multimedia datatypes.

Since I prefer not to combine my Blackboard courses, I have to set up everything multiple times. It would be nice to have an easy way to set things up once without having to combine courses.

The "Content creation" feature is actually very outdated, complicated to understand and absolutely no user-friendly

I very much hope that this integrates into UB Box or OneDrive so we don't have to have multiple copies of things floating around in different places. It should automatically see items in my Box.

We don't have multiple course sections (might be useful if we did), and really don't teach multiple courses per semester (as significant contributor)

It should be easier to include images in every aspect of the tools (exam questions, content, etc).

In Bb Ultra, why are embedded images so bad looking? In the old Bb there was so much flexibility in how I could layout content, but in Ultra it auto-sizes images and leaves big border areas on the sides.

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is nowhere near the top of the list.

hat I really would like to see is to be able to choose a template when a new course is created (https://myub.buffalo.edu/ublearns_class_setup/), this would avoid a lot of manual work. Currently UBLearns does allow importing past courses, but one still needs to tweak several items. For example, a template could store dates relative or one could have dates as a variable that needs to be filled in after import.

saving content (rubrics, assignments, etc) from one year to the next is super improtant!

The main issue I have is easily duplicating items many times. I have a folder for each week's content and the overall structure will be the same across all 15 weeks and so doing the same action 15 times would be very helpful. For example, copy/paste a folder 15 times, or even add a "discussion forum" link 15 times to each folder.

Blackboard is an extremely antiquated difficult-to-use LMS.

Blackboard does not accept Mac file extensions (e.g., .pages), which is extremely unfortunate for the students and burdensome for the faculty

Content creation in Blackboard is clunky to say the least, often requiring many extra clicks. And the end result is a presentation style that does not look good. This applies to both regular view and Ultra course view, which I used for one semester and discontinued using because it was bloated (everything clicked on opened up as a popup overlaying the main screen and took forever to load). I have used Canvas in the past and it is superior to Blackboard in terms of content creation in every way.

Yes (please share)

I find that Blackboard has a lot of the file features that I want, but they are cumbersome to use. I often have to use 3- or 4- or 5-step menu sequences to get to the features that I want. Even something like making sure that students have permission to read documents that I've uploaded (for instance, so that they can see them in Hypothes.is) requires me to change permissions for each file one by one. If there is some shortcut for this, it is not self evident.

UBL content sharing was always very time consuming and unclear. It seemed like every little thing took three separate clicks on three separate screens, and the feedback from the system was often confusing, so I couldn't tell at a glance whether something had loaded properly, and would have to go back through and see if it looked right. Extremely time consuming and boring. It would be great if we had a system that was a little more streamlined for the most common actions, like adding and moving material.

Do not make too complex and with too many features or it will not be used. Think that faculty over a certain age will not follow.

Accessibility metrics do not work with content that is multilingual or with extremely-specific formatting that must be maintained (e.g. text-figure alignment). So, all my text content scores low on accessibility not because I do not care about it, but because UB Learns uses an automatic tool that can't be adapted to the type of content I teach. If more about accessibility could be discussed with faculty, including one-on-one tutorials, then perhaps this feature could be improved. As it is, I don't see why it is important in UB Learns when content is created.

Support for embedded YouTube videos is essential for my music courses!

for content area, UB Learns/Blackboard is the worst - too much layers of pages

We absolutely need to be able to set *required file types* for submissions. I have students who consistently submit assignments using their camera phones to take pictures of messy handwritten pieces of looseleaf paper and never read the feedback telling them to stop doing it. It would be easier to just force them to upload a PDF in the first place, but there's no way to do this on UBLearns presently. Content releasing/permissions/access in the current version of UBLearns is absolutely horrible and borderline unusable. I have described it to peers as "a rat's nest of conflicting access permissions". There are multiple ways to accidentally create conflicting permissions or to generate unintended side effects that have no clear design benefit. For instance, making an assignment visible past the due date for one student makes it *disappear* for all other students. (This doesn't apply to quizzes because the way access is set for assignments and quizzes is different, for unclear reasons.) This has made it much more difficult than it needs to be to offer flexible deadlines to students (for instance, for disability accommodations or covid-related absences). This also needs to be hugely streamlined across assignment types - totally different means of setting access to quizzes and to assignments, for some reason. Exporting one semester's content to a later semester is also crucial for actually building on one's materials to improve instruction. This is much harder to do if we are constantly spending all of our down time regenerating lecture links, assignment prompts, quizzes, etc. Ability to point to a common repository of quiz assignments and written assignments at, say, the department level would also enhance my ability to explore skills-based grading.

I can't even download a file of PowerPoints to the desktop. I have to go one by on. I just want to download folders to my desktop

It's 2021, almost 2022… the above features should be givens. Every effort should be made to allow course management in an LMS to be as seamless and easy as possible.

Is this where I talk about how awful the exam designs in blackboard are, and how it's utterly incapable of dealing with ordinary things like "Answer any three of the following five questions:"

I *DESPERATELY* want a test question pool that's linked to my ACCOUNT, not to a specific course.

Please pick something that allows for batch uploads! I have to upload every single reading for my courses one-by-one through the clunky upload interface and it takes way too long. Other platforms would allow me to just drag them all in and upload them in the amount of time it takes me to upload a single file in UBLearns.

Q13 - Do you currently use the DISCUSSION BOARD feature UBLearns?
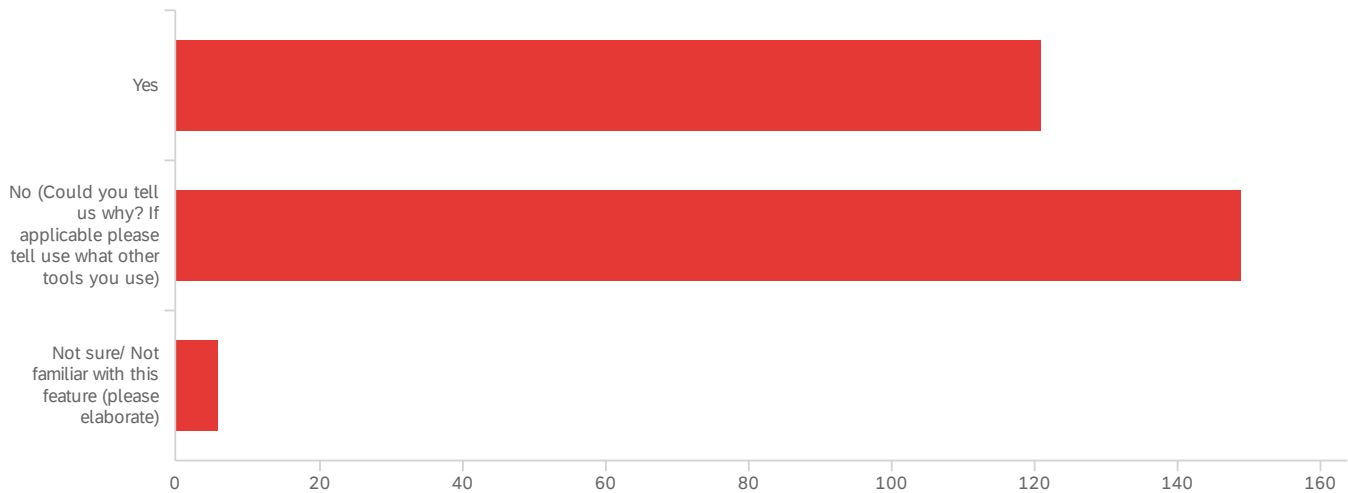
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use the DISCUSSION BOARD feature UBLearns? - Selected Choice	1.00	3.00	1.58	0.54	0.29	276

#	Field	Choice Count	
1	Yes	43.84%	121
2	No (Could you tell us why? If applicable please tell use what other tools you use)	53.99%	149
3	Not sure/ Not familiar with this feature (please elaborate)	2.17%	6
			276

Showing rows 1 - 4 of 4

Q13_2_TEXT - No (Could you tell us why? If applicable please tell use what other tools...

not useful for my class type

I have not had a need for it.

It did not figure into my pedagogy for current courses but I do plan to use in one next semester.

Based on colleagues' experiences with discussion boards, they require fairly regular moderation and are generally not as effective as the time required to operate them demands.

I have a combined course of over 1000 students. I do not have the ability to monitor discussions for that may students.

I tend to use face-to-face or one-on-one office hours to answer questions; I lead discussion through lecture

It's terrible. I don't like it, the students don't like it. There is no anonymity for students, and there is no way for students to create posts of their own (only respond to instructors). I use Piazza and it is better in every way. It also allows course management for things like groups and rosters via easy-to-understand plain text (or CSV) files.

This is exactly what Piazza does.

Difficult to create meaningful questions that elicit student participation and are gradable.

This semester I am not using it. The class is very discussion based and the students have a GroupMe where there is discussion outside the class time.

It's not efficient enough compared to other LMS like Canvas.

I don't use discussion boards in my courses

I can't manage discussion boards in large groups.

Don't really use in learns in medical school

Students are not interested in it.

The interface is not great.

I comment on journals separately to each student. I don't trust public discussions outside of in person discussion in the classroom (on on Zoom if that is how the course is structured.)

I cannot see the upside of doing so.

Would like to explore more but don't have much experience with it yet

Not needed.

Too many students to manage

It is horrible to navigate in general, the thread system is horrible, notifications are a mess. It is not meant as a general discussion board, it is more for organized soliticed discussion. I use Piazza, which has a much better organizational structure to support communications.

We already talk constantly in class.

Students have historically told me that they hate discussion boards, even in discussion based classes. They prefer video assignments where they can talk into the camera for a minute to discuss their thoughts. If this could easily be done in a discussion board then I would use it. I tried this but it couldn't support the large files. Also, grading was not simple when I want to grade students' responses to others' videos.

I try to have the discussion in class.

I just use email for contacting students. Also, Students already often use "discord" or other things anyway

It is not well designed.

