

# You Can't Have It All: Faculty and Student Priorities in the Online Classroom

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While potential teaching activities in the online classroom are unlimited, an instructor's teaching time is not. As such, it is essential that online instructors prioritize limited time to instructional strategies that have the greatest impact on student learning. A survey of 413 faculty and 2386 students examined faculty and student perceptions about instructional components or strategies that have greatest impact on student learning in the online classroom. Findings revealed significant differences in faculty and student perceptions with faculty giving the highest value ratings to non-instructor generated content and students prioritizing text-based instructional content (regardless of source). Overall, faculty tended to place more value on instructional components compared to students. Students rated faculty interaction and feedback as the most valuable component of their online learning experience. Findings explore how institutions can utilize teaching supplements to support faculty's desire to provide content so that instructional time can focus on interaction and feedback.

There is a plethora of instructional opportunities for faculty to promote learning in the online classroom (i.e., post content, facilitate discussions, one-to-one outreach, videoconferencing, feedback, etc.). Despite this wide range of potential teaching strategies, instructors are limited by one key factor: time. Simply put, the amount of time an instructor has available for online teaching is limited and, as such, every instructor must allocate their limited time to prioritize the instructional strategies that they believe will have the greatest impact on student learning. Unfortunately, guidance as to how to prioritize and allocate online instructional time is mixed. Research highlights instructional best practices spanning pedagogical, social, and technical components of online learning as well as virtually every mode of content delivery and communication. The purpose of this study is to examine faculty and student perceptions about instructional components or strategies that they believe have the greatest impact on student learning in the online classroom.

There are numerous books and journal articles offering countless best practices for online teaching. Instructional recommendations span pedagogical, social, and technical domains making it difficult to identify a common core of online teaching best practices. Pedagogical guidelines focus on course facilitation and content delivery, social strategies center on creating space for vibrant participation and engagement, while technical recommendations highlight the integration of technology to foster learning. The wide (and overwhelming) range of recommended online teaching strategies may hinder decisions regarding how to allocate instructional time to most effectively promote student learning. As such, it is essential to understand faculty and student views regarding the potential impact of various instructional components.

## COMMUNITY OF INQUIRY (COI)

Garrison, Anderson, and Archer's (2000) Community of Inquiry (CoI) model has long been the foundational learning theory in the online environment. The CoI model has spurred decisions related to both curriculum development and instructional best practices. The CoI theory consists of three dimensions: teaching presence, social presence, and cognitive presence of which the instructors and students are the main participants (Garrison et al., 2000). These three presences should be the basis for all academic actions in the online modality for creating the ultimate learning

experience. Social presence allows the instructors and students the ability to project themselves as human beings. Social presence is designed to function as a support for cognitive presence (Hajibayova, 2017). The element of cognitive presence is primarily found in the content creation of the course as it focuses on critical thinking and problem solving (Garrison et al., 2000). The last element of CoI, teaching presence, refers primarily to the design and facilitation of the course (Hajibayova, 2017). Since facilitation, feedback, and content delivery are the main pedagogical roles of which faculty engages, they should include the elements of CoI when considering teaching strategies.

## Facilitating Discussions

Instructor engagement should be the cornerstone of a strong and rewarding online course. Gray and DiLoreto's (2016) review of numerous studies determined that students prefer faculty who were good communicators, showed interest in their student's learning, displayed respect, and accurately evaluate student work. Faculty's ability to facilitate discussion in a way that student's perceive their presence is valuable and necessary to increase student engagement and understanding. When learning moves into an online context, executing social presence can be challenging as tone and nonverbal cues are not negotiated through technology (Thompson, Vogler, & Ying, 2017). Faculty who implement respectful, encouraging, and timely communication and feedback create a sense of social presence which is important to facilitating online discussions (Frazer, Sullivan, Weatherspoon, & Hussey, 2017). Some of the keys to a successful pedagogy are the ability to increase student engagement, student motivation, reduce the sense of isolation, and increase student performance in the class discussion. Martin and Bolliger (2018) surveyed one hundred and fifty-five students about their perceptions of engagement strategies. The study found the importance of learner-instructor engagement to be critical and stressed the importance of instructor facilitation. Thus, the more engaged the instructor is in the learning process, the more likely it is that students will be engaged in the learning process.

