Administrative Considerations Impacting the Quality of Online Teaching

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Abstract

While content and pedagogical knowledge are the foundation of quality instruction, there are a number of administrative, policy, and operational factors that influence instructional behaviors. Understanding the influence (positive or negative) of operational functions on teaching and learning can help inform policies, procedures, and support to maximize the teaching and learning dynamic in the online classroom. Survey and interview data were gathered from online full-time and adjunct faculty (n=223). Survey findings indicated that both full-time and adjunct faculty perceive advance notice of course changes as having great impact on teaching effectiveness. Interview findings illuminate Learning Management Software, faculty support, curriculum, and communication as holding greatest importance for administrative consideration of teaching effectiveness. Administrators can use this information to make key policy and process decisions that focus on improving the quality of online teaching.

Introduction

The growing number of faculty teaching online (Allen & Seaman, 2013)has led to an increased interest in understanding factors that influence the quality of online education (Dittmar & McCracken, 2012; Harrison & El Mansour, 2008; Prieto-Rodriguez, Gore, & Holmes, 2016). As online learning becomes a mainstay across colleges and universities, it is imperative that distance learning programs and administrators understand how to best support faculty teaching online (Nordin & Anthony, 2014; Walters, Grover, Turner, & Alexander, 2017). Research has explored a wide range of factors that impact the quality of online learning, yet there is a paucity of research that addresses faculty perspectives on the impact of administrative programs, policy, and support services on the quality of online teaching and learning.

While content and pedagogical knowledge are the foundation of quality teaching, there are a number of administrative, policy, and operational factors that influence instructional behaviors. Research highlights several factors that influence teaching effectiveness in the online environment: administrative programs (Wickersham & McElhany, 2010), instructional technology (Macaulay & Pantazi, 2006), faculty support initiatives (Arbaugh, 2000; Dittmar & McCracken, 2012; González-Sanmamed, Muñoz-Carril, & Sangrà, 2014; Irlbeck, 2008; Mueller, Mandernach, & Sanderson, 2013; Planar & Moya, 2016), scheduling (Tomei, 2006), faculty compensation (Ehrenberg, 2012;

Green, Alejandro, & Brown, 2009), and faculty community (Baran & Correia, 2014; Dittmar & McCracken, 2012; González-Sanmamed, Muñoz-Carril, & Sangrà, 2014; Irlbeck, 2008; Lewis & Abdul-Hamid, 2006; Mueller, Mandernach, & Sanderson, 2013).

Research has explored the influence of four key administrative issues on the quality of teaching in the online classroom: instructional technology, faculty support, scheduling, compensation, and faculty community.

Instructional Technology

The most prevalent areas of instructional technology explored in the literature include Learning Management System (LMS) (Tonbuloglu & Gurol, 2016; Black, Beck, Dawson, Jinks & DiPeitro, 2007), multimedia (Macaulay & Pantazi, 2006), curriculum (Puzziferro & Shelton, 2009), and supplemental technology (Suda, Bell, & Franks, 2011). When considering the LMS, Tonbloglu & Gurol (2016) found that faculty want this element integrated/controlled by the institution, with readily available support. Black, Beck, Dawson, Jinks & DePeitro (2007) suggest that while important to online success, the LMS is simply a vessel to deliver the course content, but one that should be evaluated and considered with feedback from as many impacted parties as possible. Use of multimedia instruction is another component of instructional technology to consider as it helps student performance as the concept of "difficulty" advances; allowing programs to support multiple methods of instruction to meet the needs of students (Macaulay & Pantazi, 2006). Another element of instructional technology is the use of course shells which according to Puzziferro & Shelton (2009) create a sense of uniformity for all students, decrease preparation loads for instructors, but leave the ideal of "quality" instruction open to interpretation. The final piece of instructional technology to consider for this study focuses on the theme of supplemental technology/information, which according to Suda, Bell, & Franks (2011) is essential as students are less than likely to review textbooks and course materials but will rather focus in on materials created/provided by the faculty member.

Faculty Support

Support of online faculty including faculty development (Mueller, Mandernach, & Sanderson, 2013), pedagogical and technology training (Arbaugh, 2000; Irlbeck, 2008; Orr, Williams, & Pennington 2009); peripheral roles (González-Sanmamed, Muñoz-Carril, & Sangrà, 2014), policies (Dittmar & McCracken, 2012), and feedback (Planar & Moya, 2016) have been explored in the context of faculty effectiveness. Implementation of targeted faculty development programming is one of four areas of focus identified by Mueller, Mandernach, & Sanderson (2013) to connect adjunct faculty to fulltime faculty. Focused on effective instructional strategies for online learning, the programming should be asynchronous and web-based to meet the time and location constraints of all faculty (Mueller, Mandernach, & Sanderson, 2013). Faculty development encompasses both technology and pedagogy; and undoubtedly, both lead to teaching effectiveness.

Arbaugh (2000) examined the influence of pedagogical and technological factors and found that pedagogy played the most significant role in student learning in online courses. As a significant influence on student learning, the level of faculty support in the area of pedagogy becomes key. Orr, Williams, and Pennington (2009) surveyed faculty concerning barriers to the planning and delivery of online instruction and concluded that as faculty become more adept with the technology, focus and needs shift to further development in pedagogy. Support through training and development programming should expand beyond these areas to also include how educators evaluate student performance. Planar underscores the importance of effective personalized feedback in the student experience (2016), making this an important area of focus for faculty support efforts.

