

SUPPORTING HIGH QUALITY TEACHING IN ONLINE PROGRAMS

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ABSTRACT

The increasing popularity of standardized online course design mandates that administrators and course designers understand faculty and student perceptions of the value of specific course components in the online learning management system (LMS). The results of a survey sent to online faculty and students revealed that both groups value the inclusion of videos in course design; however, the perceived value varied as a function of faculty status (full time or adjunct) and student level (undergraduate, master's or doctoral). While students value instructional videos, they believe that rubrics and sample assignments have the greatest potential impact on their learning. The discussion explores the practical implications of meeting both groups' needs in large online programs utilizing standardized course design.

Keywords: teaching, online learning, education, learning management system, course design, large programs

INTRODUCTION

Online teaching and learning have become a mainstay at many colleges and universities. Highlighting the prevalence of online education in higher education, around six million students are currently taking at least one online course (U.S. Department of Education, 2018). The prevalence of online education has fueled the growth of large online learning programs, and large online programs have evolved to be more effective and efficient in how online courses are developed and managed. Rather than investing time and resources for each faculty member to develop their own online course, many large online programs have moved to a centralized, standardized course design model in which online course design occurs independent of online teaching. Typically, courses are developed by a course design team (often comprised of faculty, instructional designers, and instructional technologists) and all faculty teaching that course utilize the same core online course (including

structure, instructional materials, activities, and assignments). Recognizing that choices made in the standardized course design process impact many faculty members, who utilize a wide range of pedagogical strategies, and students with a range of abilities and learning preferences, it is important that institutions understand the perceived value of standardized course design components and learning management system (LMS) features on the quality of online teaching and learning.

MODELS OF COURSE DESIGN

In higher education, course design is on a continuum as far as who is involved and how much responsibility each stakeholder has in the process. As such, there are a number of approaches to online course design:

- Fully Autonomous Approach—faculty led with minimal guidelines (which may be more common with smaller online programs).

- Basic Guidelines Approach—includes some rudimentary university guidelines and some faculty autonomy.
- Highly Specified Approach—includes a more standardized course design and minimal faculty autonomy (Lee, Dickerson, & Winslow, 2012).
- Collaborative Approaches—involve shared expertise and ideas on organization of the course shell by faculty, designers, and even students (Stewart, Cohn, & Whithaus, 2016).

The basic guidelines and highly specified approaches could involve varying amounts of collaboration of faculty with instructional designers, depending on the institution. Course design plays an important role in student learning and satisfaction. According to Grace, Weaven, Bodney, Ross and Weaven (2007), the quality of an online course is often measured by the outcome of student satisfaction (as cited in Lenert & Janes, 2017). Online instruction demands faculty to acquire the necessary skills that will enhance content instruction and delivery. The design team develops a standardized course shell that includes all of the activities, instructions, and learning materials for a particular course. This course shell is then provided to the faculty member to deliver the content without having access to edit or revise it (Caplan & Graham, 2008). It is recommended that in the absence of specific institutional guidelines, faculty should ensure that course structures are standardized in such a way that there is a rationale for each incorporated component. Standardizing the components can stimulate efficient content reusability, help facilitate navigation of the course, and improve the potential for student success (Lee, Dickerson, & Winslow, 2012).

Scott and Temple (2017) mentioned that it is important to note that using standardized online course structures can assist in reducing both the students' and faculty's learning curve as well as increase the efficiency of the students' learning experience in the online classroom (as cited in Lee, Dickerson, & Winslow, 2012). In addition, focusing on knowledge, innovations and pedagogy in the course design of programs is of great significance (Kennedy, Alves & Rodgers, 2015, as cited in Scott & Temple, 2017). Additionally, class size is an important attribute for creating a sense of

community and allowing students to engage with one another. Capping online classes at around 20 students is a recommendation to support student interaction (Dykman & Davis 2008; Kearsley 2002; Smith 2001, as cited in Collins, Weber, & Zambrano, 2014).

ADMINISTRATIVE CONSIDERATIONS

Many institutions discover that the systematic development of online instruction can be challenging and may pose many concerns from faculty members (Herman, 2013). In large online programs, course design is separate from teaching, but high-quality teaching is essential to student success. Recognizing that there is a limitless list of possible instructional tasks, it is helpful to understand faculty perceptions about how course design features, LMS features, and technology can be integrated to streamline their time.

