

EXPLORING ONLINE TEACHING SATISFACTION WITHIN THE CONTEXT OF COVID-19: IMPLICATIONS FOR PRACTICE AND FUTURE DIRECTIONS

Kellee Vess PhD, RN, Associate Professor in Nursing, Online Program Director, Tennessee Wesleyan University kvess@tnwesleyan.edu

> Jeff Russell PhD, Associate Professor in English, Pellissippi Community College jrussell@pstcc.edu

ABSTRACT

The purpose of this study is to explore faculty online teaching satisfaction, using both quantitative and qualitative methods for examination. Data collection was completed using an online survey tool. Participants completed a survey that began with Wasilik and Bollinger's (2009) 28-item instrument measuring online teaching satisfaction, and then participants were asked to provide answers to open-ended questions about satisfaction and overall online learning teaching quality. Findings from this study support the notion that online faculty satisfaction is multifactorial, and faculty satisfaction needs to be a key component in determining and/or improving overall quality of online programming. Factors noted in both qualitative and quantitative data sets that impact overall faculty satisfaction are reviewed, along with implications for practice, and future directions. As we move into the future of online learning and higher education, we are at a pivotal moment in determining gaps and future directions for online education. The significance of this study is to highlight current issues related to online teaching satisfaction and to provide areas of focus to minimize the barriers to successful online teaching and learning practices.

INTRODUCTION

Across higher education, online teaching and online delivery of classroom content has taken center stage, and with this growth comes an opportunity to revisit the many factors that contribute to online teaching satisfaction. As demands for online teaching and faculty requirements expand, it is vital to provide balance by revisiting key components of online instruction, such as, instructor workload requirements, compensation, and online student enrollment/ class size, to determine their effects on faculty satisfaction. For example, according to Taft et al. (2011), "when enrollment numbers swell in courses, students experience less individual contact with faculty, and faculty perceive that the quality of education declines" (p. 182). Furthermore, it has been established that "online courses encompass more instructor time in and out of the classroom, and that online faculty spend more hours than traditional faculty in preparing and administering online courses" (Mandernach et al., 2013, p. 2). With this perspective, the benefits of this study include promoting best practices for online teaching and assisting those in leadership to be more knowledgeable and mindful of the myriad of factors that impact faculty satisfaction when making policy decisions. As more students and faculty enter the online environment, it is time to reexamine potential issues that affect faculty satisfaction (e.g., course size for courses that are writing intensive). Finally, establishing a shared vision not only promotes student/faculty success/retention, but it can ensure sustainable program growth.

THE STUDY

The purpose of this study is to examine factors associated with online faculty satisfaction at two educational institutions in East Tennessee. This study uses Wasilik & Bollinger's (2009) faculty satisfaction survey instrument and following four original research questions:

- (1) What is the overall level of faculty satisfaction in the online environment?
- (2) What are the major frustrations of faculty with online teaching?
- (3) What do instructors like the most about teaching online?

(4) How do instructors who are satisfied with online teaching differ from instructors who are unsatisfied with online teaching based on student-related, instructor-related, and institution-related variables?

The second aim of this study is to add a qualitative lens to online faculty satisfaction by asking the following new qualitative research questions:

- 1. How do you define quality in an online teaching environment?
- 2. What impact does an effective teaching practice have on overall faculty satisfaction?
- 3. What indicators of quality have you observed and utilized in an online environment?
- 4. Describe the impact of class size on faculty satisfaction in an online environment?



Overall, the intent of this study is to identify key elements of online teaching satisfaction and use these findings to inform decision-making and practice.

STUDY DESIGN

Multiple research modalities were used to conduct this non-experimental survey design study. Both quantitative and qualitative techniques were used to address the research questions mentioned above. After email approval, a survey was created using the measurement tool developed by Bollinger & Wasilik (2009), reliability of the selected instrument was reported at .85 (Cronbach's alpha coefficient). This instrument is a 28-item survey tool that focuses on measuring the following constructs: structure to student interaction, affordances, institutional support, student-to-student interaction, and course design, development, and teaching. An open-source survey platform, Lime Survey, accessible at https://www.limesurvey.org/, provided a medium for collecting data. Data analysis was also provided by Lime Survey, in the form of descriptive statistics.