As far as I can tell, students universally loathe compulsory participation in discussion boards. I much prefer Q/A structures like Piazza.

Is not sued in the classes I am assigned

Much of our work is graphic - UBLearns does not handle graphics as well as we'd like. We use Miro.

I think this does not apply to the course that I am teaching.

Too much reading to do.

Do not have the need. (discussions are done in in-person classes)

Blackboard's discussion feature is atrocious to set up and use :)

Don't see that it would contribute enough to warrant the work involved in using it.

Not applicable for my courses.

No (Could you tell us why? If applicable please tell use what other tools…

I've tried but it's not intuitive with Blackboard.

I have tried utilising it once but while it was successful with Australian students. Unless I award grades, Singapore students would not utilise it to communicate with other students.

I think this could be useful in certain courses/formats, but just doesn't work for the class I'm teaching.

I use a different approach to class discussions.

course doesnot require this feature

I do not think it is an effective tool in the classes I teach.

Have not needed it for my courses

Too cumbersome as it was more effective to communicate on SLACK or via ZOOM.

I use the discussion boards on Tophat.

Discussion boards, as a graded component, is not used in my courses. I do use it for fielding student questions leading up to the exam. Though it is easy to miss posts in the Blackboard system (that could be an error though in my understanding of the notification features in BB).

The old version of UBLearns discussion board was impossible to follow/grade. Piazza was easier and so I have used that. The new version on BB looks great and I would likely switch back.

I only used this function when the class was taught online. This semester I teach in person so I don't use this.

Discord is better

I have used it in the past, but I am not using it this semester and doing work that might take place on discussion boards in class, since we are in-person.

But minimally. The discussion function is cumbersome currently, need functions for organized responses and to allow for easy grading. more 'wiki-like' like what students see in their social media

The Blackboard implementation of this is really bad. In addition, numerous free discussion platforms exist that are miles better than Blackboard. Those discussion platforms also have the benefit of being the types of software that our students will actually have to use when they graduate and get a job.

It is horrible. Threads are hard to create and read, the interface is clunky, access control is not sufficient. I use Piazza, which is superior in every way.

have not found it necessary to use it in my courses

students view this activity as profoundly unhelpful

Not necessary as part of the courses I teach

I teach a flipped classroom, so students discuss things in class all the time. Plus, I'd forget to check the discussion board.

Because it is clunky. I'd much rather see something like Discord integration.

Work with a small number of students in my classes

Not useful in my class.

We have recitation instead.

I currently use CampuseWire for my courses

Students tend to use it in an unprofessional way and expect us as faculty to police it and answer their questions right away.

As long as we have in-person classes, in person seems - at this point - the highest-impact means for having discussions (in my GRAD course). In our pharmacy professional course, I think the students are too overloaded to drive much useful discussion

Students don't use.

It is terrible and not mobile friendly.

Students prefer a third-party tool, like Discord for ease of chatting and connecting with other students.

Not necessary

not relevant

I tried. Students dont seem to use it. A chat function might be better.

not important part of the course, and clunky to use, students don't access it

I have relatively small graduate classes and prefer in-person discussion

My courses are not dependent on virtual/posted discussion (i.e., in-person discussion is prioritized; in Zoom meetings for online teaching).

I find them to be a complete waste of everyone's time.

We use Piazza for Q&A and discussion, which has a lot of more features needed for managing discussions and questions. For instance, it allows one to post private messages to one or more people. It also has an integrated poll feature.

Too difficult. I use Box to share documents and have students provide feedback and discuss assignments. This is not ideal with undergraduates.

Was not effective/need supervision. Other means are more convenient.

I use emails if needed.

I prefer Piazza

Discussion boards are awful and time consuming and hard to manage

Discussion boards are stupid! Nobody likes them. They do nothing for anyone.

don't need it

Students don't find this feature to be especially engaging.

Student participation and effort is poor

I've tried but students don't use it voluntarily. I don't do required discussions--doesn't really work for my classes.

Not that useful

Blackboard's Discussion Board is extremely clunky and students don't like to use it. We would use Piazza instead if it were still free.

I have in the past, just not currently.

I hold discussions in class in person.

not needed

I discuss in class

No (Could you tell us why? If applicable please tell use what other tools…

I've tried to use it, but I get very few students who want to discuss topics. I also find the setup rather awkward.

I do not find discussion boards useful.

not needed

When I taught a course where I encouraged discussion outside of class, I managed the course with piazza, so UBLearns was just not in the equation. We did everything right there on piazza and I could follow the threads of different topics. Not sure how UBLearns would have handled this. Piazza did a very decent job!

I don't have time to moderate an open discussion board. I have no TAs either. Discussion boards run the risk of devolving without oversight.

I found the UBLearns interface to be one of the most poorly designed systems that I have to regularly use. So, I prefer to avoid using this kind of functionality whenever possible.

Discussion generally takes place on Zoom or live in the classroom

Student engagement is often low and students do not often make very thoughtful posts.

Optically does not look good

Students don't use it, at least not without an impractical amount of nagging.

it undermines student development of self-sufficiency in learning.

I have in years past, but haven't enjoyed the features within UBLearns so I no longer use this feature.

Not necessary for my courses.

I'm trying to move away from discussion board for in person classes. But, when I do use it, I prefer to use Schoology as it is much more user friendly.

I teach ENG105, so regular weekly writing takes place on Eli Review.

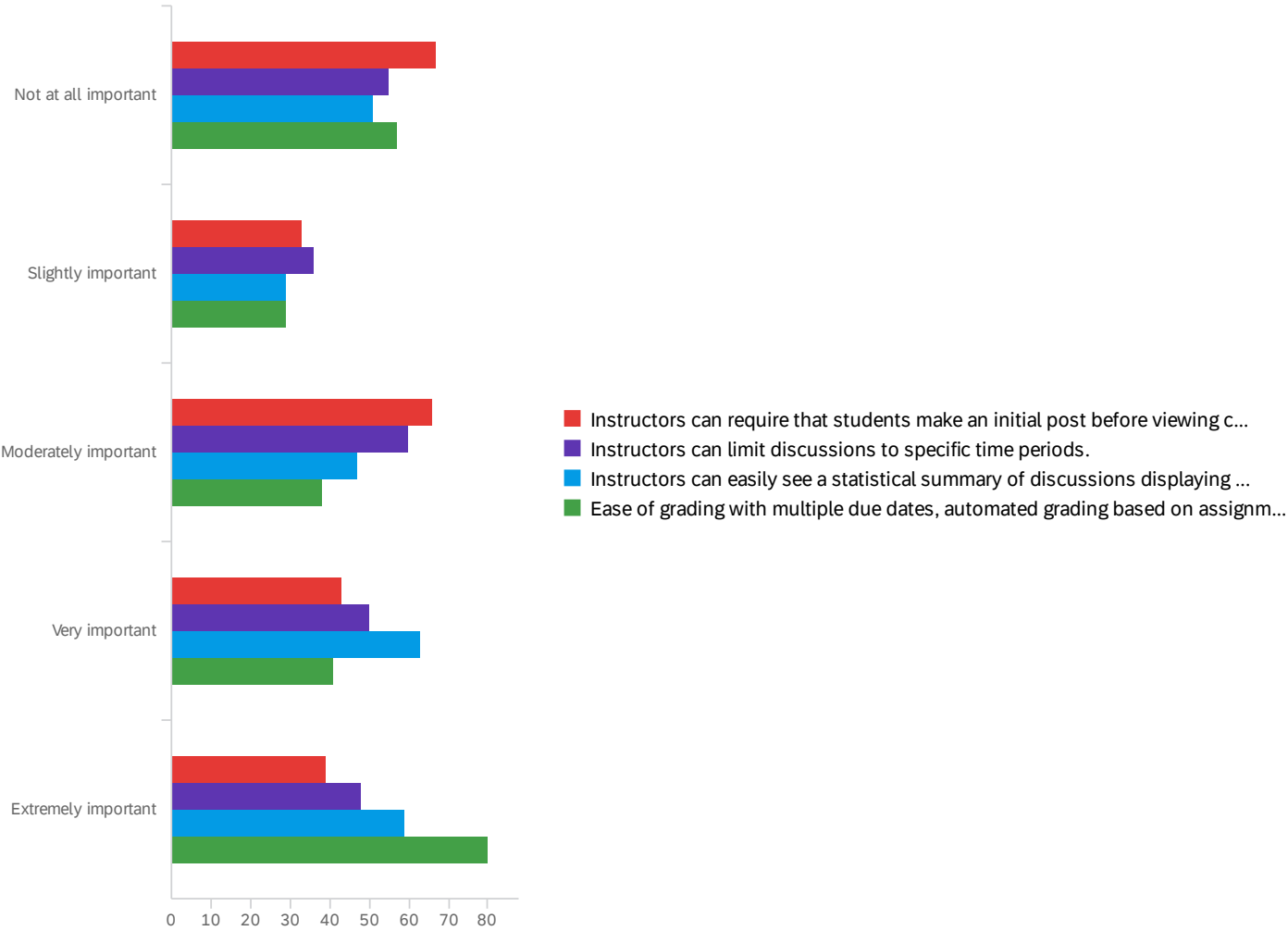i teach large lecture-format courses

Q13_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

not needed in my course

Q14 - Please rate the importance of the features listed below that you currently use or would…

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Instructors can require that students make an initial post before viewing classmates' posts.	1.00	5.00	2.81	1.41	1.98	248
2	Instructors can limit discussions to specific time periods.	1.00	5.00	3.00	1.41	2.00	249
3	Instructors can easily see a statistical summary of discussions displaying each student's participation which can be used to generate grades from the same screen.	1.00	5.00	3.20	1.45	2.10	249

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
4	Ease of grading with multiple due dates, automated grading based on assignment due date structure, grading.	1.00	5.00	3.24	1.57	2.47	245