Martin and Bollinger (2018) found that online students want instructors who support, listen and communicate with them. The study also shared that students found the least important strategies to be those involving synchronous meetings, group work,

and peer review work. Ninety percent of students surveyed shared that structured discussion with guiding prompts to be the most useful (Martin & Bollinger, 2018). Practical social presence strategies for instructors in online discussions include effective expression, open communication, and group cohesion. Affective expression and open communication are developed through students and faculty sharing knowledge and beliefs, while group cohesion is negotiated through a sense of commitment achieved by students and faculty meeting expectations (Watson, Watson, Janakiraman, & Richardson, 2017). A student's sense of community in the classroom through frequent and personalized feedback is also closely connected to the social presence (Yuan & Kim, 2014). While facilitating discussions is an important part of the online faculty workload, practical feedback is a must to help students improve.

### Grading/Feedback

Effective and useful feedback is an essential part of the online classroom (Steele & Holbeck, 2018). While students appreciate most types of faculty feedback, students preferred detailed, personalized, and constructive feedback (Martin and Bollinger, 2018). Authentic learning with real-world relevant feedback was effective (Britt, 2015). Instructor tone, when sharing feedback has a great impact on student performance and teaching evaluations (Dickinson, 2017). Effective feedback is a fundamental skill for faculty as it guides student development (Leibold & Schwarz, 2015). Students who received personalized feedback have had greater academic improvement than a student who did not and have reported feeling more fulfilled in their learning experience (Gallien & Oomen-Early, 2008). Implementing feedback may be an important indicator of the instructor's involvement in the course as students look at feedback as a gauge of instructor involvement, which leads students to believe the learning experience to be more successful (Garrett Dikkers, Whiteside, & Lewis 2013).

Feedback should be detailed, apparent and distinct. Faculty who challenge students while affirming them through personalized feedback can empower students driving them towards success and persistence (Leibold & Schwarz, 2015). Affirmations, as a source of feedback, can come in various forms from simple to personalized. Simple affirmations from faculty (e.g., great job!) are only found to be "useful," while personalized affirmations (e.g., excellent work, the right idea is presented because...) are deemed "very useful" (Wolsey, 2008, p. 318).

Personalized feedback is an important best practice in online teaching. The way feedback is presented also matters. Online learning environments have the advantage of utilizing innovative technology that allows for quality written, audio, and video feedback (Portolese-Dias & Trumpy, 2014). Written feedback is the most common feedback used in an online environment through discussion forums and assignment grading, but there are benefits to using audio and video feedback. The benefits of audio and video feedback include positive student perceptions of constructive feedback (Bourgault, Mundy & Joshua, 2013). Audio feedback is more personal and relational than written feedback (Borup, West, Thomas, & Graham, 2014). Asynchronous video feedback provides visual nonverbal cues, tone, facial expressions and body language that increased student involvement (Parton, Crain-Dorough, & Hancock, 2010). Feedback is an important element of online pedagogy but so is the way the students receive the content.

Instructors who encourage and guide students through reflection and feedback display signs of teaching and social presence (Collins, Grroff, Mathena, & Kupczynski, 2019). Feedback must be clear and consistent aimed at increasing student outcomes and satisfaction (Richardson, Besser, Koehler, Lim, & Strait, 2016). Sheridan and Kelly (2010) found that students believe that clear directions, instructor responsiveness, and timely and robust feedback were of the utmost importance in their course success. Instructor communication, whether to one student or the whole class, may be displayed in various forms through posting in discussion forums, sharing announcements to the entire class, sending emails, or contributing assignment feedback (Richardson & Lowenthal, 2017). Assignment feedback is an important component to student success. How students fair on various assignments within a course and respond to feedback can help to drive content creation and delivery.

### Content Creation/Delivery

Faculty may or may not have an extended role in the way the content is delivered in the online classroom depending on the Learning Management System (LMS) and or university. Content creation and delivery affords the instructor the ability to impact the cognitive presence of classroom. Although, there are many different ways that instructors can create and deliver content to engage learners outside of any LMS or university requirements. Lister (2014) analyzed 17 different studies that determined that students prefer a variety of content presentation. It can be imperative to offer students more choices with content presentation and activities (Khan, Egbue, Palkie, & Madden 2017; Lee, Pate, & Cozart, 2015; Steele, Larson, Nordin, & McIntosh, 2017). Some ways that faculty can incorporate other methods of content delivery are through incorporating technology, videos, gamification, and or other resources that are beneficial to students. Additionally, Khan et al., (2017) found that some of the best practices for content delivery were offering multiple ways to receive the content, clarifying expectations, breaking information down into smaller segments and effective use of the discussion. With the explosion of technology, the possibilities of using technology for content delivery and creations are endless.