Participants were sought from two higher education institutions in East Tennessee (Institution 1 n=64; Institution 2 n = 17). Institution 1 is a 2-year state affiliated community college that offers a variety of online and adult programming. Institution 2 is a 4-year private liberal arts university with a religious affiliation that offers online courses and online programming. Overall, the participant demographic data (see table 1) shows that participants were mostly female, had at least a master's degree or higher, rated their level of confidence in teaching online as high, had greater than 5 years of teaching experience, completed online teaching training, and their average class size online was consistently greater than 15 students per a class.

Study Demographics		
Demographic Questions	N = 64	N=17
Age Group	36-50 (42%)	51-65 (41%)
Gender	Female (69%)	Female (65%)
Highest Level of Education	Master's Degree (54%)	PhD (35%)
Current Learning Management System (LMS)	Brightspace (87%)	Sakai powered by LAMP (94%)
Confidence in Teaching Online	8 (57%)	8 (35%)
Academic Department	English (19%), Liberal Arts (19%), 15 departments were represented	Nursing (25%), Psychology (12%), Health and Human Performance (12%), 10 departments were represented
Years of Online Teaching Experience	>5 (36%)	> 5 years (53%)
Completed training related to online teaching	Yes (86%)	Yes (65%)
Number of Online Classes per Semester	1 class (41%), 2 to 3 classes (36%)	1 class (41%), 2 to 3 classes (29%), 4 to 5 at (23%)
Average Class Size	19.64 students	>20 (47%) students, 11 to 15 students (29%), 16 to 20 students (23%)
Ideal Class Size	25 students (22%), 15 students (17%)	10 students (24%), 20 students (18%)

 Table 1: Study Demographics



FINDINGS

To provide structure to this section, the results are presented separately as either quantitative or qualitative. After review of individual analysis of data, the emergence of data will then be presented using both quantitative and qualitative results to inform final discussions, and for making suggestions for improving practice.

QUANTIATIVE

Quantitative data collection for this study was done using a previously developed and tested instrument by Wasilik and Bolliger (2009). Their online faculty satisfaction survey [OFSS] explores online faculty teaching satisfaction and can be divided into three main factors: Student-related factors, Instructor-related factors, and Institution-related factors (Wasilik & Bolliger, 2009). The validity and reliability of this instrument was established by Wasilik and Bollinger (2009) with a Cronbach's Alpha of .87. In this section we will present an overview of the individual subscales and then proceed with results. Table 2 presents the OFSS survey (3 subscales) results obtained from the two institutions surveyed for this study and the original results presented by Bolliger and Wasilik (2009) during the initial construction of the measurement tool.

Student-Related Factors (15-items in subscale), Items developed from the following student-related factors, or perceived value, as reported by Bolliger and Martindale (2004) are the "the instructor, technology, and interactivity" (p.61). Also, Bollinger and Wasilik (2009) list the following as key factors for student satisfaction: "communication, course management issues, course websites, course management systems, and students' perception of task value, and overall self-efficacy" (p. 105). Findings for student-related factors for this online teaching satisfaction study found three main results: (1) faculty felt a lack in their ability to provide effective feedback, (2) they missed the enthusiasm and interactions that occur with face-to-face instruction, (3) They disagreed that their level of interaction with student online were higher than in a traditional face-to-face class.

Instructor-Related Factors (7-items in subscale) Was defined by Bolliger and Wasilik (2009) as "the perception that teaching in the online environment is effective and professionally beneficial" (p. 105), in other words, faculty believe they can promote positive student outcomes. Other internal factors include the challenge of online teaching, interest in developing online teaching skills, professional development opportunities, and interest in using and/or learning new technology (Bolliger & Wasilik, 2009). Results show three main factors influencing online teaching satisfaction related to the subscale measuring instructor-related factors (7-items). These include (1) higher workload, (2) longer time to prepare for online classes versus face-to-face, (3) concerns about lower student evaluations than in traditional class settings.

