**Planning to Meet the Expanding Volume of Online Learners:
An Examination of Faculty Motivation to Teach Online**

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ABSTRACT

To maintain a competitive advantage, many universities have expanded their online programs and course offerings (Allen & Seaman, 2007). The growing population of online students requires a highly qualified pool of teachers (Allen & Seaman, 2013). This is a challenge for strategic planners in higher education; more importantly, it necessitates faculty to use different skills and techniques to teach online. This article sheds light on the adoption process and confirms conditions identified in the literature, with the hopes of assisting educational planners who want to build the capacity of their faculty. A mixed-method study was used to investigate the factors that motivate and impede faculty to teach online. At a large suburban university in the Southeastern United States, 363 faculty members were surveyed and 14 faculty members were interviewed using the frameworks of Innovation Diffusion Theory (Rogers, 2003) and the theory of self-efficacy (Bandura, 1986). The findings showed flexibility and convenience were the primary motivators for teaching online, as well as, the ability to reach a wide range of diverse learners. However, the large amount of time and effort needed to teach online proved to be the major obstacles for adopting online instruction. Additionally, the participants had concerns about academic integrity and expressed a negative opinion about the quality of online instruction. These findings are beneficial to guide colleges, universities, and other organizations who want to adopt online instruction or other technology initiatives.

INTRODUCTION

More and more institutions of higher education have adopted online learning as a vital part of their course offerings. The increase in enrollment is due to innovations like the massive open online course (MOOC). The ever expanding populations of online students require a highly qualified pool of online instructors (Allen & Seaman, 2013). It takes strategic planning to meet the needs of these new students. The skills needed to teach online are different than the skills of a traditional college instructor. Therefore, understanding the motivations and apprehensions of online instruction is fundamental in recruiting and retaining high quality online instructors. If a university wants to maintain a competitive advantage and change the status quo (Mitchell & Geva-May, 2009), educational planners must work as change agents. This study provides evidence of the factors that influence a faculty member's decision to teach online.

The volume of online course offerings has exploded on college campuses (Allen & Seaman, 2007; Ngai, Poon, & Chan, 2007; Seaman, 2009). The Sloan Consortium (Sloan-C) reported that in the fall of 2006, approximately 20% of all college students in the United States had taken at least one online course. Moreover, 32% of college students have taken one online course in 2012 which is an all time high (Allen & Seaman, 2013). During that time period the online course enrollment in the United States grew at a rate of 9.7%, while the higher education population grew only at a rate of 1.5% (Allen & Seaman, 2007). This dramatic increase in online learning is a disruptive change that is altering the landscape of higher education and directly impacts the role and function of the faculty members.

Many universities view online learning as an essential part of their viability (Allen & Seaman, 2007; Seaman, 2009). Careful planning is

required as more students are added to the online environment; more importantly, it requires faculty to adopt a new tool set and transition to a different instructional medium. Therefore, this study sheds light on the adoption process and established conditions identified in the literature, with the hopes of aiding other institutions who want to build capacity.

Problem Statement and Rationale

Not all faculty members have embraced online education (Jones, Lindner, Murphy & Dooley, 2002; Mitchell & Geve-May, 2009). For example, Zemsky and Massy (2004) reported discrepancies between faculty and administrators' responses on the same items regarding expectations and attitudes about online learning. Faculty and administration often have different perspectives regarding online instruction. Nonetheless, Shea, Pickett, and Li (2005) conclude, "if the benefits associated with online teaching are to be realized – especially those most clearly revered, such as increasing access to higher education – faculty participation and engagement is critical" (p. 2).

However, faculty members are the key to the successful design, development, and delivery of online instruction. Consequently, understanding the factors that promote and impede faculty involvement in online instruction is the rationale. The goal of this study was to examine the reasons why some faculty members adopt online teaching, while others do not. The ultimate purpose of this study is to provide help to educational planners and further the faculty participation in online learning for any university struggling to staff online courses.