Swift (2016) found that student interaction was the determining factor in having a good experience with content delivery and method. McGowan (2018) found that the structured tutorials, video, or guided format with the use of quizzes to promote learning to be an effective manner to deliver content to students. Robertson, Humphrey, and Steele (2019) found that technology for formative assessment could save faculty members time and increase student scores on summative assessments. Technology can complement the delivery of content in the online classroom, but requires intentional faculty focus and applicable design (Phillips, McNaught, & Kennedy, 2012). The rise and advancements of new technologies continue to offer faculty members numerous ways to vary the presentation of content. Khan, Egbue, Palkie, and Madden (2017) found that content delivery that focused on promoting active learning engages students and maximizes learning experiences. Faculty should provide access to tools that engage students and help them reflect on their own level of engagement going beyond reliance on the learning management system (Duta, 2017). While the content presentation is important so is the engagement of the faculty.

## Commonalities

The three main ways that faculty can affect online pedagogy is through their engagement or participation, with their feedback, and content delivery. One of the common themes that emerge is the importance of faculty participation and engagement (Dickinson 2017; Gray & DiLoreto, 2016; Martin & Bollinger, 2018). However, the way to foster this engagement differs. Dalton (2018) found the instructor to be the most important element in the online classroom that is tied to student achievement. The impact of faculty engagement may vary by course, subject area, and level of education (undergraduate, graduate, and doctoral). The first-year series asynchronous online students seem to benefit the most from an increased amount of faculty participation (Steele, Robertson, & Mandernach, 2017). However, a study into engagement levels of first-year and senior students found that a high number of seniors who were distance learners contributed to the discussion in other ways or asked questions than first-year students (Morris & Clark, 2018).

Several different studies cited the importance of feedback to effective pedagogy (Leibold & Schwarz, 2015; Martin & Bollinger 2018; Steele & Holbeck, 2018). However, the delivery method and the effectiveness associated with it differed. Detailed, personalized, and elaborative feedback is much more effective than verification feedback, which reaffirms a correct answer and/or confirms an incorrect answer. The value of the different types of feedback has not been validated or compared with regards to the other variables, of the course, subject area, and level of education.

The last way faculty can influence good pedagogy is through content delivery. Faculty may have more or less control of how the content is delivered depending on the LMS and or university. However, faculty have many different options available to deliver content to meet various student needs and learning preferences regardless of the LMS. Several studies found that students preferred to have different options in how they receive the content (Khan et al., 2017; Lee, Pate, & Cozart, 2015; Lister, 2014; Steele, Larson, Nordin, & McIntosh, 2017). There are so many different ways to vary the presentation content that it is difficult to pinpoint what makes one better than another. However, it seems faculty members cannot go wrong offering multiple options. Frazer, Sullivan, Weatherspoon, and Hussey (2017) conducted a qualitative study with nursing students, finding that students wanted faculty who tried to be connected to their students, were approachable, and responsive.

## Differences

There were many commonalities between the pedagogical themes, but there were also some differences found. Frazer et al., (2017) found that students seek to feel connected with their faculty members. The literature differed in how this can occur. Some studies found that synchronous conferences increased learning noted as a best practice in the articles (Mark & Purcell, 2018; Ng, 2018). However, other research by Martin and Bollinger (2018) found that online students least preferred synchronous meetings. Arslanyilmaz and Sullins (2013) found that the degree to which an instructor participates in the online discussion did not impact the amount of student participation or performance. Several studies found that instructor engagement or participation to be crucial to student engagement and success (Dickinson 2017; Gray & DiLoreto, 2016; Martin & Bollinger, 2018). While one of the main

elements linked to many “best practices” is instructor engagement, feedback is an essential part of student learning as well.