Institution-Related Factors (4-items in subscale), Institutional factors related to faculty satisfaction are related to perceived workload, adequate compensation, equal reward system for promotion and tenure, and quality of course, because course evaluations are generally lower in online courses versus traditional classes (Bolliger & Wasilik, 2009). Institutional factors affecting online teaching satisfaction include (1) increased workload and fair compensation for teaching online. Both institutions strongly agreed that instructor weekly hours for prep was greater in the online environment versus face-to-face. Participants also scored comparable in the following two areas, (2) frustration because of technical problems, and finally, (3) the need to find more creative resources in the online environment.

Bolliger and Wasilik's (2009) survey also includes 2 general satisfaction questions. The results of this study are presented below. Before noting a sharp decline in online teaching satisfaction, it is important to be mindful of context and time. Data collection occurred fall 2020, which was during the middle of the COVID-19 pandemic. Many participants had just experienced a dramatic alteration in their teaching practices and were teaching online for the first time. One insight to gain from this dramatic drop is the importance of utilizing one's learning management system to its fullest potential, so that future pivots between learning modalities are more organized and seamless. Furthermore, this speaks to the importance of available resources to faculty and students and creating a sense of information technology (IT) support.

Two General Satisfaction Questions:

I look forward to teaching my next online course (48% Agree, 18% Agree, original study was at 93% agreement with this statement).

I am more satisfied with teaching online as compared to other delivery methods (11% Agree, 18% Agree, 38.2% Agree with this statement from original study by Bollinger & Wasilik, 2009)

QUALITATIVE

A thematic analysis was used to analyze four open-ended questions asked of each participant at the end of the survey. Analysis of the data was done to identify recurring patterns. Overall, the researchers used the following



process to identify appropriate themes. The process began with asking four open-ended questions to all participants. Next, researchers completed a thematic analysis of the data to identify recurrent patterns in participant comments. Themes/ patterns were identified through reading transcripts verbatim aloud and having discussions about content, key words, and phrases.

This study employed the following strategies presented by Merriam (2009) to support the credibility and transferability of qualitative data. For example, the use of an audit trail was used to detail the process of data analysis and thematic development. Also, important conversations and memos of the process were documented. Transferability was achieved using descriptive descriptions of the data. This was done to ensure that findings can be transferred to a variety of settings. Overall, these measures were used to ensure the authenticity and trustworthiness of results.

Four major themes emerged from the open-ended questions aimed at defining quality within the online learning environment. The findings presented in the following paragraphs are organized thematically, and the interrelated themes illustrate how faculty define quality in online teaching and how those experiences affect overall teaching satisfaction within the context of COVID-19. Each theme is explained through examples from the collected data. Finally, the connections between the themes and the potential research question are explored.

Emerging Theme 1: Balance. The first theme that emerged was Balance. Findings show that there was a need for balance between online course design and the rapid shift in modalities, with the importance of academic rigor, integrity, and access to campus resources.

"One that balances academic integrity and the understanding of the medium of online. The difficulties that students and faculty face with online courses is difficult because there is a direct balancing act that is not necessarily struck between the two sides of this" "Online classes can be a "double-edge sword"

Also, faculty expressed a need for balance between faculty roles (e.g., teaching, advising, service to the department) and working from home, amidst a global pandemic.

"Unexpected quarantine and the lack of access to campus resources, and the nature of the sudden shift, misplaced work-life balance"

"I wouldn't find my work/home life balance quite so off-kilter and would have a better view of it."

"Online classes are not ideal for all courses (Synchronous versus Asynchronous)."

"Teaching online requires more prep and more time during the course (If done right)."