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	Instructors can require that students make an initial post before viewing classmates' posts.	27.02%	67	13.31%	33	26.61%	66	17.34%	43	15.73%	39	248
2	Instructors can limit discussions to specific time periods.	22.09%	55	14.46%	36	24.10%	60	20.08%	50	19.28%	48	249
3	Instructors can easily see a statistical summary of discussions displaying each student's participation which can be used to generate grades from the same screen.	20.48%	51	11.65%	29	18.88%	47	25.30%	63	23.69%	59	249
4	Ease of grading with multiple due dates, automated grading based on assignment due date structure, grading.	23.27%	57	11.84%	29	15.51%	38	16.73%	41	32.65%	80	245

Showing rows 1 - 4 of 4

Q15 - Do you have any comments related to the DISCUSSION BOARD tools?
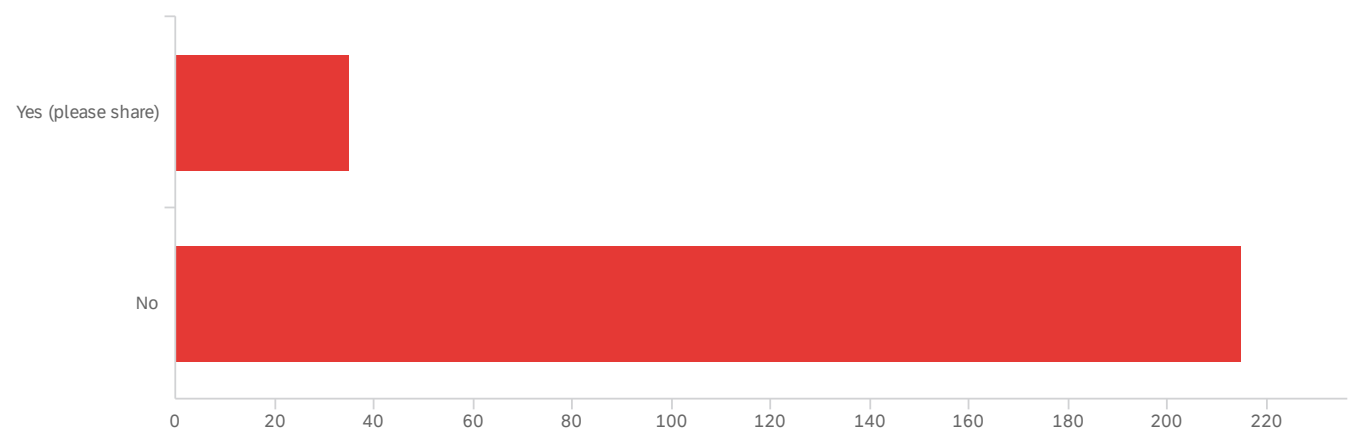
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the DISCUSSION BOARD tools? - Selected Choice	1.00	2.00	1.86	0.35	0.12	250

#	Field	Choice Count	
1	Yes (please share)	14.00%	35
2	No	86.00%	215
			250

Showing rows 1 - 3 of 3

Q15_1_TEXT - Yes (please share)

In my teaching, I can see this becoming more important over time. I use handouts in-class for active learning features/discussion, and I can see real value in doing this online provided all students could do this in-class.

Please license Piazza.

I'm not sure what grading has to do with a discussion board. At any rate, this is something Piazza solves for me.

Blackboard offers most of those except I did not know automated grading was possible. That would be wonderful!!!

Discussion board statistics can be subjective. A comment on a students discussion is not the same as providing content on a students submission.

See above.

No assignments are given in this course.

It is one of the least friendly user interfaces and navigation structures I have ever seen.

At least from the perspective of CSE courses it is hard to provide automated grading (that is why we use dedicated system). In terms of discussion boards it is hard to see a system that could compete with Piazza (for which UB should have a license long time ago).

The discussion boards seem overly complicated on blackboard- the forum>thread hierarchy and ability to grade at both the forum level and thread level makes the set up confusing for most of the things I need to do (though I appreciate it gives instructors more options).

Currently need to update discussion board edits in two places- this is a pain!

Sometimes I do not want to see the students' work every post, but I do want to see them at the end of the deadline after this. Additionally, I'd like the option to have the students' posts not show up in the grading center anymore once they have 100%. It would also be great to be able to grade by thread but then have their overall grade of the forum be the highest thread grade (so that we can encourage high quality discussion without caring particularly on which thread they were engaging).

D2L is not user friendly with discussions

I wish it was possible to have multiple graded due dates within a single Discussion

I'd like to allow anonymous to students posting, but always be able to see poster identity myself. I'd like the ability to have users thumbs up responses. I'd like discussion boards to be easily searchable.

Yes (please share)

But minimally. The discussion function is cumbersome currently, need functions for organized responses and to allow for easy grading. more 'wiki-like' like what students see in their social media

None of the above features are important. How about the ability to include multimedia content in posts? Ability to restrict posts to groups? Ability to include surveys in posts? Ability to pin posts? Ability to make private posts? Ability to refer to other posts easily in responses? Ability to convert from questions to notes? There are a thousand important features in a discussion board that were totally missed here, which is one of the major reasons that I don't use the current LMS feature.

The Blackboard discussion system sucks. It is very awkward to set up, use and grade. Students are not familiar with this old fashioned type of discussion.

Being able to follow a twitter hashtag, or integrate with slack or discord would be more useful.

Multiple due dates is essential - currently you can only have one which makes multiple touch points difficult; also better ability to assign and manage group discussions is needed. Ultra does pretty good in this respect but Learn stinks.

In the old Bb you could grade discussion posts right on the post, but in Ultra it only appears to be gradable in the gradebook. That stinks.

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is not at the top of the list.

don't use this feature, and I'm not sure I would even if it was easier to use

I think this is an area of the Blackboard system that can and should be improved significantly. As of now, it does not support or provide quick topic summarization, like "hot" topics, difficult topics, topics of least interest, which students are more interested in or struggle with which topics, etc. As part of my research in this area, I actually contacted Blackboard company to see if there is an easy way to export the discussion board in a common format (like XML). I was promised that they would look into it and got back to me, though they never.

It would be useful if the instructor could see all (multiple) the participation of a student in a single discussion board.

Instructors should never use discussion boards for assignments.

I marked all of the above of "Not at all important" because I don't use Discussion Boards.

Students rarely use UBLearns discussion board, although I am not sure why. Prefer Piazza.

I've wondered if students would be more into it if it looked more familiar, like if it were visually organized like a texting app.

IMO, the discussion board is for students' questions to be made visible so that the instructors answers can be seen by all. This avoids having to answer the same question multiple times, and encourages student participation (and discussion with other students). This is what a discussion board ought to do. All the features listed on this survey are of little relevance to me.

It would be very useful to also have a graphic oriented space something similar to Mirro.

Effective management of multiple threads of conversation going on simultaneously is important. Being able to organize those hierarchically and link them to created content is also very valuable.

The ease of having a summary of how many posts a student have posted per discussion subject is very useful.

need to improve multi-media features and content

I would love to be able to see what is posted without having to click through each post individually. Ideally this would make it possible to see the whole discussion on one screen.

Q16 - Do you currently use the ASSESSMENT feature (to have student submit assignments…
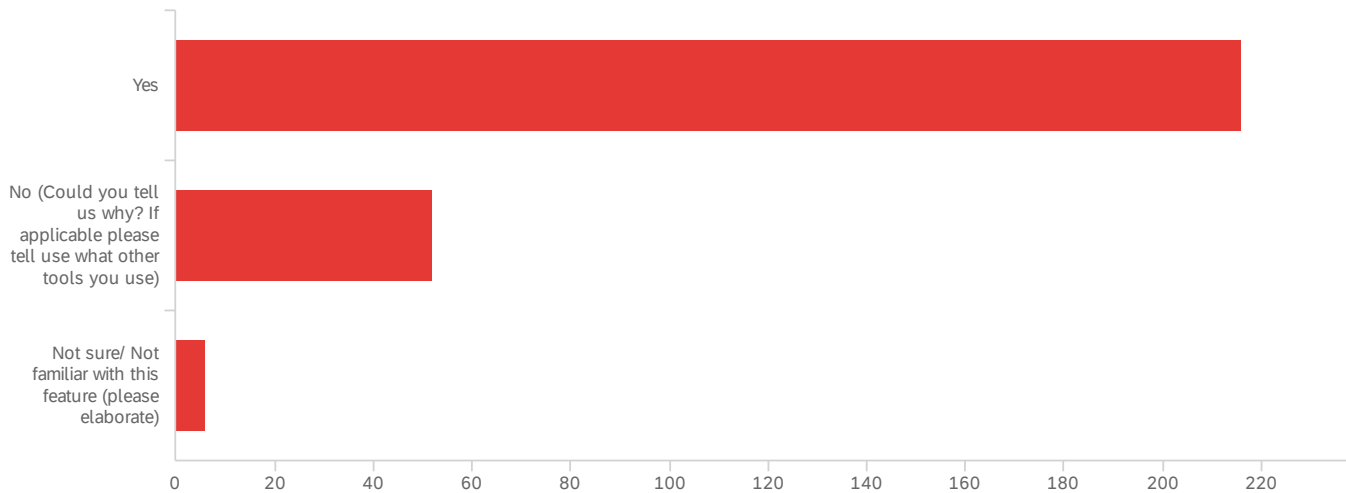
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use the ASSESSMENT feature (to have student submit assignments, take quizzes) in UBLearns? - Selected Choice	1.00	3.00	1.23	0.47	0.22	274

#	Field		Choice Count
1	Yes	78.83%	216
2	No (Could you tell us why? If applicable please tell use what other tools you use)	18.98%	52
3	Not sure/ Not familiar with this feature (please elaborate)	2.19%	6
			274

Showing rows 1 - 4 of 4

Q16_2_TEXT - No (Could you tell us why? If applicable please tell use what other tools…

No (Could you tell us why? If applicable please tell use what other tools...

Studio based course

Autolab manages assignment submission, and I've found the work involved in creating quizzes in LMSes to be not worth their educational value.

using only formative quizzes now and don't really know how to set up other quizzes in UBLearns

No assignments and quizzes given.