Feedback is a vital element of online learning. Cole et al., (2017) found that students could have a negative emotional disposition to instructor feedback that can hinder student motivation. Thus, the question of what type of feedback is useful versus what type may be detrimental remains. Obviously, not all feedback is created equal. Verification feedback confirms whether an answer is correct or not (Steele & Holbeck, 2018). Whereas, elaborative feedback expounds on how and why a student got an answer correct or incorrect (Steele & Holbeck, 2018). It can be hard to determine what is too much or not enough feedback. Steele and Holbeck (2018) noted that effective feedback could be delivered in more than one way. Feedback is a necessary part of the learning process along with how the content is delivered.

Content delivery allows the instructor to weave in some of their personality, ideas, and spin on the topic. Several studies have noted the importance of how the content is delivered (Khan et al., 2017; Lee, Pate, & Cozart, 2015; Lister, 2014; Steele, Larson, Nordin, & McIntosh, 2017). An abundance of research exists about the best ways for faculty to deliver content that engages students and learning (Khan et al., 2017; Lee, Pate, & Cozart, 2015; Lister, 2014; Steele, Larson, Nordin, & McIntosh, 2017; Mark & Purcell, 2018; Ng, 2018). However, it seems the most finding is that students prefer a choice of how to receive the content. The more options that faculty can offer the better.

## PURPOSE OF THE STUDY

The growth of online learning has resulted in a host of research offering best practices in online teaching and learning. With an ever-increasing range of opportunities to enhance the online teaching and learning experience, it is important to identify student and faculty priorities. The purpose of this study is to determine student and faculty perceptions about instructional components that they believe have the greatest impact on student learning in the online classroom. In addition, we examined faculty views on instructional support and resources that are most valuable in supporting high-quality online teaching.

## METHOD

### Participants

Participants included faculty and students responding to an anonymous online survey. All respondents are from a large university that has established online and campus programs; the university offers bachelors, masters 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 8-weeks in duration 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 independently 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 uniquely 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 unique set of questions sent to each half of the online faculty population. Survey questions targeting the impact of course design and instructional supplements on the quality of online teaching were included in both forms of the survey. Combining the participants from Form A ( $N = 217$ ) and Form B ( $N = 196$ ), complete faculty survey responses include 413 respondents that currently teach online. While 50 respondents (12.0%) are fulltime faculty, the majority (363; 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 7.00 years ( $SD=4.55$ ). In addition to their online teaching experience, respondents also indicated extensive campus-based teaching experience with a mean of 7.51 years ( $SD=8.158$ ). Faculty represent a range of academic disciplines: 22.5% business; 19.6% education; .2% fine arts; 20.8% humanities and social sciences; 19.4% nursing and health care; 1.0% science, engineering and technology; 10.9% theology; and 5.5% graduate studies. No information was collected on faculty age, gender, or ethnicity.

### Students

Student respondents included 2386 individuals who indicated online learning for their primary mode of education. Degree breakdown indicated 1067 (44.7%) undergraduates (205 freshmen, 211 sophomores, 284 juniors, 367 seniors), 927 (38.9%) masters, and 392 (16.4%) doctorate. Most students (48.3%) take 6 to 8 classes per year.

Most students are in their first two years at the institution (56.0% in first year; 19.0% in second year) with experience in the online program (53.6% have taken 1 to 8 online classes; 23.3% have taken 9 to 16 online classes). The majority of students (93.0%) have a grade point average above 3.0. Students tend to be nontraditional with an average age of 43.13 years (undergraduate = 40.67; masters = 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 5 to 15 individual items requiring independent rating) exploring 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. Demographic questions were included in both forms of the survey.

Different survey questions targeting the impact of course revisions and instructional supplements were included in each form of the faculty survey. The target survey question asked faculty to "Rate the impact you believe each of the following instructional components has (or could have) on student learning in your online course." Faculty then rated the following instructional dimensions: instructor-created videos, Internet videos, instructor-created text, Internet text, online games, ungraded quizzes or review activities, screencasts. Faculty responded to rating survey items using a 5-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). Using the same rating scale, faculty also responded to the statement, "Imagine that you were provided with a detailed Instructor Resource Manual for each course that you teach. Rate the value that each of the following resources would have on your teaching." Faculty rated each of the following resources: links to module-specific videos, links to module- or topic-specific websites, module outlines, module summaries, text-based lectures, module-specific announcements, assignment answer keys, general assignment feedback, stock discussion prompts relevant to each discussion, feedback banks with specific comments for each assignment, feedback banks for each discussion question, and feedback banks for discussion participation.