If college faculty are vital to propel online teaching (Allen & Seaman, 2013; Maquire, 2005; Seaman, 2009), it is reasonable to examine the reasons why some faculty choose to participate in online instruction, while others do not. Ultimately, this problem is a classic adoption problem (Rogers, 2003). The identification of motivating factors and the barriers to adoption will better inform future planning. Moreover, the rationale for this study is to increase competiveness and manage the flow of students that can be taught effectively in the online environment. The knowledge presented in this study will impact future institutional planning to meet the needs of the increased online student enrollment.

Furthermore, an exploration of factors that encourage faculty members to teach online shed light on the rate of the adoption of this new technology. Mitchell and Geva-May conclude that, "one key variable leading to implementation problems that is acknowledged in the literature is the resistance of actors in organizational systems to take up new initiatives and change the status quo" (2009, p. 72). This study responds to Mitchell and Geva-May's call to change the status quo by the examination of adoption and resistance patterns.

Finally, the examination of resistant factors is crucial in the removal of roadblocks and other obstructions. As universities began using online instruction, Berge (1998) articulated the need to examine faculty resistance to distance learning and the reasons for non-participation. He concluded that the changes in universities often are small and measured, and these changes may not keep pace with the needs of students in a competitive marketplace (Berge, 1998). Online instruction exposes universities to a new level of competition that is not bound by geographic regions. Therefore, a major rationale for conducting this research study was to understand faculty adoption patterns in the hopes of creating a competitive advantage for strategic planners in universities and other institutions (Dooley & Murphrey, 2000).

Research Questions
The following research questions guided this study.
RQ1. What factors motivate faculty adoption of online instruction?
RQ2. What barriers inhibit faculty adoption of online instruction?
RQ3. How do faculty members perceive the quality of online instruction?

CONCEPTUAL FRAMEWORK

Social Cognitive Theory and *Self-efficacy*

The conceptual framework for this study is grounded in two seminal theories that are used as foci to examine faculty adoption of online instruction. The first is Bandura's construct of *self-efficacy* that described a person's capacity to organize and implement a plan of action for adopting a new idea (1997). The second major theory used is the Innovation Diffusion Theory (IDT) (Rogers, 1962/2003).

Self-efficacy is a central component of Social Cognitive Theory (SCT) that attributes changes in human behavior based on observation (Bandura, 1986). Social Cognitive Theory explains learning through observation, or modeling, of other people's behaviors in conjunction with a person's own belief in their ability to perform a particular action. According to Bandura (1986), the concept of self-efficacy is a major prerequisite before change can occur. Fundamental to the adoption of online instruction, faculty must believe they will be successful before adoption can take place.

Essentially, one's attitude influences behaviors, and people engage in behaviors where they perceive they will be successful (Ormrod, 2007). Self-efficacy is an important aspect of technology adoption because it illuminates perceived capabilities that link to attitudes regarding adopting technology (Elgort, 2005; Straub, 2009). In general terms, the instructor must believe they will be successful teaching online before adopting a new instructional method. "In the last twenty years, self-efficacy has been shown to have a significant impact on student performance, meaning that when confidence levels increase, performance levels increase as well" (DeTure, 2004, p. 23). Conversely, people avoid activities and situations where they perceive failure (Bembenutty, 2009). For example, Schunk (1996) found people sustain learning efforts based on self-efficacy or the belief in one's ability to perform a task. Therefore, Bandura's Social Cognitive Theory, with a primary emphasis on self-efficacy, is a logical and appropriate conceptual lens for this study.

Innovation Diffusion Theory

The second major conceptual foundation for this study is the Innovation Diffusion Theory (IDT) (Rogers, 1962/2003). Rogers' work is the bedrock of multiple theories of technology adoption (Straub, 2009). Diffusion of Innovation examined the micro level adoption process, as well as macro level diffusion across organizations, systems, or processes. Online learning presents many positive advantages, and has been adopted by many institutions of higher education (Allen & Seaman, 2007; Seaman, 2009).