"Takes a lot of time for each class."

"Cheating is rampant in online courses."

From these direct quotes, it is apparent that greater instructional design assistance and instructor training/time to prepare would help to alleviate the stressors of transitioning from synchronous to asynchronous learning environment.

Emerging Theme 2: Engagement. The second theme to emerge was Engagement. The main indicators for quality online education identified by faculty were access, course organization, utilizing multiple modes of teaching, and quick/effective feedback.

This theme can be further explained in terms of things that faculty identify as promoting engagement...

"Engaging, inclusive, accessible, equitable to face to face learning, and technologically sound."

"Student engagement and maintaining high levels of morale."

"Quality online teaching is like actual teaching. Learners are able to use different medias to engage in the classroom. The students are engaged in the class with discussions, either real time or discussion boards." "I define it as students being involved and hopefully engaged while being able to get subject matter covered in a thorough way. I also feel that quick and constant faculty interaction with student emails is essential for quality. Engagement. Easy to follow course content. Different kinds of content - not just reading. For example, videos, quizzes, and synchronous communication. Providing a rich variety of learning resources to facilitate success for online students."

"Teacher involvement in discussion groups"

"Tracking attendance"

"Using and creating multiple types of learning and providing clear goals"

"Multiple effective teaching strategies employed in online classes positively impact faculty satisfaction."



"The quality of the class depends on the instructor and the teaching methods they use. They must cater to both types of students, ones who work great with online learning and those who don't. The instructor must be available and very involved with the class and ensure that everyone is understanding the content. You can't just give out assignments and grade them without any type of communication or feedback."

"Accurate feedback, clearly presented information, frequent interactions with students to encourage active engagement."

To those things that faculty identify as factors that diminish student engagement and overall quality/satisfaction... "More students more difficult it is to engage students"

"Too many students make connecting really difficult OL makes it doubly harder to get to know students." "Greater than 25 students I can't do the job I need to do."

"Having to teach 26 students virtually and 27 students' lives is difficult. You cannot convey the material the same way for both classrooms."

"Too many students make connecting with students really difficult in an already difficult situation."

Noteworthy findings from these direct quotes include the significance of the instructor to drive quality engagement in the online environment, and that a high-level of engagement is directly related to class size. The greater the number of students, the less the instructor can facilitate meaningful learning, or engagement.

Emerging Theme 3: Equality. The third theme that emerged from the data was Equality, for not only access to online courses for all, but to have equal learning experiences regardless if the course is offered asynchronous versus synchronous.

"Students need to understand how to navigate the course, and get the same educational value at least as they would from an in-person course, including building relationships and support"

"Ensuring that all students are provided the same quality of learning and community building I provide in my ftf classes."

"Materials and methods must be as good or better than in-person sections. The same way that I would define quality in a traditional face-to-face course, by evaluating if students can demonstrate a clear understanding of the course content and can synthesize the information being delivered. Are they meeting the learning objectives? Are the instructional materials being used accessible to all learners? Are learners interacting with the content in a meaningful and transformative way?"

"Quantity and quality of instructor/student interaction, accessibility"

"Instructor preparation and students having consistent access to technology is key"

"The quality of the class depends on the instructor and the teaching methods they use. They must cater to both types of students, ones who work great with online learning and those who don't. The instructor must be available and very involved with the class and ensure that everyone is understanding the content. You can't just give out assignments and grade them without any type of communication or feedback."

"Online courses are not ideal for all courses. Some courses are great online, and some are not. This is something to be aware of when deciding whether courses should be taught online. It is not a bad idea to try a course online, but if it doesn't work, move it back into the classroom...for the students!"

"Online teaching is wholly unsatisfactory for lab-intensive courses. There is no way for a simulation or video to adequately take the place of actually, physically doing the work."