### Student Survey

The complete online survey consisted of eight demographic questions, three open-ended essay questions, and nine rating questions (each containing 1 to 15 individual items requiring independent rating) exploring various aspects of online teaching and learning. Students responded to the target question "Rate the impact that you believe each of the following instructional components has (or could have) on your ability to learn." Students then rated the following instructional dimensions: instructor-created videos, Internet videos, instructor-created text, Internet text, online games, ungraded quizzes or review activities, screencasts. Students responded to rating survey items using a 5-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). Using the same rating scale, students responded to the statement, "Rate the value that each of the following has on your learning." Students rated the following instructional components: module-specific videos, module- or topic-specific websites, module outlines, module summaries, text-based lectures, module-specific announcements, feedback with correct answers for each assignment, general assignment feedback, instructor's participation in online discussions, detailed feedback on your assignment submissions, detailed feedback for discussion questions, and detailed feedback on discussion participation.

## PROCEDURE

A request to complete the survey was emailed to all faculty and students. The email was sent out 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; 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 respondents clicked the "submit" button. At the conclusion of the survey, respondents were provided a notification with contact information in the event they had questions, comments or desired access to survey results.

## RESULTS

An analysis of perceptions about instructional components that have the greatest impact on student learning in the online classroom revealed significant differences in seven of the nine target instructional dimensions. Faculty gave higher value ratings than students on the impact of videos from the Internet [ $F(1, 2594) = 13.584, p = .000$ ], online games or activities [ $F(1, 2585) = 55.262, p = .000$ ], ungraded quizzes or review activities [ $F(1, 2577) = 14.463, p = .000$ ], screencasts to demonstrate information on the computer [ $F(1, 2587) = 11.106, p = .001$ ], third-party applications [ $F(1, 2583) = 7.916, p = .005$ ], and preloaded text-based content [ $F(1, 2587) = 21.070, p = .000$ ]. Students rated text-based instructional content created by the instructor more valuable than did faculty [ $F(1, 2592) = 6.182, p = .013$ ]. The only instructional components that showed similar value ratings between students and faculty were videos created by the instructor and text-based instructional content from the Internet (i.e., websites, links, or

articles). Table 1 shows the mean faculty and student value ratings for each instructional component.

Table 2 provides the relative ranking of each instructional component as a function of the perceived value ratings. While faculty gave the highest value ratings to non-instructor generated content (i.e., videos and text from the Internet as well as preloaded text-based content); students tended to prioritize text-based instructional content regardless of whether it was instructor-generated, preloaded in the course, or from a website. If we examine instructional components as a function of rating, faculty tended to have higher overall ratings of the value of various instructional components compared to students. Using a baseline rating of 3 (which indicated “moderate impact”), students only rated four of the instructional components as providing value to their learning experience. It is also worth noting that students perceived that third-party applications (i.e., supplemental technology or websites associated with the course or textbook) and

**Table 1. Mean Instructional Component Value Ratings**

Instructional Component	Faculty			Student			Overall		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Videos created by instructor	217	3.10	1.68	2386	2.91	1.93	2603	2.92	1.91
Videos from Internet	217	3.80	1.09	2379	3.42	1.50	2596	3.45	1.48
Text-based content created by instructor	217	3.50	1.30	2377	3.72	1.26	2594	3.70	1.27
Text-based content from Internet	217	3.76	.95	2381	3.77	1.13	2598	3.77	1.12
Preloaded text-based content	215	3.70	1.13	2374	3.19	1.62	2589	3.23	1.59
Online games or activities	216	2.67	1.53	2371	1.75	1.75	2587	1.83	1.75
Ungraded quizzes or review activities	214	2.84	1.44	2365	2.34	1.88	2579	2.38	1.85
Screencasts to demonstrate information from computer	217	2.99	1.64	2372	2.54	1.95	2589	2.57	1.93
Third-party applications	214	2.38	1.59	2371	2.03	1.76	2585	2.06	1.75