I have quizzes every two to three weeks which we immediately discuss and talk about. They know how they are doing in the course from these.

My courses generally involve submitting artwork/portfolios

I tried to use it once last year (when all courses were online). VERY PAINFUL experience...

I don't do tests or quizzes, my assignments are all written or presentations

I don't give those kinds of assessments. Also, we should have policies against student surveillance. Have you spent any time on UBReddit? Students are so angry and indignant about Lockdown Browser, etc., and I agree with them.

I keep track of all grades on excel, it gives me flexibility and control that I like

I understand the utility but do not have access to my grading details after the semester is over. Often I need to go back to grading details, for example, to write recommendation letters for students. I wish I could use the assessment feature that connects to the grade book on UB Learns.

All grading within UBlearns is so slow and hard to figure out that it is not worth it.

I have in the past but is not currently relevant to my courses

Lab courses require students to produce gradable content created experiential learning.

I have students take quizzes in real time on Tophat.

The current one is clunky and awful. The first time I tried it UBLearns crashed during my exam and it was an utter horror show.

I used this when the class was online but not when in person.

Its badly implemented in Blackboard and better free alternatives exist—particularly in Google Drive.

I am not using it for advanced 300/400 level courses or for graduate seminar

No need

I have project based outcomes for my assessments

Most of this type of work is done in-person.

Able to work directly with the small number of students in my classes

Our quizzes are on paper or turned in via Google Forms. Our papers are turned in via email, so I can confirm to students when they are received. Perhaps I'd change this if the assessment tools in the new system were user-friendly and a good fit.

Not necessary

This seems to be more relevant to Course Directors.

I am old school

We only have coding assignments that are submitted through Git systems.

Not this semester. Used when online teaching.

I do it in class or through email.

I have used this function in the past but not now just because my current classes do not contain a quiz/test-style assessment

I'm doing in person exams

Could figure how and there is nobody to ask (I do not want online instruction)

Viewing or downloading submitted documents is terrible in UB Learns. If faculty could download all students' assignments at once, it might be useful.

Students should be treated as adults and so allowed to decide what they what to learn and how. Continuous assessment undermines this important skill that goes with being an adult.

Have used this in the past, it is very difficult and time consuming to create assessments in UBLearns so I avoid it whenever possible.

All assignments are submitted as word documents that I individually assess. There are no quizzes or tests.

No (Could you tell us why? If applicable please tell use what other tools...
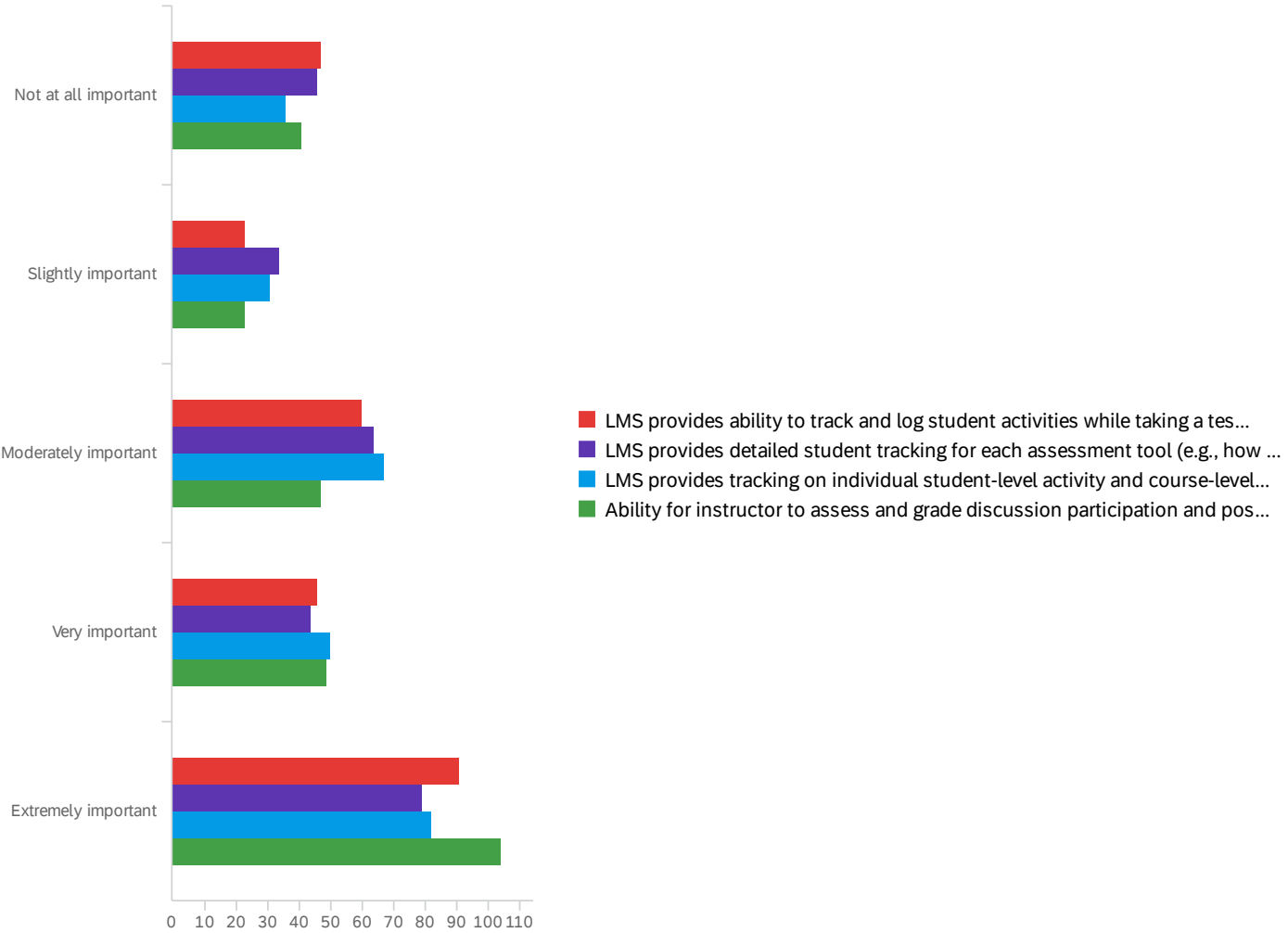
Using Gradescope

I conduct exams on TopHat

Q16_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Not sure/ Not familiar with this feature (please elaborate)

Not used before

not been long enough to learn the function

Q17 - Please rate the importance of the features listed below that you currently use or would…

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	LMS provides ability to track and log student activities while taking a test/quiz.	1.00	5.00	3.42	1.47	2.15	267
2	LMS provides detailed student tracking for each assessment tool (e.g., how many discussion posts were read, how long a student spent on each quiz question).	1.00	5.00	3.28	1.44	2.08	267
3	LMS provides tracking on individual student-level activity and course-level activity.	1.00	5.00	3.42	1.38	1.90	266

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
4	Ability for instructor to assess and grade discussion participation and postings (hooks into grading tool, aggregates individual student's posts and gives basic quantitative stats).	1.00	5.00	3.58	1.46	2.14	264

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	LMS provides ability to track and log student activities while taking a test/quiz.	17.60%	47	8.61%	23	22.47%	60	17.23%	46	34.08%	91	267
2	LMS provides detailed student tracking for each assessment tool (e.g., how many discussion posts were read, how long a student spent on each quiz question).	17.23%	46	12.73%	34	23.97%	64	16.48%	44	29.59%	79	267
3	LMS provides tracking on individual student-level activity and course-level activity.	13.53%	36	11.65%	31	25.19%	67	18.80%	50	30.83%	82	266
4	Ability for instructor to assess and grade discussion participation and postings (hooks into grading tool, aggregates individual student's posts and gives basic quantitative stats).	15.53%	41	8.71%	23	17.80%	47	18.56%	49	39.39%	104	264

Showing rows 1 - 4 of 4

Q18 - Do you have any comments related to the ASSESSMENT tools?
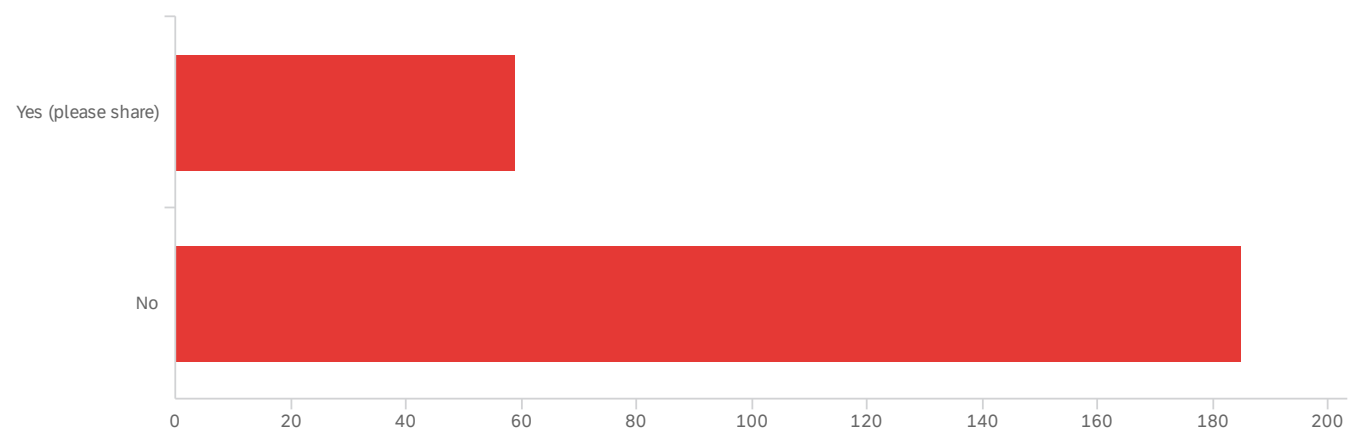
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the ASSESSMENT tools? - Selected Choice	1.00	2.00	1.76	0.43	0.18	244

#	Field	Choice Count	
1	Yes (please share)	24.18%	59
2	No	75.82%	185
			244

Showing rows 1 - 3 of 3

Q18_1_TEXT - Yes (please share)

I was not exactly sure what the 3rd feature above was referring to. However, I would like the process of making quiz/exam questions to me easier, fewer clicks. Also, if a question on an exam is pooled, I would like to see a percentage of correction for that pool.