LMS Features

Features of the LMS should enhance the teaching and learning experience and understanding the value of these features are essential. With busy schedules, faculty could benefit from a streamlined and efficient course design. Tensions can arise as faculty may have multiple expectations on top of their teaching responsibilities, including research, presenting, design, and administrative duties (Sher, Williams & Northcote, 2015). Instead of faculty checking and rechecking student work, faculty would benefit from a built-in authentication process in the LMS shell (Amigud, 2013). Having solid course design organization and support enhances the teaching and learning environment.

Technology

Technology integration is a key component in many online classrooms. Lee and McLoughlin (2007) discuss how using social web tools in online classes can help create a space without barriers in which participation within the network community, personalization of the learning experience, and productivity related to knowledge creation can grow (as cited in Moreira, António, Goulão, & Barros, 2017). Web 2.0 tools can be beneficial, but their instability and rate of becoming obsolete in place of newer technologies is a significant problem. Developers and faculty should ensure that the methodology does not rely upon these specific tools but more on the service that they provide (Ornellas & Muñoz Carril, 2014).

Typically, colleges and universities with large online programs utilize a standardized course design model in which all faculty teaching a given course use the same basic online course (i.e., identical structure, instructional content, activities, expectations, etc.). As such, there is a clear differentiation between course development, technology integration, and teaching. In this context—in which individual faculty have limited input or control over course design, instructional technology, or content—it is essential to ensure that LMS features, course design, and instructional supplements allow individual faculty members to invest their time where it has the greatest impact on student learning. The purpose of this study is to explore faculty and student perspectives on course design, course content, and LMS features that have the greatest potential to enhance the online teaching and learning dynamic. Understanding faculty and student views on the benefits and limitations of course design and technology choices are essential for institutions to support high-quality teaching in large online programs.

METHOD

Participants

The participants included faculty and students responding to an anonymous online survey. All respondents were from a large university that has established online and on-campus programs and offers bachelor's, master's and doctoral degrees. Only faculty and students who indicated online as their primary mode of teaching or learning were included in the current study. The online program is fully established and utilizes a faculty-created, centralized curriculum. Courses last eight weeks and are organized into weekly, time-limited, asynchronous modules. All modules contain online lecture information (primarily text-based overviews with embedded multimedia supplements), discussion activities, and homework assignments. Course development is completed independent of course facilitation, so during an active term, faculty are responsible only for teaching the established course. Faculty and students received parallel forms of the same survey adapted in language to be specific to their role at the institution.

Faculty. To prevent survey fatigue for faculty respondents, the original survey was divided into

two parts (Form A and Form B) with a particular set of questions sent to each half of the online faculty population. Both forms of the survey included survey questions targeting the impact of course design and instructional supplements on the quality of online teaching. The complete demographic information of faculty receiving each form of the survey is in Table 1.

Form A. Respondents to Form A included 227 faculty currently teaching online; four responses were eliminated as the individuals were online doctoral mentors and did not teach typical, asynchronous online courses. The remaining 223 faculty responses were included in the analysis; 30 (13.5%) were full-time faculty and 193 (86.5%) were adjunct. Faculty reported an average of 6.77 (SD = 4.54) years of experience teaching online.

Form B. Two hundred faculty teaching online responded to Form B; five responses were eliminated as the faculty mentored online doctoral students rather than teaching a typical online course. Analysis of the remaining 195 faculty indicated that 20 (10.3%) were full time and 175 (89.7%) were adjunct. Faculty reported an average of 6.98 (SD = 4.58) years of online teaching experience.

Faculty Overall. Combining the participants from Form A and Form B, the complete faculty survey responses include 418 respondents that currently teach online. While 50 respondents (12.0%) are full-time faculty, the majority (368; 88.0%) of respondents classify themselves as adjunct faculty. Faculty reported a wide range of online teaching experience (0 to 27 years) with a mean of 6.87 years (SD = 4.56). In addition to their online teaching experience, respondents also indicated they had extensive campus-based teaching experience with a mean of 7.54 years (SD = 8.24). Faculty represent a range of academic disciplines: 22.5% business; 18.9% education; .5% fine arts; 20.6% humanities and social sciences; 20.8% nursing and health care; 1.2% science, engineering, and technology; 10.8% theology; and 4.5% graduate studies. No information was collected on faculty age, gender, or ethnicity.

Students. Student respondents included 2,386 individuals who indicated online learning for their primary mode of education. The breakdown of degrees indicated there were 1,067 (44.7%) undergraduate (205 freshman, 211 sophomore, 284 junior, and 367 senior), 927 (38.9%) master's,

and 392 (16.4%) doctoral students. Most students (48.3%) take six to eight classes per year. Table 2 highlights the typical course load by degree.