While pedagogy and technology are important considerations for faculty development, another

theme that emerged related to faculty support in online teaching effectiveness was that of peripheral roles (González-Sanmamed, Muñoz-Carril, & Sangrà, 2014). The authors identify seven roles (social, evaluator, manager, technologist, advisor/counsellor, personal, and researcher) as associated with online teaching effectiveness (2014). González-Sanmamed, Muñoz-Carril, and Sangrà (2014) explored faculty perceptions of their own proficiency and development needs in each of the seven roles and identified the importance of providing developmental support in each of these areas (2014).

Finally, institutional policies emerged as an important theme to faculty support. Institutions should consider policies that will create the supportive culture in which supporting faculty through training and development is an expectation. Faculty training and development related to university policies is an important consideration (Dittmar & McCracken, 2012; González-Sanmamed, Muñoz-Carril, & Sangrà, 2014), so are policies related to faculty training and development (Mueller, Mandernach & Sanderson, 2013). While institutions regularly incentivize training and development in position descriptions and contracts for fulltime faculty, opportunity also exists within the context of adjunct faculty. Mueller, Mandernach, and Sanderson also propose that universities explore structures and policies that encourage adjunct faculty to invest further in themselves beyond their course contracts. Policies such as these create accountabilities, partnerships, and expectations between the institution and the faculty member.

Class size, faculty compensation, and course scheduling.

While class size, faculty compensation, and course scheduling are administrative factors outside the control of individual faculty, it is important to consider the impact of each on teaching effectiveness. Simply put, administrative policies, practices, and procedures can often unintentionally help – or hinder –faculty support, motivation, and commitment.

To address budget constraints, institutions often increase class size or teaching loads (Mueller, Mandernach, & Sanderson, 2013); while the financial benefits of these approaches are clear, it is important to consider the impact of class size on student learning (Harrison & El Mansour, 2008). Despite disagreements in the current literature about what constitutes a "perfect" online class size, there is a general consensus that smaller classes tend to be associated with outcomes that are more positive. Tomei (2006) suggests that the "perfect" online class size is twelve students; but research by Sorenson (2015) indicates that faculty performance is consistent up to 30 students. Additional research by Arzt (2011) echoes the slightly large class size and finds classes of 12-22 to be most desirable in the online classroom. While these "perfect" numbers may not be practical or realistic within institutional budget constraints and instructional resources, Tomei explains that it should be the target as positive results are more likely when compared to larger classes.

While class size is outside the control of the instructor, institutions should consider class size as a function of teaching effectiveness. Research on online education finds that faculty workload is directly related to class size (Cavanhaugh, 2005; Mupinga & Maughan, 2008; Rockwell, Schauer, Fritz & Marx, 1999). When class sizes are smaller, it is feasible to have higher expectations in relation to instructor interaction, engagement and feedback; in contrast, larger class sizes may mandate shifts in curriculum or course expectations to ensure manageable faculty workload (Harrison & El Mansour, 2008). Recognizing the instructors only have a finite amount of time available to devote to their online teaching (Mandernach & Holbeck, 2016), shifts in class size directly impact on the teaching quality that instructors are able to provide.

Faculty compensation may also influence teaching effectiveness. Not only do higher paying institutions have the potential to attract more qualified faculty, but also compensation may influence the motivation and commitment of an instructor's teaching activities (Windes & Lesht, 2014). Time is limited, and individuals often have to prioritize time and effort in relation to the compensation

they receive. As such, low pay may translate into less time-on-task dedicated to instructional activities. In addition, higher pay may increase an instructor's willingness and ability to engage in professional development, technology, or interactions that would further foster teaching effectiveness.

Related to limited time, the consistency or inconsistency by which an instructor is scheduled to teach a given course may impact teaching quality. If a faculty member has a consistent teaching schedule, then they have an opportunity to build course-specific instructional resources and enhance their expertise in that course. In contrast, if teaching schedules are not consistent, there are three potential pitfalls: 1) faculty may have decreased motivation to invest in the creation of instructional resources for a course they may never teach again; 2) faculty are constantly in 'new course prep' mode so time that could be spent on student interaction or feedback must be invested in instructional preparation and development; and 3) repeated teaching of the same course leads to higher level of expertise, comfort and resource development that, in turn, promotes better teaching. While the issue of consistent course schedules is often discussed as a function of job stability and fairness for adjunct faculty (Giannoni & Tesone, 2003), consistency in course schedules can impact teaching effectiveness – and student learning – in a meaningful way.

Faculty Community

Online teaching creates the unique opportunity for faculty, either fulltime or adjunct, to teach remotely. The geographic separation from campus may prevent online faculty from the benefits of daily interaction, community, and opportunities for collaboration that are inherent in campus-based teaching position. The remote nature of online teaching has the potential of leaving faculty feeling isolated and disconnected from the campus-based faculty community (Baran & Correia, 2014; Mueller, Mandernach, & Sanderson, 2013). Reduced opportunities for collaboration and resource sharing with the broader faculty community may hinder teaching effectiveness.