Assessment/Assignment has been a very useful tool for reproducible grading; I usually create my own rubric and collate in excel; I can see where a note-based grading function on a PDF assignment could be very useful.

I find the assessment tools confusing and hard to use. I use basically only tests (which I use to hand out regular quizzes). The analysis of the tests is one thing, but the creation and management of the tests themselves is another, and more important. It is very difficult and error prone. Creating questions is hard, editing questions is hard, understanding what a question is once it has been created is hard. There is a lot of switching between pages using ok and next and previous type buttons, and the summary views (like the list of all questions in a test) do not show the information that I actually need. Questions with multiple variants are very difficult to view and understand, and UBlearns does nothing to identify questions in a pool that are actually variants (versus different questions). It is a thoroughly unsatisfactory experience. UBlearns rubrics are horrible. Not only are they very rigid and hard to use, structurally, but the fact that they default to the same nine-box grid no matter what, and the fact that they are IMMUTABLE ONCE A SINGLE QUESTION IS GRADED makes them very painful to both create and apply.

I give the same survey 3 times a week to the same class. Would be real nice to be able to repeat a survey just as you can repeat an event in google calendar

A much more valuable assessment tool for me is already present in Autolab: The ability to annotate PDF files with comments (with comments optionally tied to grades).

The assessment tool is not easy to use. It's not as intuitive as other LMS and the way of reusing quizzes (downloading and then reuploading) is terrible.

Robust features for grading student's written work in-line are very important to me (and I don't see any questions referring to that feature of assessment). I find UBLearns very frustrating when grading lab reports in-line.

Easy to grade and view the assignment is extremely important.

Either I don't know everything or it's a bit clunky. Giving assignments is no issue, but creating or importing quizzes that are using multiple choice or some other selection system like organizing in order, ranking, fill in the blank, True or False is VERY time-consuming to create, but easy to grade.

I use quizzes and appreciate automated grading. I don't believe in tools that monitor students while they take exams.

I always find creating tests to be a little clunky in terms of all the settings - and the fact that there is the edit test versus edit text options. Just a lot of things to go through. I am used to it - but, it is definitely not a quick and easy process to create a new test. Or maybe I just need more training.

Better method for by group submissions in terms of deadlines is needed. Adaptive release is not sufficient. It really needs a file type filter (which is weird that it isn't there since Blackboard in 2011 had that feature)

Please ensure it is simple to create questions. Blackboard is awful at how many clicks it takes to create a question since it doesn't save your question setting preferences.

The Blackboard features I use are strong and useful but complex.

More customizability would be great. Also, the reloading after making changes to an assignment is jarring and could be improved.

It should be easier to build assessments like exams. Once click that applies to all questions - and an ability to mark a free response question as correct rather than typing in the specific points (and the ability to provide auto feedback on free response questions) - which ultra doesn't currently allow.

We'd like to see a better markup / drawing tool within UBLearns. Ideally, one that works with Apple Pencil.

It's absolutely inexcusable that Blackboard does not allow copying/duplicating of assignments. Many of the assignments I use are based on the same template, so not being able to duplicate assignments wastes a significant amount of time.

It would be good if I could download and save the assessment and grades so that I will have access to them offline and also after the semester ends.

It would be great to be able to randomize both the appearance of questions AND the order of answer choices simultaneously for multiple choice questions.

I don't want to police students. I would like to be alerted if most students performed poorly on a question, so that I can improve the question.

I want easy test building, importing of old questions, one stop shopping. And I want quizzes/tests to be pretty on the user end. I also want total control over when grades post.

I teach writing. My students' assignments are essay drafts. There are many things I could say about the problems with trying to view and grade multiple drafts.

Again, where are all the actually important features? What about creating/sharing/reusing rubrics? What about copying assignments from one semester to another? Tracking late submissions? Allowing automatic penalties for late submissions? Allowing multiple time ranges for quizzes? Allowing customized creation of assessments with question pools? There are a hundred things that are key to making this useful not asked about here.

The tool must allow faculty to easily obtain a record of the time students put into each segment of the course in a form that makes it easy to compute a participation grade. UBLearns has some templates for this but they are not adequate. I would have to show you to explain the problem I have with it.

When we were remote, we used Blackboard to deliver assessments. The process of setting up and deploying an assessment was clunky and confusing. One of the only negative things about Blackboard.

Yes (please share)

I desperately want the LMS to better integrate into our other tools. (1) It should be easy for professors or graders to initiate an academic integrity process by clicking a button (2) Faculty should be able to click a button to send an alert to advising for a student in trouble (3) Students should be able to click a button to seek help if they need it (4) Advising should be able to look up current grades in a student's courses so they have more data earlier to assist students who are at risk. This to me is close to the most important thing that we should be thinking about with any LMS that we select.

important to have lots of options for question types, exam/quiz structure, randomization/pools, and other academic integrity options.

We started using UBlearns assessment during remote covid teaching. Once forced to master (yet another) technology, will may continue to utilize this. For our large pharmacy professional course, we use in-class assessment partly as a means to get our students to show up for class - the first-years can be immature And we also saw students struggle without the classroom experience. So diminishing the drive to show up for class ('it's part of your grade') by providing the assessments electronically has potential to diminish the quality of the in-class experience. But for short homeworks, this is a very useful tool.

I don't like the system available to give feedback to students on their work. It is cumbersome, inflexible, and not easy to work with.

The assessment should auto-save quiz answers immediately. Currently, there is a delay in this feature. The assessment feature also needs to be more robust. Sometimes, the assessment submits the quiz almost immediately after it has started. The instructor should have the ability to turn on and turn off delegated grading. Currently, grading delegation can be turned on, but not off. Moreover, if grading is delegated, students should be able to see who graded it. Currently, this information is visible only to the instructor.

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is not at the top of the list.

rubrics embedded into assignments are extremely important for my grading efforts (mostly teach courses that involve a lot of writing)

The data reports that Blackboard generates are not refined enough to be useful. Also, at least according to many students, Blackboard has a heavy error rate in reporting student access and usage of course materials. I have often seen an access report showing zero accesses by a student who then persuasively argues that they have in fact accessed the material. I also find the test-building features of Blackboard to be clunky and unintuitive. I've been building my tests on Respondus and then importing them, which I find easier and more logical, but which then can create additional problems of formatting and/or ugly presentation.

It's more convenient to grade coding assignments using scripts and automation tools that cannot easily be integrated into LMS -- they'd require additional computation resources and maintenance.

the settings for releasing the grades to students are overly complicated. There isn't a very easy way to re-grade an item for all students without a lot of clicking. There should be a way to give full credit for an item/ assignment to all students.

Using Box and Blackboard makes it difficult to aggregate this information.

My previous comments are relevant to this question too, i.e., how to semi-automatically assess the quality of each discussion post (difficulty level, relevance to the original post, timeliness, novelty, etc.)

ability to set accommodations for one student that apply to all assessments would be extremely useful, rather than setting for each assessment individually

Yes (please share)

I don't use tracking of student activity and don't feel it would improve my ability to teach if I could do so.

Whatever you do, do NOT adopt an LMS like Moodle. Its Discussion feature is brain dead and makes assessment time consuming and difficult.

In my area, it would be useful to have a tool in which we can present text or video for a specific period of time then it disappears and students can respond to tasks based on what they saw.

I'd love for the tool to allow for team assessments. Using a rubric should be quick and intuitive (much better in Ultra than Classic). Easier team assignments.

It's difficult to easily copy assessments that I already have set up with exactly the settings I need and that I maybe just want to tweak slightly in a copied version. I always seem to need to start from scratch with each assignment, which means I have to click through and change a lot of different settings, and if I miss something, it can have a negative impact on the students' experience with the assessment.

I love being able to give quizzes that are automatically graded & show students explanations. But boy is this a pain to do on Blackboard. Again, it just feels like everything takes too many clicks and too many screens. Things disappear inexplicably. The sequencing of the screens remains a mystery to me; I have to figure out each time how to get from one end to the other. The options (for when to show students which answers, for instance) are worded in a way that does not really resemble normal English, so I have to guess at what it all means. It's all just extremely un-intuitive and time consuming. I would love a system that allowed me to quiz with less time and less stress.

Keeping integration with test prep tools and test banks is very important.

What the students have access to after the assessment or after it has been graded is confusing.

I just want this tool to allow students to upload their assignments, so that I can grade them. I'm not sure I want to police their activity via tracking features.

Blackboards Assessment tools are AWFUL. (rudimentary, too simplistic, and sluggish in the browser, too many confusing options, ...)

Assessment in UBLearns is very problematic. We use it for quizzes, and lots of students have problems with connectivity. Huge numbers of e-mails get sent during every quiz. Last year, we used it for tests, and the lockdown browser caused huge numbers of problems.

I'm very uncomfortable with the idea that the LMS would be used to monitor student activity at a fine-grained level.

Yes (please share)

I am sort of amazed that none of the importance-rating questions actually involve features of the assessment system, and instead almost exclusively focus on surveilling students. I do not want UB's learning systems product to contribute to surveillance of students in their own homes and on their own personal devices. This is entirely unnecessary if the instructor's pedagogy actually accounts for at-home or open-book assignments and exams. The most I want to see about my students is how often they've accessed my course site; I don't need to know about their activity in other places. Actual features of the assessment tool which badly need to be improved include: - the default font size is *extremely* small on quizzes; should be 4-6 points larger in most cases, or simply give us the opportunity to pick the display font size. - the syntax for "sentence jumbles" doesn't permit a range of special characters which happens to make it impossible to ask certain questions in the phonetic sciences: [ ] are used to indicate a blank to be filled in, but is also shorthand for a range of phonetic notations. - each question is worth, for some reason, 10 entire points (why not a default of 1?)