To explain the process of adoption, Rogers (2003) outlines characteristics of innovations observed by the users. These characteristics include: (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, and (5) observability. These characteristics are perceived differently by individuals, and this difference in perception explains the degree of participation or rate of adoption of the innovation (Rogers, 2003). Using these characteristics is a valuable way to examine and explain why faculty adopt online learning.

Furthermore, Rogers (2003) describes the adoption and diffusion process in unique stages. As faculty develop their skills as online instructors,

they traverse through various stages of adoption. These stages provide distinctive ways to classify and categorize the different levels of experience of the individual faculty members. To spur the adoption to the online medium, it is important to know where the faculty members are in relationship to Rogers' Diffusion of Innovation model. Thus, Innovation Diffusion Theory was the ideal conceptual framework to examine faculty adoption of online teaching.

In summary, this study was grounded in two prominent academic theories: Social Cognitive Theory and Innovation Diffusion Theory. Self-efficacy and Social Cognitive Theory provided the psychological foundation to explain internal motivation and human behavior. Innovation Diffusion Theory provided a formal model to explain how and why people adopt or resist online instruction. These dual lenses serve as the conceptual foundation to frame the discussion of technology adoption and diffusion.

SUPPORT FROM THE LITERATURE

Online learning threatens some core values and assumptions held in higher education (Maguire, 2005; Mitchell & Geva-May, 2009; Schifter, 2000). The literature is rich with studies of effective practices of online instruction (Clay, 1999; Means et al., 2009). Reviewing the literature dealing with faculty attitudes and perceptions towards online learning established the foundation for this study.

Zhen, Garthwait, and Pratt (2008) in a study of 400 college faculty members found that the role of self-efficacy and faculty educational philosophy impacted the rate of adoption to teach online. They concluded, "the innovation rate of adoption whether relatively slow or rapid is determined by many factors such as the individuals' perceptions of and experiences with the advantages of the innovations, the difficulties and limitations for potential uses, and the need for social understanding" (p. 3). Six themes described by Zhen, Garthwait, and Pratt (2008) provide the foundation for this study. For example, the authors discuss experience, time, peer-pressure, and self-efficacy as factors that influence the decision to teach online. Additionally, they discuss the importance of philosophy and pedagogical style as a predictor of use.

Shea, Pickett, and Li (2005) examined 913 professors across 40 campuses in the New York State University. Rogers' (2003) IDT was used as a theoretical lens to examine the adoption of online learning and to identify the barriers to adoption. They found that the level of technical support, a positive experience in teaching and developing the course, the level of interaction in the course, and the content discipline affected faculty attitudes to teach online.

Mitchell and Geva-May (2009) also explored faculty attitudes about online learning with 363 faculty members at five university-colleges in British Columbia. The study triangulated an attitude questionnaire, follow-up interviews, and a content analysis of institutional documentation regarding the use of online learning. The study found four major themes and variables that manifest changes in faculty behavior. The authors contend that faculty attitudes associated with intellectual reluctance, technical and instructional support, willingness to change, and ultimately the cost-benefit influenced the adoption or rejection of online learning.

Tabata and Johnsrud (2008), at the University of Hawaii, presented a conceptual model for faculty participation with distance learning. Tabata and Johnsrud's model asserts that four major factors influence faculty participation in online learning: (1) demographics, (2) experience with online learning, (3) attitudes towards online learning, and (4) the adoption and use

of technology. These four major elements served the founding model for this study.

Finally, time and complexity are listed as major reasons for not participating with online learning. For example, Rockwell, Schauer, Fritz, and Marx (1999) cited that faculty members felt online instruction displaced the time dedicated to research and other scholarly activities. Additionally, the issues of tech support and technical complexity are cited repeatedly as impediments. One of the primary factors of resistance to teach online is frustration with technology (Zhen, Garthwait, & Pratt, 2008). The complexities of the technology along with a lack of tech support are cited barriers in the literature (Berge, 1998; Bonk, 2001; Jones, Lindner, Murphy, & Dooley, 2002; Seaman, 2009).