Online learning and faculty effectiveness has been discussed in the context of community (Baran & Correia, 2014; Lewis & Abdul-Hamid, 2006), collaboration (Baran & Correia, 2014; Dittmar & McCracken, 2012; Mueller, Mandernach, & Sanderson, 2013), development of best practices (Irlbeck, 2008); the opportunity to share resources (Irlbeck, 2008; Orr, Williams, & Pennington 2009), team based approach (Orr, Williams, & Pennington 2009), and communication (González-Sanmamed, Muñoz-Carril, & Sangrà, 2014). The importance of faculty community in supporting effective teaching emphasizes collegial learning groups, peer support, and mentoring. Prioritizing this important factor may have the ability to unite and ignite important work of the faculty as a community and may lead to teaching effectiveness.

Community provides an excellent platform for collaboration particularly in areas of emerging technologies such as web 2.0 tools (Dittmar & McCracken, 2012). Dittmar and McCracken (2012) developed the META Model for the development of high performing online faculty. The model includes four components, each with associated themes (Mentoring, Engagement, Technology integration, and Assessment) of collaboration and community (2012). González-Sanmamed, Muñoz-Carril, & Sangrà (2014) proposed that the collaborative approach to online teaching including community and teamwork could strengthen faculty development of peripheral roles. In addition, teaching efforts including the development of best practices (Irlbeck, 2008) and the opportunity for faculty to share resources (Mueller, & Mandernach, 2013; Orr, Williams, & Pennington, 2009) as benefits of collaborative teaching communities.

Purpose

As indicated by existing research, many administrative factors have the potential to influence teaching effectiveness in the online classroom. While each of these factors has the potential to influence instructional practices, there is limited information on faculty perceptions about which

factors are most influential to online teaching. Understanding the influence (positive or negative) of operational functions on teaching and learning can help inform policies, procedures, and support to maximize the teaching and learning dynamic in the online classroom. Equally important is an awareness that most, if not all, of these factors are outside of the control of individual faculty members. As such, it is essential to gain faculty feedback on institutional policy, structures, and procedures that can either support or hinder effective instructional practices. The purpose of this study is to explore faculty perceptions about administrative, program, or policy factors that impact the quality of online teaching and learning. Understanding the influence (positive or negative) of operational functions on teaching and learning can help inform policies, procedures, and support to maximize the teaching and learning dynamic in the online classroom. Another likely byproduct of this understanding and the resulting efforts include a greater sense of community between administration and faculty, which in turn benefit students through faculty growth and stability.

Methods

Materials

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. Survey items were developed based on key considerations highlighted in the literature; survey was reviewed for content validity by two experts in online education. Prior to survey administration, survey was pilot-tested by a faculty focus group to ensure readability and clarity. 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; demographic questions are listed in Table 2.

Table 2: Survey Demographic Questions

Question	Response Options
How would you describe your primary teaching role?	Adjunct Online Instructor; Fulltime Online Faculty; Traditional Campus Adjunct Instructor; Fulltime 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

Questions targeting the impact of administrative considerations on the quality of online teaching were only included on Form A of the survey; the two survey questions relevant to this study are listed in Table 3. Participants responded to rating survey items using a 5-point Likert scale (1 = no value; 2 = minor value; 3 = some value; 4 = significant value; 5 = extreme value; and 6 = not applicable).

Table 3: Survey Questions Targeting Administrative Factors

Question	Response Options
Rate the impact or value of each of the following factors on the quality of your online teaching.	• Consistent and predictable schedule of specific courses that you teach • Lead time of course assignments in relation to class start • Opportunities for collaboration with peers teaching the same course • Opportunities for collaboration with peers teaching in the same modality • Increased input on course revisions • Review faculty comments on end-of-course surveys • Notification of course changes (curricular, assignments, etc.) • Notification when students are added or dropped • Other (with open-ended response option)
What can the university do (or provide) to enhance the quality of your online teaching? How can administration support you to foster high-quality online instruction?	Open response

Procedure

After receiving IRB approval and site authorization, a request to participate in the survey was emailed to all faculty. The email was sent out from the academic affairs office as a component of a larger institutional effectiveness initiative. The initial email requesting faculty participation in the survey outlined the purpose and scope of the investigation. Faculty 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 faculty clicked the "submit" button. At the conclusion of the survey, faculty were provided a notification with contact information in the event they had questions, comments or desired access to survey results.

Participants

Respondents included 227 faculty currently teaching online; 4 responses were eliminated, as the individuals were online doctoral mentors and did not teach typical, asynchronous online courses. The resultant 223 faculty responses were included in the analysis; 30 (13.5%) are fulltime faculty and 193 (86.5%) are adjunct. Faculty reported a wide range (0 to 27 years) of online teaching experience with an average of 6.77 (SD=4.54) years; in addition, faculty indicated an average of 6.98 (SD=8.16) years of experience teaching traditional campus-based courses.

Faculty represent a range of academic disciplines: 23.3% business; 17.5% education; .4% fine arts; 19.3% humanities and social sciences; 18.4% nursing and health care; 1.8% science, engineering and technology; 13.0% theology; and 6.2% graduate studies. No information was collected on faculty age, gender or race.