We need to ensure that individual users are made aware of whether the website/system is uploading their work after they click the "submit" button. Something like a progress bar (e.g 0-100%) would be helpful, especially when they have to submit a media file as part of their assignment.

If I give an exam that contains both multiple choice questions and an essay, I do not want students to have access to both types of questions when exam is graded. I only want them to see my feedback (because I re-use the MC questions). Canvas does this but not Blackboard.

On 7 hour exam multiple students end up getting locked out and does not auto save their work. The test taking is just not reliable especially for long tests If student loses internet connection or goes off browser they often lose their test and can't get back in. On 7 hour midterm I had 5 out of 20 students who had to just email me their exam since they got locked out or their answers did not save. This did not happen last year for shorter exams

UB Learns currently is VERY user UNFRIENDLY in how to access uploaded essays to grade, how to check easily for plagiarism, how to post comments on essays while an instructor is grading the essay. SIGNIFICANT CHANGES should be made to make grading much more user friendly or intuitive.

Our master's program is 100% paperless so we utilize the assessment feature a ton. It'd be nice to merge with overall programmatic assessment too.

Making different tests or assignments (such as different test versions) available to different groups or students.

Q19 - Do you currently use any of the third-party integrations (e.g., Panopto, Zoom, UB Box,…
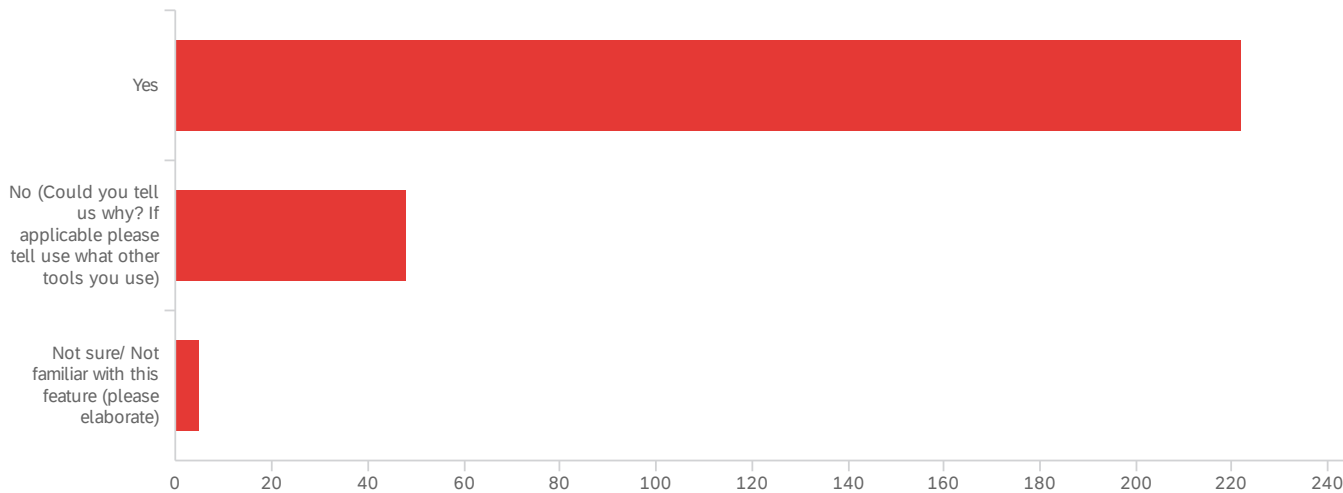
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently use any of the third-party integrations (e.g., Panopto, Zoom, UB Box, UB Clicks) in UBLearns? - Selected Choice	1.00	3.00	1.21	0.45	0.20	275

#	Field	Choice Count	
1	Yes	80.73%	222
2	No (Could you tell us why? If applicable please tell use what other tools you use)	17.45%	48
3	Not sure/ Not familiar with this feature (please elaborate)	1.82%	5
			275

Showing rows 1 - 4 of 4

Q19_2_TEXT - No (Could you tell us why? If applicable please tell use what other tools...

I use Panopto

There has not been a need so far this semester but this is a good reminder when looking forward to next semester planning.

Students have given me feedback that blackboard is complicated enough as it is so adding another tool to the mix is not welcomed.

I haven't had a need.

we don't use them enough to take the time to link

All of the interfaces are too complicated for it to be worth taking the time to figure out. It's so easy to just set up things separately.

I have used them in past semesters, but not currently using them.

I only used these tools when the course was online, not in person like this semester.

No need

I prefer to use these tools independently of UBLearns.

I do not need it

Use Zoom, but not through UBLearns

None are really user friendly. I just upload to youtube and post links.

It is easier to upload my documents (including lecture videos) to UBLearns than using a third-party app, such as Box or Panopto.

All class materials are available within UBLearns. I include links to outside sources within UBLearns.

I had both Panopto and Zoom integrated into UBLearns while teaching remotely during the pandemic. This semester I am back in person so it doesn't feel necessary. I will definitely be using them again anytime I teach online.

I upload videos from recorded zoom lectures rather than use any integration features.

no need

I don't need to.

Used Panopto in the past but no via UBLearns

Not sure how to use it

I am automatically enrolled in Panopto becuase of the size of the class I teach and the rooms I teach in, and also, I share research data via UBBox. But I don't really rely on the fact that they work within UBLearns. I would be happy if they worked even with other LMS.

I do not like using Panopto or UB Clicks. Zoom I use for meeting with students (office hours appointments) but since this is a fully online course, I do not do lessons over Zoom.

Zoom, Panopto, UB Box

Have not been the person responsible for setting these up in classes I've taught.

I upload what the students need into UBLearns.

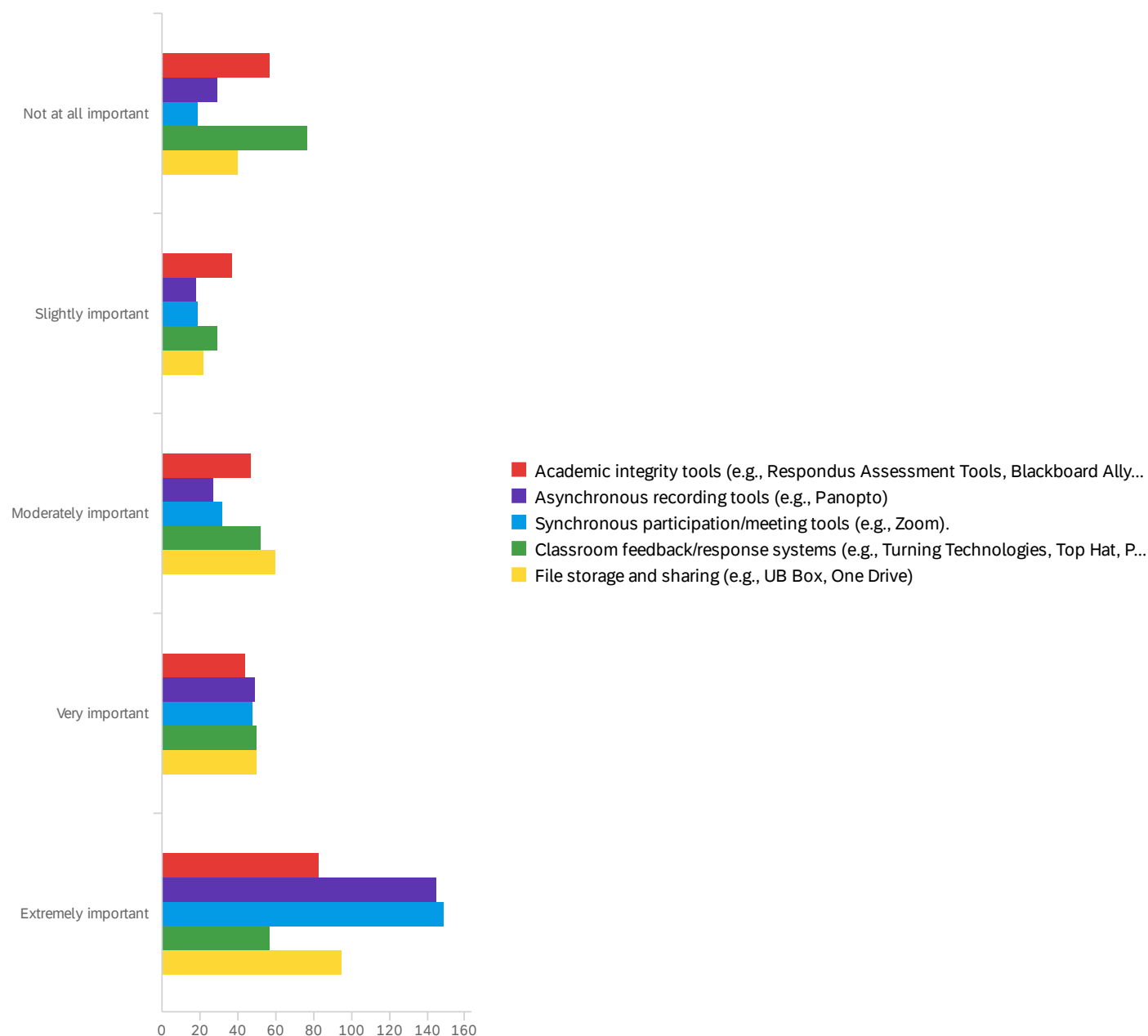If necessary I send individual zoom meeting links to the student from my UB email account.

I find that students are more engaged when the LMS is not the central "hub" for the course. I treat UBLearns as one tool among many, so students access third-party tools directly, rather than going through the LMS.

Q19_3_TEXT - Not sure/ Not familiar with this feature (please elaborate)

Panopto is the **only** thing I use UBLearns for.