**Table 2. Ranking of Instructional Components by Perceived Value**

Rank	Faculty	Mean Value Rating	Students	Mean Value Rating
1	Videos from Internet	3.80	Text-based content from Internet	3.77
2	Text-based content from Internet	3.76	Text-based content created by instructor	3.72
3	Preloaded text-based content	3.70	Videos from Internet	3.42
4	Text-based content created by instructor	3.50	Preloaded text-based content	3.19
5	Videos created by instructor	3.10	Videos created by instructor	2.91
6	Screencasts to demonstrate information from computer	2.99	Screencasts to demonstrate information from computer	2.54
7	Ungraded quizzes or review activities	2.84	Ungraded quizzes or review activities	2.34
8	Online games or activities	2.67	Third-party applications	2.03
9	Third-party applications	2.38	Online games or activities	1.75

**Table 3. Value Ratings by Year in School**

Instructional Component	Freshman/ Sophomore		Junior/ Senior		Masters		Doctoral	
	N	Mean	N	Mean	N	Mean	N	Mean
Videos created by instructor	364	3.19	577	3.05	914	2.63	391	2.58
Videos from Internet	363	3.81	575	3.50	912	3.31	390	3.16
Text-based content created by instructor	364	3.97	574	3.71	911	3.71	388	3.55
Text-based content from Internet	364	3.83	577	3.65	911	3.84	389	3.71
Preloaded text-based content	362	3.35	573	3.01	911	3.21	390	3.22
Online games or activities	363	2.22	576	1.83	908	1.73	387	1.29
Ungraded quizzes or review activities	362	3.19	574	2.46	906	2.16	384	1.75
Screencasts to demonstrate information from computer	360	3.16	576	2.53	909	2.34	389	2.38
Third-party applications	360	2.37	576	1.94	909	1.97	388	2.08

online games/activities provided little to no impact on their learning.

In order to more closely examine student perceptions of the relative value of targeted instructional components, student ratings were examined as a function of year in school. One hundred thirty-six students were eliminated from this analysis for failure to specify their year in school. Table 3 provides mean ratings; Table 4 overviews relative rank of each instructional component as a function of the ratings. Undergraduate students gave the highest value ratings to text-based content created by the instructor, while graduate students (both masters and doctoral) gave the highest value ratings to text-based content from the Internet. Undergraduate and masters-level students had similar ratings in the value of videos from the Internet, but doctoral students tended to prioritize text-based content over any other multimedia content presentation. Ungraded quizzes/activities had decreasing value ratings as a function of year in school; ratings of ungraded quizzes/activities were rated the high-

quality of their online teaching. Specifically, the highest ratings of perceived instructional support focused on module-specific videos, outlines, summaries, and websites. Faculty also perceived that assignment-based feedback banks would have “significant value” for enhancing their online teaching but did not see an equivalent value in feedback banks for grading discussions or discussion participation. Likewise, faculty gave the lowest value ratings to stock discussion posts. This is not to imply that faculty don’t value interaction or feedback, but rather that Instructor Manual resources in this area are not perceived as effectively supporting their teaching. Table 6 provides the mean ratings for faculty perception of the value of Instructor Manual resources.

**Table 4. Ranking of Instructional Components by Year in School**

Rank	Freshman/ Sophomore	Mean Value Rank	Junior/ Senior	Mean Value Rank	Masters	Mean Value Rank	Doctoral	Mean Value Rank
1	Text-based content created by instructor	3.97	Text-based content created by instructor	3.71	Text-based content from Internet	3.84	Text-based content from Internet	3.71
2	Text-based content from Internet	3.83	Text-based content from Internet	3.65	Text-based content created by instructor	3.71	Text-based content created by instructor	3.55
3	Videos from Internet	3.81	Videos from Internet	3.5	Videos from Internet	3.31	Preloaded text-based content	3.22
4	Preloaded text-based content	3.35	Videos created by instructor	3.05	Preloaded text-based content	3.21	Videos from Internet	3.16
5	Videos created by instructor	3.19	Preloaded text-based content	3.01	Videos created by instructor	2.63	Videos created by instructor	2.58
6	Ungraded quizzes or review activities	3.19	Screencasts to demonstrate information from computer	2.53	Screencasts to demonstrate information from computer	2.34	Screencasts to demonstrate information from computer	2.38
7	Screencasts to demonstrate information from computer	3.16	Ungraded quizzes or review activities	2.46	Ungraded quizzes or review activities	2.16	Third-party applications	2.08
8	Third-party applications	2.37	Third-party applications	1.94	Third-party applications	1.97	Ungraded quizzes or review activities	1.75
9	Online games or activities	2.22	Online games or activities	1.83	Online games or activities	1.73	Online games or activities	1.29

est by freshman/sophomore undergraduates and consistently had a decrease in perceived value as year in school increased.