Most students were in their first two years at the institution (56.0% in first year, 19.0% in second year) and had experience in the online program (53.6% had taken one to eight online classes; 23.3% had taken nine to 16 online classes). Most students (93.0%) had a grade point average above 3.0. The students were nontraditional with an average age of 43.13 years (undergraduate = 40.67; master's = 43.24; doctorate = 49.56). No information was collected on gender, ethnicity, or program of study.

Materials

Faculty Survey. The complete online survey consisted of five demographic questions, one multiple-choice question, five open-ended essay questions, and nine rating questions (each containing five to 15 individual items requiring independent rating) that explored various aspects of online teaching and learning. Due to the length of the survey, it was divided into two forms (Form A and Form B) that each included approximately half of the questions. The demographic questions were included in both forms of the survey (see Table 3).

Different survey questions targeting the impact of course revisions and instructional supplements were included in each form of the faculty survey (the relevant questions from each form of the survey are listed in Table 5). The participants responded to rating survey items using a five-point Likert scale (1 = no impact; 2 = minor impact; 3 = moderate impact; 4 = major impact; 5 = significant impact; and 6 = not applicable, or 1 = no value; 2 = minor value; 3 = some value; 4 = significant value; 5 = extreme value; and 6 = not applicable).

Student Survey. The complete online survey consisted of eight demographic questions, three open-ended essay questions, and nine rating questions (each containing one to 15 individual items requiring independent rating) that explored various aspects of online teaching and learning. The demographic questions are listed in Table 4, and the questions targeting the impact of course revisions and instructional supplements are listed in Table 5. The participants rated survey items using a five-point Likert scale (1 = no impact; 2 = minor impact; 3 = moderate impact; 4 = major impact; 5 = significant impact; and 6 = not applicable, or 1

= no value; 2 = minor value; 3 = some value; 4 = significant value; 5 = extreme value; and 6 = not applicable).

Procedure

A request to complete the survey was emailed to all faculty and students. The email was sent from the academic affairs office as a component of a larger institutional effectiveness initiative. The initial email requesting faculty and student participation in the survey outlined the purpose and scope of the investigation. Faculty and students electing to complete the online survey accessed it via a link embedded in the email. There was no incentive for participation nor were there any consequences for electing not to complete the survey. The survey was administered anonymously via an online survey tool; no personal identifiers or IP address information was collected. The survey access remained open and available for participants for 30 days and there were no reminders or follow-up emails to encourage participation in the survey. Per the survey design, participants could skip questions, move throughout the survey, and/or change answers to questions at any time. Survey answers were not finalized until the respondents clicked the submit button. At the conclusion of the survey, the respondents were provided a notification with contact information in the event they had questions or comments, or if they desired access to the survey results.

RESULTS

Faculty Perceptions of the Impact of LMS Instructional Components

A one-way ANOVA was conducted to examine differences between full-time and adjunct faculty perceptions of the potential impact of various LMS instructional components. The results indicated that full-time faculty rated instructor-generated LMS instructional components (videos, $F(1, 221) = 5.434$, $p = .021$, and text-based content, $F(1, 221) = 3.945$, $p = .048$) significantly higher (i.e., having greater impact on learning) than did adjunct faculty. There were no significant differences as a function of faculty role on any other LMS instructional components.

An examination of the mean ratings of LMS instructional components by faculty role indicates that both full-time and adjunct faculty agree that videos from the Internet ($\bar{x} = 3.77$, $SD = 1.11$) are

valuable to the online learning experience and provide greater instructional value than instructor-generated videos. Faculty were also consistent in their views that online games/activities ($\bar{x} = 2.66$, $SD = 1.53$) and third-party applications ($\bar{x} = 2.42$, $SD = 1.60$) provided limited value. Table 6 provides the means and standard deviations for all LMS instructional components by faculty role.