Q20 - Please rate the importance of the features listed below that you currently use or would…

Not at all important

Slightly important

Moderately important

Very important

Extremely important

- 🟥 Academic integrity tools (e.g., Respondus Assessment Tools, Blackboard Ally…
- 🟪 Asynchronous recording tools (e.g., Panopto)
- 🟦 Synchronous participation/meeting tools (e.g., Zoom).
- 🟩 Classroom feedback/response systems (e.g., Turning Technologies, Top Hat, P…
- 🟨 File storage and sharing (e.g., UB Box, One Drive)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Academic integrity tools (e.g., Respondus Assessment Tools, Blackboard Ally)	1.00	5.00	3.22	1.53	2.34	268
2	Asynchronous recording tools (e.g., Panopto)	1.00	5.00	3.98	1.37	1.88	268

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
3	Synchronous participation/meeting tools (e.g., Zoom).	1.00	5.00	4.08	1.26	1.60	267
4	Classroom feedback/response systems (e.g., Turning Technologies, Top Hat, Pearson, Piazza)	1.00	5.00	2.93	1.52	2.32	265
5	File storage and sharing (e.g., UB Box, One Drive)	1.00	5.00	3.52	1.42	2.02	267

#	Field	Not at all important		Slightly important		Moderately important		Very important		Extremely important		Total
1	Academic integrity tools (e.g., Respondus Assessment Tools, Blackboard Ally)	21.27%	57	13.81%	37	17.54%	47	16.42%	44	30.97%	83	268
2	Asynchronous recording tools (e.g., Panopto)	10.82%	29	6.72%	18	10.07%	27	18.28%	49	54.10%	145	268
3	Synchronous participation/meeting tools (e.g., Zoom).	7.12%	19	7.12%	19	11.99%	32	17.98%	48	55.81%	149	267
4	Classroom feedback/response systems (e.g., Turning Technologies, Top Hat, Pearson, Piazza)	29.06%	77	10.94%	29	19.62%	52	18.87%	50	21.51%	57	265
5	File storage and sharing (e.g., UB Box, One Drive)	14.98%	40	8.24%	22	22.47%	60	18.73%	50	35.58%	95	267

Showing rows 1 - 5 of 5

Q21 - Do you have any comments related to the THIRD-PARTY tools?
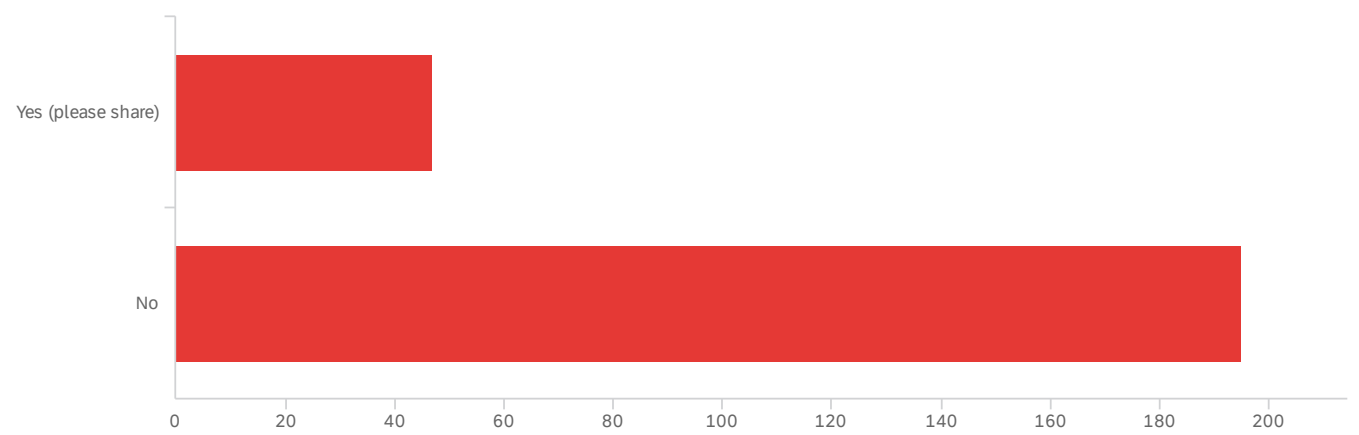
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any comments related to the THIRD-PARTY tools? - Selected Choice	1.00	2.00	1.81	0.40	0.16	242

#	Field		Choice Count
1	Yes (please share)	19.42%	47
2	No	80.58%	195
			242

Showing rows 1 - 3 of 3

Q21_1_TEXT - Yes (please share)

Yes (please share)

I use TopHat for course assignments, and would like to preserve the interoperability between TopHat and the LMS that is currently available in UBLearns.

I would like the ability to grade a student based on the percentage of video they watched. For example Panopto does record this data but it is not able to place it into the grade book. I have to download the Viewing file convert the percentage viewed into a number value (for example if they watch 95% of the video they get 0.95 points), and then up load the Username and data. I would also like to be able to control an individuals ability to see a video, similar to how the quizzes can be given at different day/times.

Panopto has been a good tool for the most part; and Zoom meeting integration/participation is going to be mandatory from now on, one supposes. As part of archiving of teaching materials, a simple UB box sharing service would be nice. There is really no reason any archival information should be removed from the system...

Respondus is spyware and malware and an abomination. I use panopto for classroom recording, and it is fine. Piazza is so much better than ANYTHING that UB offers that it should have a category of its own. It is useful for logistics, for student support, for graded interactions, and many other things. Box and One Drive are both terrible. Google Drive is better. In particular, O365 is difficult to use and often fails to work correctly -- different people editing a document see different versions of teh document, forms and formulas in spreadsheets simply do not work or take literally minutes to open, etc.

Sync is not always good. Not all third-party tools have a seamless integration.

It is very important that there be easy integration between systems that our publishers use especially if we go with ebooks. Integration has been easy with Blackboard and is transferrable from semester to semester via course copy.

Zoom is great.

The integration with Panapto and Zoom is really great - no issues with any of these programs. I am always amazed at how well it all works. Record something on Zoom and then it shows up in Panapto and then I just turn it on in Blackboard - works well!

The "Piazza" integration is just a link, it really isn't integrated in a useful way. There is no API link for us to create custom add ons to support special products. There needs to be support for programming assignment plagerism checking. SafeAssign can be tricked by multiple submissions from the same person. It does not do a good job catching things. There is no option (or at least one that can be found) to submit a file with noted content to ignore.

The ability to integrate with AI tools is extremely important, except that listed tools are rather under-performing. Again, from the CSE perspective integration with tools like MOSS would be very welcome.

Panopto is not a user-centered tool. There is no way to link video in one class to another class. Every time, the instructor should create a copy of a video and move it to another section, which is not effective.

Allowing students a shared workspace if we put them in groups in the LMS is very helpful. Now that they no longer have google accounts, using sharepoint and getting them setup with their microsoft emails is a tedious process.

Respondus stinks. Taking a test with it is like Russian roulette.

Yes (please share)

Panopto-integration with Blackboard does not work with Safari's default settings (which are set to ensure users' privacy on the web), which means that students have to either compromise their privacy on the web or use a different browser to access all course resources. It would be great if Panopto-embeds could work in the LMS without having to allow Third-Party Cookies.

allowing 3rd party tools to download grades into the grade book is preferrable.

zoom integration has been very effective with respect to live streaming content as well as providing recorded lectures for students

Panapto integration of quickly moving meeting recordings into UBLearns courses is excellent. This has been EXTREMELY easy for me, and I'd love to see this retained in the new LMS.

I and my students seem to enjoy the collaborative nature of SLACK and MIRO

Integration to third party tools is very important, especially if the LMS is not strong in a particular area.

Using many different tools is a burden for faculty and students. The U. should support one integrated system and have it set up from the start. Then everyone would be on board with it after taking or teaching one course. Currently instructors in my department are using a variety of different tools. My preference would be to use Teams because it has lots of communication tools that are integrated and it is being used heavily in business. Teams has educational templates but I have not tried them out yet since not all the students have access to Teams.

essential for any remote learning platform

You should allow hosting of custom tools

The priority should be picking an LMS that will improve our workflows on important things, like academic integrity, student advising, and efforts around student retention.

Appointment scheduling tool (like Calendly) would be greatly appreciated.

My low estimation of academic integrity tools is based on our remote teaching; the only way to secure exams -- even with these tools- is to have all of the students in a physically-proctored room. These students are remarkably (too) creative. *IF* there were an effective integrity tool (we used Examsoft - which failed miserably, even with remote video monitoring by examsoft, or the far cheaper subsequent approach, breaking the class into Zoom sections that are monitored in gallery mode by instructors.

The most ideal would be integration with google drive since that is what most students use.

Academic integrity tools are critical to be integrated. Zoom works just fine on its own and I don't need it to be integrated into UBlearns (as long as I can post the zoom link somewhere that's easy to find).

The current LMS is fine. We need plenty of things modified and modernized at UB, but a new LMS is not at the top of the list.

The Breakout rooms are a great tool in zoom. Would be ghood to provide instructor more control and flexibility to use these rooms.

Yes (please share)

The standard academic integrity tool, SafeAssign, is utterly worthless. It catches nothing -- nothing! We were much better off when the campus used the previous software (I can't remember the name).

Box is fine but it's lack of integration into Blackboard creates extra work for faculty.

I would like to see Slido available on computers for use as a feedback/response system

I'm not sure if you include youtube as a third-party tool. It's important to me for youtube video to be easily embedded into the course, so that students don't have to leave the LMS to view them.

Yes! h5p tools, please. We could use so many of these tools to make more interactive assessments and practices for foreign language learning.

faculty need google suite, students have it and it is waaay better than MS teams.

Get better classroom feedback systems!

Hypothes.is is one of the coolest tools I've used on UB Learns.

I used to use piazza as my chief system, but students were not familiar with it and got frustrated so I switched to UBL. If it were integrated in the school LMS, that would be great!