All faculty respondents teach online at a single-target university in a large, fully established online program that 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 solely for teaching the established course.

Results

Data was cleaned to remove incomplete responses and eliminate respondents who did not indicate "online as their primary teaching mode. An analysis of faculty ratings of administrative factors that impact the quality of online teaching found significant differences between fulltime and adjunct faculty in their perceptions of administrative factors that have the greatest impact on the quality of their online teaching. As indicated in Table 4, a one-way ANOVA revealed significant differences in fulltime versus adjunct faculty perceptions for six of the eight administrative considerations. Specifically, adjunct faculty were more likely than fulltime faculty to believe that lead time of course assignments and reviewing faculty feedback from end-of-course evaluations would have an impact on the quality of their online teaching. In contrast, fulltime faculty were more likely than adjunct faculty to rate collaboration with disciplinary peers, collaboration with other online faculty, input on course revisions, and notification of course changes as having a higher impact on online teaching quality. There was no difference between adjunct and fulltime faculty's perceptions of the impact of a consistent/predictable teaching schedule or notification of when student rosters change (i.e., drops or adds). Table 5 provides mean ratings for each administrative factor by faculty role.

Table 4: Significant Differences of Faculty Role in Rating Impact of Administrative Factors

Administrative Factor	df	F	p
Consistent and predictable schedule of specific courses that you teach	1, 220	.289	.591
*Lead time of course assignments in relation to class start	1, 219	19.501	.000
**Opportunities for collaboration with peers teaching the same course	1, 219	10.337	.002
**Opportunities for collaboration with peers teaching in the same modality	1, 219	10.377	.001
**Increased input on course revisions	1, 219	6.305	.013
*Review faculty comments on end-of-course surveys	1, 217	5.379	.021
**Notification of course changes (curricular, assignments, etc.)	1, 219	5.243	.023
Notification when students are added or dropped	1, 218	.000	.993

*Adjunct faculty rated higher than fulltime faculty
**Fulltime faculty rated higher than adjunct faculty

Table 5: Mean Ratings for Administrative Factors by Faculty Role

Administrative Factor	Fulltime Faculty Rating		Adjunct Faculty Rating		Total	
	Mean	SD	Mean	SD	Mean	SD
Consistent and predictable schedule of specific courses that you teach	4.16	1.15	4.27	.96	4.26	.98
Lead time of course assignments in relation to class start	3.13	1.83	4.12	.99	3.99	1.19
Opportunities for collaboration with peers teaching the same course	4.50	.63	3.77	1.21	3.87	1.17
Opportunities for collaboration with peers teaching in the same modality	4.30	.92	3.57	1.19	3.67	1.19
Increased input on course revisions	4.57	.73	4.06	1.06	4.13	1.03
Review faculty comments on end-of-course surveys	3.30	1.49	3.88	1.25	3.80	1.29
Notification of course changes (curricular, assignments, etc.)	4.70	.60	4.27	.99	4.33	.96
Notification when students are added or dropped	4.07	1.08	4.07	1.09	4.07	1.09

Fulltime faculty indicated that advanced notification of course changes (x̄=4.70; SD=.60) was the most important factor while advanced notification of course changes (x̄=4.27; SD=.99) and a consistent/predictable teaching schedule (x̄=4.27; SD=.96) tied as the most important administrative considerations for adjunct faculty. While lead-time of teaching assignments (x̄=3.13; SD=1.83) was the lowest rated administrative consideration for fulltime, this was a highly rated factor for adjunct faculty (x̄=4.12; SD=.99). Similarly, collaboration with disciplinary peers (x̄=3.77; SD=1.21) and collaboration with other online faculty (x̄=3.57; SD=1.19) were the lowest rated factors for adjunct faculty but were some of the most important factors (x̄=4.50; SD=.63 and x̄=4.30; SD=.92 respectively) for fulltime faculty. Table 6 highlights the relative ranking of administrative factors for fulltime and adjunct faculty.

Table 6: Ranking of Administrative Factors by Faculty Role

Rank	Fulltime Faculty	Adjunct Faculty
1	Notification of course changes (curricular, assignments, etc.)	* Notification of course changes (curricular, assignments, etc.)
2	Opportunities for collaboration with peers teaching the same course	* Consistent and predictable schedule of specific courses that you teach
3	Opportunities for collaboration with peers teaching in the same modality	Lead time of course assignments in relation to class start
4	Increased input on course revisions	Notification when students are added or dropped
5	Consistent and predictable schedule of specific courses that you teach	Increased input on course revisions
6	Notification when students are added or dropped	Review faculty comments on end-of-course surveys
7	Review faculty comments on end-of-course surveys	Opportunities for collaboration with peers teaching the same course
8	Lead time of course assignments in relation to class start	Opportunities for collaboration with peers teaching in the same modality

*tie

Recognizing that the impact of administrative factors on the quality of one's teaching may shift as a function of teaching experience, faculty responses were divided into two groups: novice (less than one-year online teaching experience) and experienced (more than one-year online teaching

experience). Forty-three faculty were novice (3 fulltime; 40 adjunct) and 370 (46 fulltime; 324 adjunct) were experienced. A comparative analysis of faculty perceptions as a function of online teaching experience revealed no significant differences between groups; Table 7 provides complete significance testing results. A factorial analysis of variance was not conducted due to the extreme group size difference between novice fulltime faculty (n=3) and experienced adjunct faculty (n=324). It is worth noting that two administrative factors (e.g., opportunities for collaboration with peers teaching the same course and review faculty comments on end-of-course surveys) approached significance with novice faculty placing a higher importance on these factors compared to experienced faculty. Table 8 provides the mean rating for each administrative factor as a function of faculty experience.