Student Perceptions of the Impact of LMS Instructional Components

A one-way ANOVA of student perceptions of the impact that various LMS instructional components have (or could have) on their ability to learn in the online classroom found significant differences in student perceptions by program level for six of the nine instructional components. Specifically, undergraduate students were significantly more likely to believe videos (either created by instructor, $F(2, 2383) = 37.813$, $p = .000$, or from the Internet, $F(2, 2376) = 17.061$, $p = .000$) had an impact on their learning than were master's or doctoral students. Similarly, undergraduate students placed significantly higher value on instructor-created, text-based content ($F(2, 2374) = 5.978$, $p = .003$) and screencasts ($F(2, 2368) = 13.314$, $p = .000$) than did doctoral students. Continuing the trend of lower-level students indicating higher impact ratings, there was a significant difference between all groups of students on the perceived impact of online games/activities ($F(2, 2368) = 20.950$, $p = .000$) and ungraded quizzes/reviews ($F(2, 2362) = 45.930$, $p = .000$), with relatively decreasing value ratings from undergraduate to master's to doctoral students.

Reviewing the mean scores of the perceived impact of LMS instructional components by student program levels, only four of the nine factors showed mean impact ratings above 3.0 (the midpoint of the rating scale indicating "moderate impact"). Students indicated that text-based content (either from Internet = 3.77, $SD = 1.13$ or instructor-generated = 3.72, $SD = 1.26$) was most likely to have an impact on their learning followed by videos from the Internet ($\bar{x} = 3.42$, $SD = 1.50$) and preloaded text-based content ($\bar{x} = 3.19$, $SD = 1.62$). Students were least likely to believe that online games/activities ($\bar{x} = 1.75$, $SD = 1.75$) had an impact on their learning experience. Table 7 provides the means and standard deviations for all LMS instructional components by program level. Tables

8 and 9 provide a comparison of faculty and student perceptions of LMS instructional components.

Faculty Perceptions of Value of Instructional Supplements

An analysis of variance revealed several significant differences between full-time and adjunct faculty perceptions of the value of various instructional supplements. Full-time faculty rated online games/activities ($F(1, 191) = 5.166$, $p = .024$), quiz feedback ($F(1, 193) = 5.038$, $p = .026$), sample papers/assignments ($F(1, 190) = 6.505$, $p = .012$), and rubrics ($F(1, 187) = 4.425$, $p = .037$) significantly higher (i.e., more valuable) than adjunct faculty.

An examination of the mean ratings of each instructional supplement indicates that full-time faculty are generally more likely to believe instructional supplements add value to the online classroom compared to adjunct faculty. All faculty, regardless of being full time or adjunct, rated rubrics ($\bar{x} = 4.15$, $SD = 1.41$) as the most valuable instructional supplement. In addition, faculty agreed that links to websites/resources listed in the course provided significant value ($\bar{x} = 4.04$, $SD = .97$) but that online games/activities did not ($\bar{x} = 3.02$, $SD = 1.44$). There was a noticeable difference in faculty perceptions of the value of sample papers/assignments with full-time faculty ($\bar{x} = 4.74$, $SD = .56$) being much more likely to believe this supplement is valuable compared to adjunct faculty ($\bar{x} = 3.94$, $SD = 1.37$). Table 10 provides the means and standard deviations for all instructional supplements by faculty role.

Student Perceptions of the Value of Instructional Supplements

A one-way ANOVA of the extent to which students believe various instructional supplements would enhance the learning experience revealed significant differences in student opinions by program level (undergraduate, master's, and doctoral) on five of the nine instructional supplements: instructional videos from the Internet integrated into lectures ($F(2, 2363) = 12.902$, $p = .000$), introductory announcements for each module ($F(2, 2367) = 3.008$, $p = .050$), summary announcements for each module ($F(2, 2368) = 4.403$, $p = .018$), online games or activities ($F(2, 2366) = 16.649$, $p = .000$), and feedback in relation to quiz answers ($F(2, 2361) = 81.062$, $p = .000$). Post hoc analysis found that undergraduates were more

likely than master's or doctoral students to value the inclusion of instructional videos from the Internet into lectures. Similarly, undergraduates were more likely than doctoral students to value introductory and summary announcements for each module. The trend for undergraduates to place higher value than master's or doctoral students was also found for online games/activities and feedback for quizzes; for these two instructional supplements, there was a significant difference between all groups.