If students had their own directories on UB Learns for material associated with the course (homeworks, files, etc), this one feature would save an immense amount of time. It would also allow faculty to just look in the student's directory rather than hunt for random emails.

Best feature of this LMS

Piazza is great, but is now paid. I wish UB Learn's discussion board was more like Piazza.

The 3rd party tools are great; the process would work better is our LMS was more intuitive and we could do more with it. I don't like having to go external to piazza and then cut and past grades and other necessary info into UBLearns. It would be helpful if we just had one useful portal controlling the learning/teaching data process.

I refuse to take part in policing student activity on their own devices or in their own homes using, i.e., Panopto or Respondus. These programs do not actually function as they purport to function and have an unacceptably high rate of "false positives" that generate cheating accusations or lock-outs from exams. Student anxiety is through the roof given the use of these tools and it has had a palpable effect on morale in *my* classroom this semester even though I refuse to use these tools. Integration with Zoom is quite important, but external file storage less so, since UBLearns already functions as if it were a student-accessible version of UB Box (with assessment built in) for me.

UB needs to increase their monetary investment in third-party tools if we want to maintain and increase our retention rate, particularly since we have a student population that comes from a digital native generation.

Yes (please share)

I am not a fan of the third party tools, I am hesitant of incorporating things like One Drive as they tend to be bulky and bloated.

Box is not used by profs at other schools. It hurts our research to use box instead of Dropbox Also box is hard to save large files Many files never seem to save

All of the integrity tools I've seen so far are absolutely unacceptable intrusions into student privacy. This seems impossible to remedy, so I've just shifted to setting up exams with the expectation that they'll have access to all course materials and the internet.

Q22 - How would you rate your level of familiarity with the UBlearns/Blackboard features me…
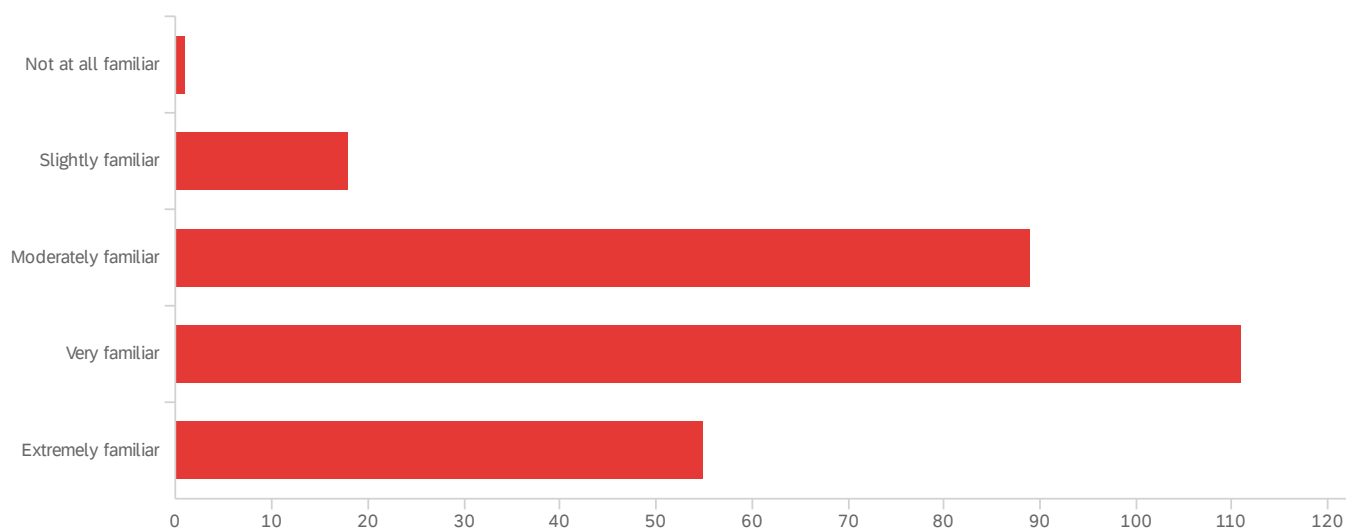
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How would you rate your level of familiarity with the UBlearns/Blackboard features mentioned throughout this survey?	1.00	5.00	3.73	0.87	0.75	274

#	Field		Choice Count
1	Not at all familiar	0.36%	1
2	Slightly familiar	6.57%	18
3	Moderately familiar	32.48%	89
4	Very familiar	40.51%	111
5	Extremely familiar	20.07%	55
			274

Showing rows 1 - 6 of 6

Q23 - Would you be willing to be contacted to discuss this survey as part of a virtual focus gr…
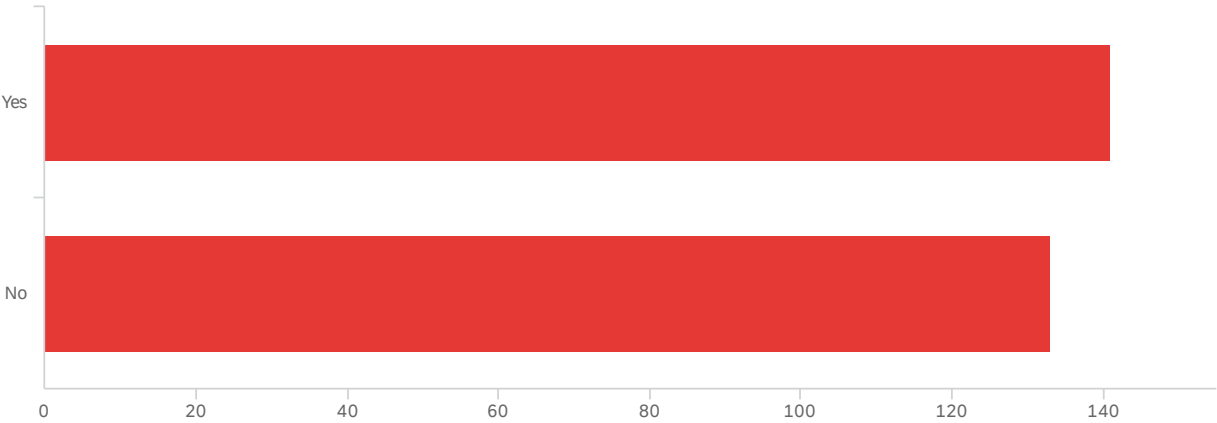
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be willing to be contacted to discuss this survey as part of a virtual focus group?	1.00	2.00	1.49	0.50	0.25	274

#	Field		Choice Count
1	Yes	51.46%	141
2	No	48.54%	133
			274

Showing rows 1 - 3 of 3

End of Report

Appendix G:
Instructor Survey: Key Functionalities Mapped to Rubric Ratings

Category	Functionality	Blackboard Ultra	Brightspace	Canvas
Communication	Emails can be sent to groups based on assignment completion or grade status.	1.8	2.0	2.0
	System provides an announcement/news utility with the ability to create, edit, and schedule announcements that can differentiate between course and section.	0	2.5	2.5
Calendar, Due Dates, and Reminders	LMS notifies students of upcoming and past due dates based on assessments created within the course (such as assignments, texts, discussions, or other items included in the grade book).	2.5	2.5	2.5
	System has a robust calendar feature that contains course events and tasks from all courses, differentiated clearly by course (such as by color).	2.5	2.3	2.8
	System has a robust calendar feature that is automatically updated when an assignment due date is entered or updated in a course.	2.5	1.7	2.8
	System has a robust calendar feature that allows students to access assignments by clicking on them within the calendar.	2.5	2.3	2.8
	System has a robust calendar feature that can be synced with an outside calendar via automatic feed.	2.0	1.7	2.8
Instructional Content	System supports common file types	2.2	2.7	2.7

such as text, multimedia, image and object files that are used in higher education.			
Supports allows selective release of content items to students based on multiple criteria, define how long an item is available to a specific student or selected individuals, establish selection criteria based on membership in a group or grading data or completion criteria, and if multiple criteria can be applied to various groups.	2.3	3.0	2.8
Ability to move and/copy items easily from one module or folder to another	1.8	2.8	2.8
Ability for creation, editing, sharing (across sections, courses, and years), and deletion of tests, surveys, and test banks.	0.0	2.3	2.5
Instructors can import content packages and test banks from publishers.	1.7	2.8	2.8
Provides ability to create courses from previous course content and from templates.	1.3	2.3	2.3
Provides the ability to roll individual items back to a previous version.	0.0	2.5	3.0
Provides a central content repository that allows multiple course sections to point to/display the same content object within each course shell.	0.0	2.3	2.7

	Ability to make changes throughout different sections of courses in "one fell swoop."	2.0	2.3	2.7
	Provision of a utility to create and manage numerous courses at once.	2.0	2.3	2.3
	Solution provides an auto-save function so that in-progress work is not lost in the event of an unexpected system outage.	2.0	2.5	3.0
Discussion Board	Instructors can require that students make an initial post before viewing classmates' posts.	2.3	2.5	2.5
	Instructors can limit discussions to specific time periods.	2.0	2.5	2.5
	Instructors can easily see a statistical summary of discussions displaying each user's participation, which can be used to generate grades from the same screen.	2.0	2.5	2.8
	Ease of grading with multiple due dates, automated grading, based on assignment, due date structure grading.	0.0	3.0	2.7
	Overall	1.8	2.5	2.6

Appendix H: Peer Review of Learning Management Systems

	Institution	LMS
Present Peers	University of Pittsburgh	Canvas
	University of Iowa	Canvas
	Stony Brook University	Bb
	Rutgers University	Canvas
	University of California, Irvine	Canvas
	University of Arizona	D2L
Aspirational Peers	University of Michigan	Canvas
	University of Wisconsin	Canvas
	University of Washington	Canvas
	UCLA	Canvas
	University of California, San Diego	Canvas
	University of North Carolina	Transitioning to Canvas
Other Notable Institutions	Cornell	Canvas
	MIT	Canvas
	Harvard	Canvas
	Penn State	Canvas
	Ohio State	Canvas
	University of Maryland	Canvas