Resistance to Change

Resistance to an innovation is often common within an organization or social system (Maguire, 2005; Rogers, 2003). Parisot (1997) and Berge (1998) found resistance to change was the primary reason faculty do not want to teach online. This dramatic shift to online instruction is radically changing the nature of college education. Regardless of the reasons for the proliferation, it is important for college faculty to adopt and ultimately master this new medium of instruction (Mitchell & Geva-May, 2009). Still, many college faculty members are resistant to teach online (Fullan, 2007; Rogers, 2003).

Natriello (2005) argued that online learning threatens the core value of faculty control by forcing traditional programs and traditional delivery methods to be re-examined. Nevertheless, this delivery method presents new challenges for the college professor. The traditional professional development focuses on acquiring technical skills (Mishra & Koehler, 2006). However, little attention is paid to how the teacher will teach with the technology in their courses. There is an assumption that teachers will naturally know how to integrate and teach with technology. But this is not always the case. Mishra and Koehler concluded, "merely knowing how to use technology is not the same as knowing how to teach with it" (2008, p. 1033). Wang, MacArthur, and Crosby (2003) concluded that despite all the opportunities offered by the World Wide Web many faculty members have not converted to online instruction. Therefore, it is important to understand why some faculty members have converted and others maintain the traditional instructional methods.

Concerns Regarding Quality

Finally, another major issue expressed in the literature is the concern that online classes are not as good or effective as traditional classes. This is one of the research questions. For example, "critics of online education have questioned the value, effectiveness, and quality of online education" (Bolliger & Wasilik, 2009, p. 104). Bolliger and Wasilik (2009) found the student's academic performance impacted the faculty's satisfaction teaching online and factored faculty burnout. Likewise, college faculty have voiced the same concern about instructional effectiveness of online courses (Romiszowski, 2004; Seaman, 2009; Wilson, 2001). Whether this concern is real or perceived, it is a major obstacle to teaching online.

Although the research evidence is not complete or definitive, the literature presents a strong validation of the effectiveness of the quality with online instruction. The field has matured in the last two decades, and the question of quality still lingers. Both sides of this debate use the *no significant difference phenomenon* to perpetuate their perspective that online learning is no better or no worse than traditional face-to-face instruction

(Russell, 1999). The U.S. Department of Education advises against more studies that directly compare online courses to face-to-face because the pedagogy, approach, and delivery are different for each format (Means et al., 2009). Nevertheless, the debate continues suggesting that the quality of learning outcomes can be the same or better than face-to-face instruction.

METHODOLOGY

Research Design

At a large suburban university in the Southeastern United States, a mixed-method approach was used to investigate faculty's perceptions about teaching online. Three hundred, sixty three faculty members were surveyed and 14 faculty members were interviewed using the conceptual framework. The primary quantitative methodology was descriptive survey design (Creswell, 2008; Lunenburg & Irby, 2008), and the qualitative interviews followed a structured protocol (Marshall & Rossman, 2006). All faculty members were invited to participate in the study, and the survey had a return rate of 42% of full-time faculty members.

A major advantage of the mixed-method approach was the deeper level of understanding gained from the interviews that was not possible from the survey instrument. Overall, the design and structure of the research methodology produced a strong data set that explained many motivating factors, obstructing barriers, perceptions of quality, and the process that faculty members obtain information relating to online instruction. The following research model (Figure 1) was used to explore variations and themes within the sample.
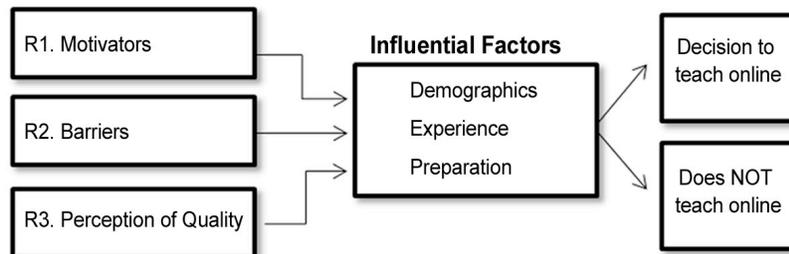