An examination of mean ratings found that all students, regardless of program level, were most likely to believe that rubrics ($\bar{x} = 4.27$; $SD = 1.04$) and sample papers/assignments ($\bar{x} = 4.14$; $SD = 1.27$) were the most beneficial to their learning experience. There was similar agreement among students that online games/activities were the least beneficial ($\bar{x} = 1.97$; $SD = 1.73$). It is worth noting that online games/activities was the only instructional supplement that fell below the midpoint of student ratings for perceived value in learning. Table 11 provides the means and standard deviations for all instructional supplements. Tables 12 and 13 provide a comparison of faculty and student perceptions of value of instructional supplements

DISCUSSION

It is vital that higher education institutions recognize that course design impacts both faculty and students. In addition, the value of standardized course design components and learning management system (LMS) features are important to reflect upon for the value that they can add to the faculty and student experience. Prior to this study, it was not fully evident the impact that course design had on faculty and students in a standardized online learning environment. The survey and results have provided a greater depth of knowledge for not only course designers but also faculty and administration. The knowledge taken from this information will help to support high quality teaching, especially in the online environment.

Smart course design requires developers to keep in mind the needs of both faculty and students. With this, there are elements to high quality teaching that faculty and staff can control, along with some limitations. While standardized course design offers more consistency, the online environment is limited in how well faculty members can develop and manage their classrooms. While there were

differences in the preferences of undergraduate and graduate students with instructional supplements, the use of rubrics and sample papers were viewed as highly important by all groups. The research also showed a consensus among faculty that rubrics are meaningful for the objective assessment of student writing and are easy to use (Minnich et al., 2018). Since this is the case, standardized course design should implement these items into each and every assignment module.

Technological integration with the encouragement of quality feedback and interaction from the faculty member play influential roles in student learning and satisfaction. The desire for feedback was evident in the survey results provided by students as they find value in both introductory and summary announcements in the classroom as well as preloaded rubrics. In addition, students find value in faculty interaction, especially when adding instructional videos and supplemental Internet links. Student engagement is also noticed by faculty that use active behaviors such as guiding questions, frequent dialogue, and substantial feedback (Faux & Black-Hughes, 2000; Fernandez-Toro & Hurd 2014; Greene & Land, 2000; Nandi, Hamilton, & Harland 2012; as cited in Lundbeg & Sheridan, 2015). The level of interaction with students enhances the overall student-faculty relationship. Identifying what is most important to the student, as well as the faculty member, is key for the overall design process.

Technology integration played a significant role in how well the instructional components were utilized. In this study, the instructional components proved to be valuable to both faculty and student groups. There were similarities and differences among faculty group perceptions. Both faculty groups believed that videos from the Internet provided greater instructional value than instructor-generated videos. There was also consistency among both faculty groups in their overall perception of the integration of less valuable components, such as online games/activities and third-party applications, especially paid publisher resources. Full-time faculty rated online games/activities, quiz feedback, sample papers/assignments, and rubrics significantly higher than adjunct faculty. It was also determined that undergraduates were more likely than master's and doctoral students to value the inclusion of videos from the Internet into lectures. Undergraduates also

found introductory and summary announcements for each module, along with online games/activities and feedback for quizzes, to be more valuable. Among all of those differences across disciplines, all students, regardless of program level, perceived the use of rubrics and sample papers/assignments to be valuable.

Overall, the integration of online games/activities did not provide much value as an instructional component in the classroom setting. This particular area is the only criterion that fell below the midmark, and thus it may be the least valuable for faculty to integrate. Each group's perception provided a clear distinction in what faculty and students felt were most valuable to them in the classroom setting. The examination of these separate components helped to identify those areas that are most impactful and where high-quality teaching and student satisfaction can be achieved. While learning games can add an interest to the curriculum, it is best to focus on adding materials that will enhance the student experience and help them retain information without misusing time.

Time-management and accessibility are two key elements that contribute to the perception of high-quality teaching by faculty. Meeting the educational needs of the student in a classroom environment is a challenge and a primary concern for most schools and/or colleges of education (Amburgey, 2006). In order to address these concerns, lifelong learning must be recognized and can be addressed by the use of professional development (Carnevale and Smith, 2013). Within this study, the disparity of perception between adjunct and full-time faculty groups shed a greater light on the importance of administrative involvement and the need for consistent communication among all. Due to this reality, the continuity of collaboration and professional development should be integrated as a University initiative and primary goal. Schutz, Drake, Lessner, and Hughes (2015) discussed the need for allowing peer feedback in a cross-training effort to offer faculty a better perspective and understanding of best practices in their course. This would mean that both full-time and adjunct faculty would communicate relative areas of their courses with each other with the goal of finding common themes to boost student success. Norming could also be a beneficial practice offered to groups of full-time and adjunct faculty to show them successful

teaching practices within the standardized course shell. Professional development can provide faculty the support and awareness necessary to make effective decisions within their classroom setting. This means that all faculty populations, full time and adjunct, should be included. Because remote online adjuncts are vulnerable to isolation, opportunities for connecting them to other faculty by using virtual collaboration, social connections, and opportunities for scholarship can strengthen the common goal of providing high quality teaching as well as supplemental tools for the standardized course design shell (Schiefer, 2016). Identifying student interests and the practices proven to be most effective are vital in understanding the impact of course design and student satisfaction. Integrating those practices that are relevant and will benefit the student most are key. Although this study focused on undergraduate and graduate groups, it did not provide a breakdown by academic disciplines. Future research could focus on student perspectives of LMS components broken down by discipline.