From these quotes, one can conclude that online course design is critical for ensuring quality and promoting a positive experience for both faculty and students. Furthermore, online programs must have a quality improvement mindset. These comments highlight the importance of organization of course content, user-friendly access to course materials, and access other campus resources. Finally, a noteworthy insight, is that not all courses are best suited for online learning, for example, lab-intensive courses, or those courses requiring hands-on experiences may be more difficult to facilitate online.

Emerging Theme 4: Quality (Lack of). The fourth, and final, theme that emerged was Quality (Lack of). Timing of data collection is also an important factor when interpreting the results for this theme. Faculty being asked to switch their teaching methods/strategies to an online format, which may have added to the negative impressions of online teaching, and although frustrations were amplified, it does speak to the importance of providing adequate faculty support for teaching online.

"I don't think quality is possible in online teaching and would never participate in it if I were not forced to do so."

"Quality online teaching for any level above Bloom's lowest two is an oxymoron."

"I can't stand it. I believe it's ineffective. The very best students do ok."



These few remarks demonstrate that online teaching is not for every educator, and these comments may simply reflect the frustrations of a rapid transition from teaching face-to-face to an online environment.

DISCUSSION

The purpose of this study was to explore the level of online teaching satisfaction among faculty at two wellestablished East Tennessee institutions of higher learning. A total of 81 participants completed an online survey to assess their individual levels of teaching satisfaction within an online learning environment. A second arm of this investigation included collecting qualitative data, open-ended questions, to explore faculty perceptions related to class size, quality, and the impact of effective teaching on overall faculty satisfaction.

For a review of quantitative findings (Institution 1 [INT1] n = 64, Institution 2 [INT2] n = 17), the data in this study shows that participants strongly agreed with the following statements: "I miss face-to-face contact with students when teaching online" 59% (INT1) and 47% (INT2); "It takes me longer to prepare for an online course on a weekly basis than for a face-to-face course" 55% (INT1) and 18% (INT2); "I have a higher workload when teaching an online course as compared to transitional teaching" 50% (INT1) and 23% (INT2). Other statements participants agreed with included the need for more creative distribution of resources online versus face-to-face 47% (INT1) and 59% (INT2), the importance of reliable technology 42% (INT1) and 35% (INT2), and the importance of having the ability to troubleshoot 44% (INT1) and 41% (INT2). Items that participants disagreed with included statements such as "I am able to provide better feedback to my online students on their performance in the course" 61% (INT1) and 18% (INT2) and adequate compensation for online faculty satisfaction, perceived workload 55% (INT1) and 18% (INT2) and adequate compensation for online teaching were identified as the biggest contributing factors affecting satisfaction. Finally, two survey questions were directly related to general satisfaction. Findings from our survey show that 48% (INT1) and 18% (INT2) agreed that they looked forward to teaching their next online courses, and 11% (INT1) and 18% (INT2) agreed that they prefer online teaching over other delivery methods.

For qualitative findings, four major themes emerged from the open-ended questions aimed at defining quality within the online learning environment: 1) Balance, 2) Engagement, 3) Equality, and 4) Quality (lack of). The first theme that emerged was "Balance." One of the main issues for the participants was needing more time and resources to help balance the demands of transition from synchronous face-to-face courses to asynchronous online learning. Many participants also mentioned there was a need to find balance between work and homelife obligations, as many of those boundaries were blurred during this time. Engagement was the second theme that emerged from the data. Many participants were concerned about maintaining a high level of engagement for students while keeping high morale levels and retaining students. To maintain student engagement, many participants reported that a variety of methods for online instruction were needed to improve course content and delivery. Early feedback was important for keeping students engaged. Another theme that emerged from the data was "Equality." Participants were concerned that students needed to have equal learning experiences regardless if the course is offered asynchronously or synchronously. Also, many participants felt that educators needed to design and implement online educational materials that could reach a broad audience regardless of the students' online learning literacy or skill set. The fourth, and final, theme that emerged was Quality (Lack of). This theme reflected the frustrations of educators during a rapid transition from teaching face-to-face to an online environment due to Covid-19.