Figure 1. Conceptual Research Model

Setting and Participants

The university had a population of 23,000 students, with 738 full-time teaching faculty and 557 part-time faculty members. Of the 363 participants, 39% (143) had taught online while 61% (220) of the sample had not taught online. The sample had a gender breakdown of 52% females and 48% males. Yet females (60%) taught online at a slightly higher rate than males (40%). The racial breakdown of the sample was 76% white, 11% African-American, 9% is Asian, and 2% Hispanic. The largest majority of faculty members who taught online were tenured (51%). The academic ranks of those with online experience were fairly evenly distributed between Assistant Professors (23%), Associate Professors (25%), and full Professors (24%). The largest population that taught online ranged in age from 55 to 64 years of age. All participants gave informed consent. Table 1 presents the breakdown of faculty characteristics with online teaching experience.

Table 1

Breakdown of Participants (N=363)

Faculty Taught Online	39%	Emeriti Taught Online	2%
Faculty Taught Hybrid	46%	Professors Taught Online	24%

Females Taught Online	60%	Assoc. Profs. Online	25%
Males Taught Online	40%	Assist. Profs. Taught Online	23%
Tenured Taught Online	51%	Instructors Taught Online	7%
Tenure Track Taught Online	23%	Lecturers Taught Online	14%
Non-ten. Track Online	26%	Other Faculty Taught Online	5%

Instrumentation and Data Collection Procedures

A self-developed survey instrument was constructed based on the work of Seaman (2009) and Tabata and Johnsrud (2008). A five-point continuum where number one was designated as *Strongly Disagree* and five was designated as *Strongly Agree* was used. Three was the midpoint of the continuum and signified a neutral position; therefore, any mean score above three showed a positive association with a particular question, idea, or construct. Several questions were negatively worded and needed reverse coding. The instrument had blocks of items to address each research question, the level of experience, and the demographic characteristics.

Content validity was established using a panel of eight distance learning experts from across the campus (Creswell, 2008). The same panel screened the interview participants to determine their skill level of novice, intermediate, and experience online instructors. The reliability for the self-developed survey was established by using Cronbach's alpha coefficient. The instrument had an extremely high alpha value of 0.91 for internal consistency for all items (Creswell, 2008).

The qualitative instrument was a self-developed interview protocol (Marshall & Rossman, 2006). The interview protocol was based on the same themes as the survey and broken into sections to triangulate the research questions. Open-ended questions shed light on various aspects of the study and the methods participants use to prepare to teach online.

The survey data was collected over a four-week period, and the interviews occurred during a six-week period. The participants anonymously submitted their academic college and their skill level with online learning. The screened interview participants were randomly selected from the categories of novice, intermediate, and experienced (Wiersma, & Jurs, 2005) to provide a sample of all skill levels across the campus. The interviews were done by the same person to eliminate interviewer-induced bias (Marshall & Rossman, 2006).

FINDINGS

Motivators - Flexibility for Teacher and Student

The most prevalent motivator for teaching online was flexibility and convenience (M=4.07, SD=1.02) as well as the faculty's own decision to teach online (M=4.03, SD = 1.22). Flexibility with time and location surfaced as the most prevalent theme in the interviews. For example, 13 of the 14 interviewees cited flexibility with time and location as a key motivating factor. The ability to shift time and place had the strongest appeal to both the student and the faculty. One professor stated, "Student convenience, they can access their course when they want, or work at their own pace." Moreover, the ability to meet the needs of diverse learners was a primary motivating factors mentioned by the faculty members.