Table 7: Significance Testing of Rating Impact of Administrative Factors by Faculty Experience

Administrative Factor	df	F	p
Consistent and predictable schedule of specific courses that you teach	1, 216	.084	.772
Lead time of course assignments in relation to class start	1, 215	.014	.907
Opportunities for collaboration with peers teaching the same course	1, 215	3.607	.059
Opportunities for collaboration with peers teaching in the same modality	1, 215	.299	.585
Increased input on course revisions	1, 215	.445	.505
Review faculty comments on end-of-course surveys	1, 213	3.345	.069
Notification of course changes (curricular, assignments, etc.)	1, 215	.114	.736
Notification when students are added or dropped	1, 214	.120	.729

Table 8: Mean Ratings for Administrative Factors by Faculty Experience

Administrative Factor	Novice Faculty Rating		Experienced Faculty Rating	
	Mean	SD	Mean	SD
Consistent and predictable schedule of specific courses that you teach	4.30	1.18	4.24	.97
Lead time of course assignments in relation to class start	4.00	1.41	3.97	1.16
Opportunities for collaboration with peers teaching the same course	4.30	1.11	3.81	1.18
Opportunities for collaboration with peers teaching in the same modality	3.78	1.31	3.64	1.18
Increased input on course revisions	4.26	1.14	4.11	1.02
Review faculty comments on end-of-course surveys	4.26	1.10	3.74	1.31
Notification of course changes (curricular, assignments, etc.)	4.39	1.12	4.32	.94
Notification when students are added or dropped	4.13	1.14	4.05	1.09

Two researchers conducted a content analysis of open-ended questions; all responses were reviewed initially to identify key themes then analyzed and coded into the emergent themes. The content analysis focused on the open-ended questions "What can administration do (or provide) to enhance the quality of your teaching? How can the institution support you to foster high-quality instruction?" and revealed four themes that were discussed in at least 10% of faculty responses: learning management system, faculty support, curriculum, and communication. The most common theme (31.21% of responses) focused on improved functionality of the learning management system (LMS). Specifically, faculty believed that enhancing the LMS with push-notifications and multimedia integration would allow them to be more effective teachers. In addition, faculty indicated that faster, more efficient, functionality of the LMS would allow them to dedicate more of

their time to high-impact teaching activities. Reflective of this concern, one respondent indicated, "The biggest issue is efficiency. There are too many clicks required to get to each area. Push notifications would be huge! The gradebook needs some efficiency as well, including integrated grading of documents within the LMS [LoudCloud] (instead of having to download the file). Perhaps being able to provide comments on the TII [TurnItIn] report would be helpful!"

The faculty support issues (15.03% of responses) mentioned in the open-ended questions echoed the findings of the quantitative data. Faculty desired consistent teaching schedules, advance notification of teaching assignments, and feedback/guidance on their teaching. Highlighting this issue, a faculty member stated, "It would be nice to have more faculty collaboration opportunities as well as a more consistent and transparent schedule with regard to future classes/contracts available to faculty." Curriculum enhancements (14.45% of responses) highlighted the importance of curriculum updates including assignments, rubrics, multimedia, examples and current event applications. Reflective of this concern, one respondent indicated, "giving online students & instructors a solid (but fluid), seamless, fully functioning system with a well thought out curriculum is #1 priority."

The final theme, communication (10.98% of responses), emphasized the desire of faculty to be more connected with the institution and informed of institutional initiatives. Specifically, faculty indicated the need for follow-up between administration and faculty in relation to student and curriculum issues. As one faculty member explained, "I feel I do not get any feedback about my teaching. I also feel as though I have no idea who to contact if I have a question ... I have submitted numerous early alerts and have no idea if the student has dropped or continuing. I also have submitted academic dishonesty forms and have not have heard anything back about the outcome." Other, less prevalent, themes that emerged during the content analysis are listed in Table 9.