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Tables

Table 1. Faculty Demographics by Survey Form

	Form A		Form B	
N	223		195	
Full-time	30	13.5%	20	10.3%
Adjunct	193	86.5%	175	89.7%
Online Teaching Experience	6.77 (SD=4.54)	6.98 (SD=4.58)		
Campus Teaching Experience	6.98 (SD=8.16)	8.19 (SD=8.30)		
Academic Discipline				
Business	52	23.3%	42	21.5%
Education	39	17.5%	40	20.5%
Fine Arts	1	.4%	1	.5%
Humanities & Social Sciences	43	19.3%	43	22.1%
Nursing & Health Care	41	18.4%	46	23.6%
Science, Engineering, & Technology	4	1.8%	1	.5%
Theology	29	13.0%	16	8.2%
Graduate Studies	14	6.2%	6	3.1%

Table 2 Typical Course Load by Degree

Course Load	Undergraduate		Master's		Doctorate		Overall	
1 to 3	161	15.1%	84	9.1%	33	8.5%	278	11.7%
3 to 5	193	18.1%	245	26.5%	99	25.4%	537	22.6%
6 to 8	496	46.6%	423	45.8%	230	59.0%	1149	48.3%
9 to 11	133	12.5%	112	12.1%	15	3.8%	260	10.9%
12 to 14	53	5.0%	43	4.7%	2	.5%	98	4.1%
15 to 17	11	1.0%	3	.3%	1	.3%	15	.6%
18 or more	17	1.6%	14	1.5%	10	2.6%	41	1.7%

Table 3. Faculty Survey Demographic Questions

Question	Response Options
How would you describe your primary teaching role?	Adjunct Online Instructor; Full-time Online Faculty; Traditional Campus Adjunct Instructor; Full-time Campus Faculty; Dissertation Faculty; Other
With regard to your primary teaching role, in which discipline area do you primarily teach?	Business; Education; Fine Arts; Humanities & Social Sciences; Nursing & Health Care; Science, Engineering, & Technology; Theology; Graduate Studies
In which of the following modalities do you currently (within the last year) teach? Select all that apply.	Campus; Online; Dual Enrollment
How many years have you taught face-to-face at the college level?	Open answer
How many years have you taught online at the college level?	Open answer

Table 4. Student Survey Demographic Questions

Question	Response Options
What year are you in school?	Freshman; Sophomore; Junior; Senior; Master's; Doctoral; Other
On average, how many courses do you take a year?	1 to 3; 3 to 5; 6 to 8; 9 to 11; 12 to 14; 15 to 17; 18 or more
How many years have you attended this institution? Please indicate to the nearest whole year.	1; 2; 3; 4; 5; 6; 7; 8; 9; 10 or more
Approximately how many traditional CAMPUS classes have you taken at this institution?	0; 1 to 8; 9 to 16; 17 to 24; 25 to 31; 32 to 39; 40 or more
Approximately how many ONLINE classes have you taken at this institution?	0; 1 to 8; 9 to 16; 17 to 24; 25 to 31; 32 to 39; 40 or more
Approximately how many HYBRID/BLENDED classes have you taken at this institution?	0; 1 to 8; 9 to 16; 17 to 24; 25 to 31; 32 to 39; 40 or more
What is your approximate GPA at this institution?	0 to .9; 1.0 to 1.9; 2.0 to 2.9; 3.0 to 3.9; 4.0
What is your age? Please indicate your answer in numeric form rounding to the nearest whole year.	Open answer

Table 5. Survey Questions Targeting Course Revisions and Instructional Supplements