We conclude that online faculty satisfaction is multifactorial, and it needs to be a key component in determining and/or improving overall quality of online programming. This is supported by the original researchers of the online faculty satisfaction survey, stating "online teaching has become an expectation and an element of instructors' regular teaching loads at many colleges and universities, we [therefore] should be concerned about faculty burnout (Bolliger & Wasilik, 2009, p. 114). Furthermore, according to Stickney et al., (2019) "faculty attitudes can have a significant impact on the outcomes of online initiatives and programs" (p. 513).

Factors noted in both qualitative and quantitative data sets that negatively impact overall faculty satisfaction include technology difficulties, lack of access to resources, limited knowledge/ training in instructional design, lack of course organization, limited faculty-student interactions, and limited communication/correspondence with students. These findings are supported by current research, noting the importance of robust faculty resources, more efficient technology/infrastructures, and training (e.g., online instructional design strategies) to support the diverse needs of online education (Shreaves et al., 2020; Perry& Steck, 2019; Stickney et al., 2019). Also, supported by the literature, class size can negatively impact faculty satisfaction, especially during the beginning stages of course development/ implementation and for courses that are writing-intensive (Taft et al., 2019).



Factors that positively impacted faculty satisfaction were flexibility of the online format, ability to reach more students, and increased creativity to find meaningful teaching resources in the online environment. Our findings are comparable to other researchers who found general faculty satisfaction was enhanced "if teaching online allows for flexibility in their schedules, and if they had the appropriate training" (Stickley et al., 2019, p. 509) to teach online. Also, the ability to reach more students was reported as a positive factor in Wasilik and Bolliger (2009) original study. Finally, the literature also supports our findings that faculty satisfaction is positively influenced by student engagement and the development of active learning strategies (Perry & Steck, 2019).

LIMITATIONS

As with most non-experimental research designs, this study had the following limitations for the reader to consider: the use of self-reported survey data, incomplete data sets, low response rates, and responses were restricted to one geographical region. As a result, the ability to generalize the findings of this study will be limited. While the findings of the study contribute to our understanding of faculty satisfaction within the online learning environment, future research should include a broader, more diverse, sample of participants to capture the complexity of online teaching satisfaction across institutional size and different learning management platforms.

CONCLUSIONS

To conclude this study, we will focus on implications for practice as it relates to faculty satisfaction, and the importance of quality in online instruction/design, within the context of significant change (e.g., COVID-19). As we move into the future of online learning and higher education, we are at a pivotal moment in determining gaps and future directions for online education. First, "faculty that are satisfied in online education find the online teaching experience personally rewarding and professionally beneficial, and faculty members represent a critical success factor in university online education" (Stickney et al., 2019, p. 512). This speaks to the importance of finding online faculty that are passionate about this type of delivery method. Also, administrators must keep in mind that a passion for online teaching can be grown and cultivated through a variety of actions that lessen the burdens and stressors associated with online teaching. From our study and literature review, we suggest the following guidelines to foster best practices in online education:

- (1) Implement an online institutional best practice manual to ensure standardization of online courses across disciplines.
- (2) Identify and strengthen campus virtual resources for faculty and students.
- (3) Utilize faculty development resources for active learning strategies for facilitating online learning.
- (4) Acknowledge online faculty workload, training, and hiring of FT online faculty.
- (5) Develop a quality checklist for online teaching readiness (instructor version).
- (6) Develop online learning and online teaching orientation sessions.
- (7) Create classroom management ideas for online classes.
- (8) Implement new course designs or find creative resources to improve engagement and retention online.

In closing, although our results were influenced by a global pandemic, mixed emotions are common in online learning especially during the development and the early implementation phases of a new course and/or new online program. Administrative support is essential in the success and satisfaction of online faculty. The results presented here should be used to help examine internal institutional factors associated with online teaching satisfaction. Overall, institutions need to follow an evidence-based framework for assessing and evaluating these factors, including those items specific to quality online education.

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