Table 9: Content Analysis Themes for Administrative Support of Online Teaching

Theme	Associated Topics	Frequency
Enhanced LMS	push-notifications, tools for instructor multimedia integration, efficiency of use	31.21%
Faculty support	consistent teaching schedules, advance notification of teaching assignments, feedback/guidance on teaching	15.03%
Improved curriculum	updated assignments, rubrics, multimedia, examples, current events	14.45%
Better communication	connection with the institution, informed of institutional initiatives, follow-up	10.98%
Student support	more support resources to help students outside classroom	8.67%
Multimedia integration	increased audio, video, interaction embedded into course curriculum	8.09%
Technology access	more options for university-supported technology supplements	7.51%
Faculty community	opportunities for faculty collaboration, shared teaching resources	6.91%
Faculty voice	increased input on policy, curriculum	5.78%
Instructional policies	faculty-friendly teaching policies	5.20%
Instructional flexibility	opportunity for faculty modification of course curriculum and requirements	5.20%
Faculty compensation	increased pay; pay per student/assignment	4.05%
Class size	reduced class size	2.31%
Grading efficiency	grading support; reduced feedback expectations	2.31%
Faculty development opportunities	more professional development opportunities	1.73%

Discussion

Faculty perceptions of the impact of administrative factors on their online teaching effectiveness revealed six key considerations: scheduling, course design, multimedia, curriculum, faculty development, and faculty support. While these factors were relevant to all faculty teaching online, the relative importance of each factor varied between fulltime and adjunct faculty. For example, quantitative research identified that both fulltime and adjunct faculty perceived advanced notice of course change (FT $m = 4.70$, Adjunct $m = 4.27$) as the most important administrative factor impacting quality teaching. Adjunct faculty also identified a consistent and predictable schedule ($m = 4.27$) as equally impactful. Recognizing that administrators must create policies and procedures which support both fulltime and adjunct faculty, it is essential that institutions reflect upon their unique faculty population when addressing the impact of administrative factors on online teaching effectiveness. Four key categories emerged in the qualitative analysis of this study: functionality of the Learning Management System (LMS), faculty support issues, curriculum enhancements, and communication.

Results of the qualitative analysis illuminated the Learning Management System (LMS) as having the greatest perceived impact on instructional quality. The LMS is often thought of as the platform in which student and faculty interaction takes place; however, faculty feedback from this study shines light on the importance of LMS features and perceptions of how they encourage (or hinder) effective teaching. Faculty in this study indicated that improved functionality and additional LMS features such as push notifications and multimedia integration to enhance the quality of their teaching.

It is important to recognize that the LMS features most relevant to faculty may be a function of their current LMS tool as well as their institutional context (fulltime vs. adjunct). Administrators should actively solicit faculty feedback on the interaction between pedagogy and the LMS. Appendix A provides an example of a faculty feedback survey that could be utilized to gain faculty insights to enhance LMS functionality. Not only can this feedback be passed along to technology administrators and LMS organizations, but it can also be used to guide faculty development initiatives targeting teaching within the LMS. Specifically, faculty development may look at third party technologies that can be integrated into the online classroom to compensate for missing LMS features or provide pedagogical workarounds that can be used within the current LMS.

Qualitative findings indicated faculty support as the second highest ranked category influencing teaching effectiveness. Faculty support in this study related to schedule consistency, advance notice of teaching assignments, and feedback/guidance on teaching. Faculty respondents in this study prioritized a consistent schedule and advanced notification of the classes that they teach.

The third category illuminated in data relates to curriculum enhancements. Institutions are again unique in how they address course design, as some utilize centralized curriculum (as is the case in this study) while others use faculty driven design from course to course. Each of these categories are unique and while relevant in a standardized, centralized curriculum, they are also generalizable to environments where faculty create their own courses.

The final category that emerged in the data analysis was communication. Faculty in the present study showed they want to be connected to their institution, contribute, and be informed of institutional initiatives. They also are looking for more follow up and discussion between administrators and faculty regarding their own teaching performance. Faculty respondents indicated that they want to be involved in, and notified of, course and curriculum changes.

Current research also echoes the finding in the present study of faculty interest in pedagogical and supplemental development (Arbaugh, 2000; Irlbeck, 2008; Mueller, Mandernach, & Sanderson, 2013; Orr, Williams, & Pennington 2009). University administrators should focus on balance in

response to this finding. More is not necessarily better; it should be targeted, real, and relevant. It is also important to realize that appropriate training and development resources are available; but faculty may not realize what is offered. Another important consideration is that administrators must be mindful of is when the training is offered. Mueller, Mandernach, and Sanderson (2013) posit scheduling to meet the needs of part-time and fulltime faculty to ensure ability to participate.

A valuable option within this discussion is for administrators to balance the desire for faculty development and the commitment to avoid overloading faculty with too much. To accomplish this, administrators may consider identifying overarching developmental areas of focus each academic year. Once decided, these areas of pedagogical and supplemental development can be focused, and consistent – to ensure that commitment and participation is achieved, without overload.

Recommendations

Scheduling

As administrators, there are a number of things we can do to meet faculty needs in regard to scheduling such as developing better projections of student enrollment so that schedule projection occurs more efficiently for the future. Another approach that administrators could take to create stable schedules for adjunct faculty would be to minimize the number of adjuncts retained for instruction, but this creates a potential situation where enrollment increases could jeopardize the overall stability of scheduling created by the need to recruit. A final combination to consider is that faculty with more experience with a course could be scheduled at higher loads due to the minimized need for lead time which would allow us administrators the ability to pay an individual more to do more work rather than relying on more people to do the same amount of work, which then effectively minimizes the risk of having a decreased adjunct pool to operate with.