Faculty Questions	Student Questions	Response Options
<p>(Form A) Reflect on the online classroom. Rate the impact that you believe each of the following LMS instructional components has (or could have) on students' ability to learn in your online course.</p>	<p>Reflect on the use of the LMS as a means of supplementing the teaching and learning experience. Rate the impact that you believe each of the following LMS instructional components has (or could have) on your ability to learn.</p>	<ul style="list-style-type: none"> • Videos created by the instructor to teach course content • Videos from the Internet that are relevant to course content • Text-based instructional content created by the instructor • Text-based instructional content from the Internet (websites, links or articles) • Online games or activities • Ungraded quizzes or review activities • Screencasts to demonstrate information on the computer • Third-party applications (paid publisher resources) • Preloaded text-based content
<p>(Form B) Rate the extent to which you think the following course revisions would enhance teaching and learning in the courses you teach.</p>	<p>Rate the extent to which the following instructional components enhance the learning experience.</p>	<ul style="list-style-type: none"> • Instructional videos from the Internet integrated into lectures • Links to relevant websites/resources embedded in the written lectures • Links to relevant websites/resources listed within the course • Introductory announcements for each module • Summary announcements for each module • Online games or activities • Preprogrammed feedback in relation to quiz answers • Sample papers and assignments • Preloaded rubrics • Other (with open-ended response option)

Table 6. Mean Ratings for LMS Instructional Components by Faculty Role

LMS Instructional Components	Full-time		Adjunct		Overall	
	Mean	SD	Mean	SD	Mean	SD
Videos created by the instructor to teach course content	3.77	1.52	3.01	1.68	3.11	1.68
Videos from the Internet that are relevant to course content	4.00	1.02	3.74	1.12	3.77	1.11
Text-based instructional content created by the instructor	3.93	.83	3.44	1.32	3.51	1.27
Text-based instructional content from the Internet (websites, links, or articles)	3.63	.89	3.76	.97	3.74	.96
Online games or activities	2.76	1.46	2.65	1.54	2.66	1.53
Ungraded quizzes or review activities	3.20	1.13	2.76	1.47	2.82	1.44
Screencasts to demonstrate information on the computer	3.53	1.43	2.95	1.65	3.03	1.63
Third-party applications (paid publisher resources)	2.60	1.59	2.39	1.60	2.42	1.60
Preloaded text-based content	3.41	1.21	3.74	1.10	3.70	1.12

Table 7. Mean Ratings for LMS Instructional Components by Program Level

LMS Instructional Components	Undergraduate		Master's		Doctorate		Overall	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Videos created by the instructor to teach course content	3.28	1.75	2.61	2.01	2.57	2.02	2.91	1.93
Videos from the Internet that are relevant to course content	3.61	1.33	3.31	1.58	3.15	1.70	3.42	1.50
Text-based instructional content created by the instructor	3.80	1.15	3.70	1.31	3.55	1.41	3.72	1.26
Text-based instructional content from the Internet (websites, links, or articles)	3.74	1.11	3.84	1.11	3.71	1.23	3.77	1.13
Online games or activities	1.95	1.75	1.73	1.78	1.29	1.61	1.75	1.75
Ungraded quizzes or review activities	2.71	1.79	2.15	1.92	1.75	1.80	2.34	1.88
Screencasts to demonstrate information on the computer	2.76	1.90	2.34	1.95	2.38	2.01	2.54	1.95
Third-party applications (paid publisher resources)	2.08	1.72	1.96	1.78	2.07	1.84	2.03	1.76
Preloaded text-based content	3.16	1.59	33.20	1.62	3.21	1.69	3.19	1.62

Table 8. Comparison of Faculty and Student Perceptions of the Impact of LMS Instructional Components

LMS Instructional Components	Faculty		Students	
	Mean	SD	Mean	SD
Videos created by the instructor to teach course content	3.11	1.68	2.91	1.93
Videos from the Internet that are relevant to course content	3.77	1.11	3.42	1.50
Text-based instructional content created by the instructor	3.51	1.27	3.72	1.26
Text-based instructional content from the Internet (websites, links, or articles)	3.74	.96	3.77	1.13
Online games or activities	2.66	1.53	1.75	1.75
Ungraded quizzes or review activities	2.82	1.44	2.34	1.88
Screencasts to demonstrate information on the computer	3.03	1.63	2.54	1.95
Third-party applications (paid publisher resources)	2.42	1.60	2.03	1.76
Preloaded text-based content	3.70	1.12	3.19	1.62

Table 9. Comparative Ranking of Faculty and Student Perceptions of the Impact of LMS Instructional Components