To examine the value of instructional support and resources that can be provided to instructors to support high-quality online teaching, an analysis of student views found that students overwhelmingly prioritized instructor feedback and instructor participation in online discussions. While students indicated that all instructional components had at least “some value” (as indicated by a rating of 3), only instructional components related to feedback and interaction were rated as having significant value on the learning experience. Table 5 provides the mean student ratings for the perceived value of targeted instructional components.

An analysis of instructor perceptions about support resources that would provide the most value to their teaching found that instructors believed general, content-based Instructor Manual resources were likely to have the most impact on the

**Table 5. Student Perceptions of Valuable Instructional Support**

Instructional Component	Students		
	N	Mean	SD
Detailed assignment feedback	2374	4.51	0.84
Instructor participation in discussions	2376	4.41	0.94
General assignment feedback	2376	4.26	0.99
Feedback with correct answers	2375	4.17	1.31
Detailed discussion feedback	2370	4.14	1.04
Detailed discussion participation feedback	2373	4.01	1.12
Module outlines	2357	3.95	1.14
Module summaries	2357	3.88	1.18
Module announcements	2373	3.83	1.16
Topic-specific websites	2369	3.82	1.18
Text-based lectures	2373	3.82	1.24
Topic-specific videos	2344	3.5	1.55

**Table 6. Faculty Perceptions of the Value of Instructor Manual Resources to Support Teaching**

Instructional Component		Faculty		
Target Component	Instructor Manual Resource	N	Mean	SD
Topic-specific videos	Links to topic-specific videos	191	4.19	0.99
Module outlines	Module outlines	195	4.18	0.93
Module summaries	Module summaries	195	4.18	0.91
Topic-specific websites	Links to topic-specific websites	196	4.15	0.94
Feedback with correct answers	Answer keys for all graded assignments	196	4.11	1.28
Detailed assignment feedback	Feedback banks with specific feedback comments relevant to each assignment	195	4.01	1.14
Module announcements	Module announcements	196	4.01	1.06
Text-based lectures	Text-based lectures to post	196	4.00	1.06
General assignment feedback	General feedback about the assignment topic	196	3.94	1.12
Detailed discussion participation feedback	Feedback banks for discussion participation	194	3.92	1.19
Detailed discussion feedback	Feedback banks for each discussion question	196	3.91	1.19
Instructor participation in discussions	Stock discussion prompts relevant to each discussion question	194	3.84	1.16

## DISCUSSION

The findings revealed that faculty members perceive themselves as content providers. Instructors felt that the central portion of the “teaching” aspect in the online classroom is through finding or creating content. In this study, instructors rated instructor-manual resources that they believed would help them the most. They gave the highest ratings to the non-instructor generated content (i.e., videos and text from the Internet as well as pre-loaded text-based content). On the contrary, students found what helps them the most was text-based instructional content regardless of the origin (instructor-generated, pre-loaded in the course, or created by the instructor). Faculty found value in interaction but not the degree that students did. However, faculty also felt this was not something that institutions could provide to them in an instructor resources manual. The reason for this could be because many faculty feel that their time is best spent by developing content if they think it is not sufficient. Thus, this could have significant implications for teaching and or the course design of institutions. While instructors prioritize the value of standardized content, students prioritize interaction, and feedback.

Institutions need to be mindful that if instructors do not feel that they have ample standardized content, that is where they will spend their time. However, if institutions can deliver this content by pre-loading it into the course, through course development, or with an instruction manual, it could potentially free up instructors to invest their time in other areas such as interaction/feedback. If institutions can provide standardized content, faculty members may feel that the content delivery aspect of the course and or content needs of the students is accomplished. Therefore, instructors would have more time to devote to giving holistic feedback and engaging in interactions with students. Faculty members felt that feedback/interaction resources are not something that could be presented in an instruction manual. Hence, institutions could help faculty by providing them with some form of streamlined, standardized content. Finally, instructors indicated that providing instructional content via an instructional resource manual would save them time, which they could use to provide more feedback/interaction for students.