These concerns are very relevant to content specific scheduling. If this is true, we recommend that administrators include faculty in the planning and development of faculty scheduling. An additional benefit of this level of support would extend to the ability of administrators to begin to provide teaching expectations as well as feedback and guidance on their teaching. This resulting level of support could include provisions for scheduled time for administrators to observe faculty and conduct spot checks in classrooms and identify what is working and what is not. Faculty best practices that may be presented to the larger body of faculty. In addition, administrators may identify opportunity for potential mentorship and course lead opportunities for seasoned faculty.

University academic administrators should explore creative ways in which to address this issue. For example, one way this could be accomplished is map a degree plan for the entire program, specific to the student and schedule the student in all courses from point of entry to graduation. Utilizing these projection numbers, faculty can be tentatively scheduled for several terms out with an awareness that student scheduling can then be monitored on an ongoing basis so that adjustments if needed can be made to faculty scheduling. Another option is to create a course walk for each program that maps the sequence of courses taken in each program of study. Then forecasting may be used to schedule courses.

Similarly, recognizing that one of the benefits of a consistent schedule is that faculty do not have to spend as much time preparing for new courses but rather can invest this time into other instructional activities. Creating a scheduling structure that prioritizes consistency in scheduling may lead to less lead-time needed to prep for courses, as the schedule is expected and planned. When faculty have a consistent schedule, they have potential to improve the quality of their teaching as time will be freed to further develop and build their own curriculum and resource library, mentor and or collaborate with other faculty, and engage in service, scholarship, and professional development. With this in mind, creating stability in the scheduling of faculty becomes a key component to be considered by administrators.

Staffing models for online instruction generally are comprised of fulltime online faculty, fulltime faculty who have a portion of their course load in class, and the other portion online, as well as adjunct online faculty. Some institutions are moving toward fulltime online faculty models with supplemental scheduling of adjunct faculty. While this approach may appear costly, the cost benefit may be realized in student satisfaction and retention (Mueller, Mandernach, & Sanderson, 2013). Regardless of whether the institution uses fulltime faculty or predominantly adjuncts the use of consistency in scheduling as a tool to support faculty may in turn lend itself to potential improved teacher effectiveness as well as commitment to the organization (Giannoni & Tesone, 2003).

Undoubtedly, there exists a continuum of various faculty models that include some combination of adjunct and fulltime online faculty. The faculty model employed by the institution in this study includes a combination of both online fulltime faculty and online adjuncts. Faculty in this study perceived scheduling variance as having impact on their own teaching effectiveness. There is significant time commitment accepted by the faculty member when scheduled for a course (for example: class set up, welcome calls, etc.). When course scheduling is sporadic the return on that that time investment is limited, which may result in diminished teacher effectiveness (Harrison & El Mansour, 2008). However, if the scheduling is consistent in terms of frequency or the actual courses themselves, then faculty can develop materials that can be used over several courses and improvements can be made from course to course as that familiarity develops.

This familiarity bodes well for the students as familiarity with the course materials, objectives, and outcomes leads the faculty or adjunct to know shortcomings or concerns that commonly arise which they can address prior to them popping up in future courses which results in better student outcomes. All faculty (novice $m = 4.39$ and experienced $m = 4.32$) perceive the being notified with course change information as impactful on teaching quality. From an administrative perspective, this familiarity could be used to foster teaching circles, between faculty regardless of position type, which would allow for collaboration of ideas and teaching methodology/pedagogy.

Faculty Support

The issue of consistent teaching schedules is a challenge in online programs that utilize a large population of adjunct faculty. One of the benefits of adjunct faculty is that they allow institutions to schedule faculty to teach as a direct function of student enrollments. Simply put, the institution does not have to pay an instructor for a class that fails to have an adequate number of students. Fulltime faculty data did not support this concept as impactful as the adjunct ($m = 4.16$, which places it fifth), however the benefits of creating stability would still likely be felt by all regardless of institutional status. The downside of this model is that faculty are often scheduled for courses with little notice as enrollments fluctuate. With this in mind, solutions that provide scheduling consistency for online faculty have to be balanced with an awareness of the budgetary needs of the institution.

When considering scheduling, the fulltime faculty ranked this number five while the adjuncts ranked this number two on their respective lists. A likely rationale for this is that fulltime faculty inherently know they will have a predetermined course load when hired into their position, whereas adjuncts employment is typically on an as needed basis.

Curriculum Enhancements

In reviewing the results of this study, some approaches from an administrative perspective could be advantageous. The recommendation would be to create basic course shells at the minimum, which would contain relevant materials, objectives, resources, and potential talking points. This would allow faculty in either course design model to have solid foundations to build on and allow them to maximize their time in the classroom teaching.

The use of a basic course shell would create a fostering environment for faculty and adjunct alike as it allows them to focus more on their teaching. The results indicated that fulltime faculty placed an increased sense of value on this collaborative element than their adjunct counterparts. A likely causation of this is the notion of proximity in that fulltime faculty have the means to collaborate more directly with their colleagues than adjuncts do. From an administrative perspective, this desire for collaboration within the fulltime faculty can be fostered by encouraging collaboration and offering opportunities within the college, content, or team to meet and discuss ideas, develop course materials, or create research works.