Rank	Faculty	Students
1	Videos from the Internet that are relevant to course content	Text-based instructional content from the Internet (websites, links, or articles)
2	Text-based instructional content from the Internet (websites, links, or articles)	Text-based instructional content created by the instructor
3	Preloaded text-based content	Videos from the Internet that are relevant to course content
4	Text-based instructional content created by the instructor	Preloaded text-based content
5	Videos created by the instructor to teach course content	Videos created by the instructor to teach course content
6	Screencasts to demonstrate information on the computer	Screencasts to demonstrate information on the computer
7	Ungraded quizzes or review activities	Ungraded quizzes or review activities
8	Online games or activities	Third-party applications (paid publisher resources)
9	Third-party applications (paid publisher resources)	Online games or activities

Table 10. Mean Ratings for Instructional Supplements by Faculty Role

Instructional Supplements	Full-time		Adjunct		Overall	
	Mean	SD	Mean	SD	Mean	SD
Instructional videos from the Internet integrated into lectures	4.25	1.16	3.95	1.05	3.98	1.07
Links to relevant websites/resources embedded in the written lectures	4.30	1.26	3.98	.97	4.01	1.01
Links to relevant websites/resources listed within the course	4.35	.93	4.00	.97	4.04	.97
Introductory announcements for each module	4.05	1.39	3.90	1.19	3.92	1.21
Summary announcements for each module	3.90	1.41	3.54	1.27	3.57	1.29
Online games or activities	3.70	1.45	2.94	1.42	3.02	1.44
Preprogrammed feedback in relation to quiz answers	4.15	.99	3.30	1.65	3.39	1.62
Sample papers and assignments	4.74	.56	3.94	1.37	4.01	1.34
Preloaded rubrics	4.79	.54	4.08	1.46	4.15	1.41

Table 11. Mean Ratings for Instructional Supplements by Program Level

Instructional Supplements	Undergraduate		Master's		Doctorate		Overall	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Instructional videos from the Internet integrated into lectures	3.55	1.33	3.25	1.58	3.20	1.63	3.38	1.49
Links to relevant websites/resources embedded in the written lectures	3.80	1.12	3.76	1.23	3.72	1.22	3.77	1.18
Links to relevant websites/resources listed within the course	3.93	1.02	3.97	.99	3.86	1.07	3.93	1.01
Introductory announcements for each module	3.94	1.10	3.90	1.14	3.78	1.18	3.90	1.13
Summary announcements for each module	3.87	1.13	3.78	1.20	3.67	1.31	3.80	1.19
Online games or activities	2.16	1.72	1.93	1.75	1.58	1.64	1.97	1.73
Preprogrammed feedback in relation to quiz answers	3.80	1.61	3.03	2.01	2.54	2.06	3.29	1.91
Sample papers and assignments	4.19	1.18	4.08	1.34	4.15	1.30	4.14	1.27
Preloaded rubrics	4.27	1.08	4.26	1.03	4.35	.96	4.27	1.04

Table 12. Comparison of Faculty and Student Perceptions of Instructional Supplements

Instructional Supplements	Faculty		Students	
	Mean	Mean	SD	SD
Instructional videos from the Internet integrated into lectures	3.98	3.38	1.49	1.07
Links to relevant websites/resources embedded in the written lectures	4.01	3.77	1.18	1.01
Links to relevant websites/resources listed within the course	4.04	3.93	1.01	.97
Introductory announcements for each module	3.92	3.90	1.13	1.21
Summary announcements for each module	3.57	3.80	1.19	1.29
Online games or activities	3.02	1.97	1.73	1.44
Preprogrammed feedback in relation to quiz answers	3.39	3.29	1.91	1.62
Sample papers and assignments	4.01	4.14	1.27	1.34
Preloaded rubrics	4.15	4.27	1.04	1.41

Table 13. Comparative Ranking of Faculty and Student Perceptions of the Value of Instructional Supplements

Rank	Faculty	Students
1	Preloaded rubrics	Preloaded rubrics
2	Links to relevant websites/resources listed within the course	Sample papers and assignments
3	Links to relevant websites/resources embedded in the written lectures	Links to relevant websites/resources listed within the course
4	Sample papers and assignments	Introductory announcements for each module
5	Instructional videos from the Internet integrated into lectures	Summary announcements for each module
6	Introductory announcements for each module	Links to relevant websites/resources embedded in the written lectures
7	Summary announcements for each module	Instructional videos from the Internet integrated into lectures
8	Preprogrammed feedback in relation to quiz answers	Preprogrammed feedback in relation to quiz answers
9	Online games or activities	Online games or activities