What does this look like at the institutional level? Institutions can use this data to train faculty on what instructional supports students are most likely to value and that are more time-efficient for the faculty member. Students indicated that instructor

participation and discussions and detailed assignment feedback were the most crucial elements for their success in the online classroom. Instructors reported that developing content is their priority. For example, if faculty members are spending time searching for videos to supplement material that students are either not watching or do not find much value in versus the text-based content. The faculty member may be better off increasing their participation in the discussions instead of supplementing content. However, if institutions could provide these videos by pre-loading them in the course or making them available in an instructor course manual, the instructor may not even feel that additional content is necessary. Thus, the instructor would be free to spend more time discussing the video with students and engaging them in the discussion. Further, the more content resources that the institution can provide the instructor, the more it will free up the instructor to facilitate the discussion and offer feedback.

Another important aspect of this study is that students found text-based content to be the most helpful. Thus, instructors may be wasting their time by creating multimedia content or other complicated content that depletes their time. The time for investment may not be worth it if students find the same value in text-based content. While all types of content can be considered valuable, the importance of time needs to be a consideration. Institutions can promote content sharing that would be free up more time for faculty while allowing all faculty to share in the content creation process and benefit from it. Institutions could take the top-down approach by providing the resources pre-loaded in course, deliver it in an instructor course manual, or by other ways of generating content development and sharing. Institutions can also encourage the sharing of content among faculty by creating websites, virtual meetings, or Google docs that allow faculty to share resources. Content sharing would not only offer faculty members various resources but also other perspectives for presenting the material and engaging students. However, this can also take on a bottom-up approach, whereas faculty members could share content on websites, Google Docs, or virtual meetings on their own as well. The bottom line is that students want more interaction/feedback, but faculty will always put content first. Instructors felt that institutions could not give faculty the interaction/feedback component. Still, institutions can provide instructors with content that would allow for a more significant investment of time in feedback/interaction with students.

It is important to note that the current study focused exclusively on faculty and student perceptions of value but did not analyze the cognitive impact of each instructional or interaction technique on learning outcomes. As such, it is possible that what faculty and students value may not align with learning outcomes; future research should extend the current investigation to examine the alignment between perceived value and cognitive outcomes. Regardless, perceived value (for both faculty and students) is a key component of the learning experience as people will invest their time and energy into the course components that they believe are helpful. So, even if their beliefs don't match cognitive indicators, these perceptions are still going to drive time-on-task and focus within the teaching and learning experience.

Also of importance, perceived value (for students or instructors) may rest with their satisfaction with the course rather than the course effectiveness in terms of learning impact. As such, information concerning student and instructor perceptions should be balanced with other data more directly informing the cognitive learning experience. This study focused on student and faculty self-perceptions of teaching and learning. But even within this context, the impact of student perception of value cannot be overlooked in the online environment; if students do not perceive that content, interactions, or feedback have value (from an affective perspective), they may not be willing to invest the necessary time in these components to gain the associated cognitive/learning impact. As such, even though student perceptions or student satisfaction is not the only consideration in creating an effective online learning environment, it is an important one that may drive students' investment of time with learning resources.

## LIMITATIONS AND RECOMMENDATIONS

Limitations to this study present a potential for issues or weakness to the study that are out of the researchers control. The following are limitations that were present in the study. Researcher bias may be evident from the participants and researchers as the researchers are also faculty. The participants in this study all teach at the same university, which may limit the perspective some.

Future research could investigate the reasons why faculty and students view the importance of instructional support resources differently. A deeper dive into the reasoning behind these differences could be studied more in-depth with a focus group and or interviews. Also, worth examining is why faculty choose specific instructional resources and how they feel that the content resources can best be shared. Additionally, what role does time and convenience play in selecting particular types of instructional resources? Another interesting aspect would be to explore the relationship between student satisfaction, grades, and the level of instructor interaction/feedback. Does an instructor's level of interaction/feedback affect their student satisfaction? The final consideration is that the potential teaching activities in the online classroom may be unlimited but an instructor's teaching time is not. Finally, it becomes fundamental that online instructors are able to prioritize the limited time they have to devote to instructional strategies that have the most significant impact on student learning. There is a need to continue research that takes the next step to examine the correlation between student perceptions of learning and learning outcomes.

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