Focusing on adjunct faculty, administrators could create opportunities for these individuals to become engaged with colleagues by holding conference calls via ZOOM or a similar video-conferencing service where fulltime faculty are also included so that relationships can develop. With the value relationship in mind utilizing more novice faculty would be perceived as more impactful (If same course novice faculty $m = 4.30$ whereas experienced faculty $m = 3.81$, if different course novice faculty $m = 3.78$ and experienced faculty $m = 3.64$). Also, by maintaining documents where research interests or general interests are visible to all, opportunities for collaboration could be sought out by the faculty regardless of their position and/or experience level within the university. This increased focus on collaboration allows for additional administrative focus on faculty support.

Administrators should also address the role of multimedia as it impacts the quality of online teaching. Multimedia supplements, while only explored in this study via qualitative means, allow faculty to teach and students to learn using integrated technology to engage with and process information in an online environment (Bledsoe & Simmerok, 2014). Multimedia may include social media, web-enhanced tools, video, games, and the like. Recognizing that faculty are busy, it is important to minimize the workload associated with multimedia integration. If multimedia and technology integration is easy, faculty are more likely to use it. As such, administrators should focus on provided limited multimedia options that have heightened support. Involving faculty in multimedia adoption decisions may help ensure ease-of-use and relevance.

The findings from the present study, for example, indicate that both students and faculty find instructional videos valuable to student learning.

- Videos created by the instructor may include:
    - welcome videos
    - content specific
    - announcements
    - library overview
    - APA formatting
    - assignment overviews
- Videos from the internet
    - content specific
    - related podcasts or Ted Talks
    - related movie clips
    - related commercials

 It is recommended that university administrators focus on the integration of multimedia in the curriculum. As administrators, it is essential to make informed decisions about the funding and training provided in relation to instructional technology to ensure that faculty have the necessary tools for effective teaching. In addition, it may be more cost-effective to explore options for building multimedia curriculum directly into the course materials (as opposed to attempting to support individualized selections of each faculty). Another recommendation is to provide access to multimedia resources directly in the online classroom such as quick links for instructors and students to create audio or video files for each other. In addition, multimedia may be optimized in

assignments by providing access to technology resources like Loom and Zoom for student presentations.

Multimedia integration does come with a cost. While investments in site licenses for technology may be expensive, if sufficient faculty utilize a given technology (such as ZOOM) it may be worth the investment for the resultant gains in instructional quality. In addition, there are several free web enabled tools and multimedia options available to faculty such as Flip Grid and Loom, faculty development and tech support to assist with their use.

As earlier mentioned, faculty are more likely to implement pedagogical approaches that are quick and easy. As such, administrators may consider the integration of strategies that make it easy for faculty to incorporate multimedia into the online classroom. Such strategies may include faculty development workshops that demonstrate set-up and implementation of multimedia resources will assist in garnering participation. Institutions can also tap into their existing faculty leaders by recognizing faculty who multimedia innovators; these faculty may lead collaborative teams to integrate multimedia in specific courses.

Communication. While many institutions engage lead faculty in course development, all faculty have insight into best practices, tools, and resources that work best for them. Administrators can capitalize on what is working well by engaging all faculty in the sharing of best practices in creative ways including presentations, resource centers, and weekly communique to keep faculty updated on updates and changes. Communication may include any combination of email, newsletter, faculty forums, and college specific announcements. Recognizing faculty time is limited, each of these should be concise, and encourage opportunity for faculty to engage their voice.

Less seasoned faculty may become further empowered and engaged in and with the curriculum if given the opportunity to use their expertise in the courses that they teach. Allowing less seasoned faculty to develop enhanced assignments, integrated rubrics, and the development of standardized templates and examples that are course and assignment specific could be beneficial for further developing newer faculty. In turn, these resources can then be provided as instructor resources for all instructors teaching the course. Course specific email accounts could be used for faculty to submit feedback and ideas about the course that they teach (for example, setting up an email for PSY502@universityaddress.edu). The emails could then go to a lead instructor or the instructional designer. Content collaboration groups and course specific forums are additional options to engage faculty at various levels of experience in the content of the course.

Conclusion

The current study identified scheduling, course design, multimedia, curriculum, faculty development, and faculty support as perceived by faculty to have the greatest impact on their teaching effectiveness. Each institution is unique, and the administrative approach used to facilitate effective teaching is undoubtedly a mix of art and science. Several insights and recommendations have been provided related to LMS, faculty support, curriculum enhancement, and communication. The opportunity for administrators is to utilize the insights provided to construct an integrated approach within their institution that creates an environment that sets instructors up for success.

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Appendix A

Example: LMS Faculty Feedback Survey

Rate the extent to which you think the following LMS course revisions would enhance teaching and learning in the courses you teach:	Scale: 1 = no value 2 = minor value 3 = some value 4 = significant value 5 = extreme value				
Instructional videos from the Internet integrated into lectures	1	2	3	4	5
Links to relevant websites/ resources embedded in the written lectures	1	2	3	4	5
Links to relevant websites/ resources listed in the course	1	2	3	4	5
Introductory announcements for each module	1	2	3	4	5
Summary announcements for each module	1	2	3	4	5
Online games or activities	1	2	3	4	5
Pre-programmed feedback in relation to quiz answers	1	2	3	4	5
Sample papers and assignments	1	2	3	4	5
Preloaded rubrics	1	2	3	4	5