Another professor concluded, "[the students] liked the flexibility that comes from and an asynchronous delivery format. They like the time flexibility. They like the flexibility in the week to work on whatever deliverable is due that week. They also like the flexibility to work ahead." The ability to arrange one's schedule to maximize time to devote to a particular project or assignment was a major advantage of online instruction.

They enjoy the convenience of working at their own pace, and deciding what activities they would do at their own schedule.

Time shifting and flexibility are also a major advantage for the professor. One of the professors stated, "The biggest benefit is it gives me a large block of time to do research or grade papers. It frees up a blocks of time to work on other things."

Overwhelmingly, the quantitative and qualitative data suggest the flexibility and convenience to learn anywhere and anytime was the predominant motivator for adopting online instruction. Flexibility and convenience proved to be a significant finding of this study.

Personal Decision to Teach Online

The personal decision to teach online was recognized to be one of the strongest motivators. The faculty rated the importance of personal choice to teach online (M=4.03, SD=1.22) the second highest motivating factor behind flexibility and convenience.

The faculty members had a high affirmation for their own personal decision to teach online; paradoxically, they felt marginal about deriving personal satisfaction from teaching online (M=3.03, SD=1.43). The level of personal satisfaction teaching online is a positive aspect but not an important motivator. One professor concluded, "I wanted to do it because I thought it would be an interesting experience." Another complimented, "I like technology. I like to interact with students that way. I like to grow and challenge myself and learn more how to teach students in this way."

Extra Financial Compensation

This university implemented a financial incentive system to compensate professors for the increased workload to teach online. According to the quantitative data, extra pay for teaching online (M=3.77, SD=1.14) proved to be a major motivating factor. However, some of the interviews contradicted the quantitative findings. Only four of 14 interview participants stated that the extra pay was very important. One professor said, "If the extra financial compensation was taken away, watch out. You would have a rebellion on your hands." Another professor concluded that the extra pay was extremely beneficial, especially for adjunct instructors who were trying to piece together an income from multiple sources. Finally, one interviewee stated, "It helps. As you know, most of us are dealing with the same financial salaries we have had for the last several years, so a financial incentive to do the additional work [is nice]."

External Pressure to Teach Online

Allen and Seaman (2007) cited the explosion of online universities like Phoenix as a source of competition and external pressure on the traditional university. One participant stated, "We are getting the stuffing knocked out of us by the private, online universities." The pressure maybe overt or covert and may occur from external sources or from internal pressure from the university administration, deans, or chairs.

Almost all faculty members acknowledged the existence of external pressures. One professor stated, "I would not say it is like an overt pressure, there is a sense that this is where the university is heading." The colleges provide encouragement and resources to increase participation in distance learning.

Survey items examined the source and impact of the external pressures. The aggregate mean score of the variables that measured pressure was M=2.07 (SD=0.92). For example, the outside pressure from competitors (M=2.52, SD=1.41), the internal pressure from the campus administration

(*M*=2.23, *SD*=1.34), peer pressure from colleagues (*M*=1.78, *SD*=1.04), and pressure from the students (*M*=1.76, *SD*=1.01) did not impact the decision to teach online. The participants recognized external and internal pressures to teach online; however, these pressures did not impact the decision to adopt online instruction.

Barriers to Adoption - More Work and More Time

Of all the obstacles examined, the amount of work (*M*=2.20, *SD*=1.14) and extra time (*M*=2.25, *SD*=1.17) it takes to teach online was cited as the strongest barrier. The participants slightly disagreed with the premise that the time spent on online instruction would be better spent on other aspects of their work (*M*=2.96, *SD*=1.31). One professor commented, "The workload is roughly equal during the semester. But that does not include the large amount of time on the front-end and the back-end. So when you look at it over the course of the semester, these classes are significantly more work than a traditional course."

The most distinctive theme to emerge from the interviews was the issue of the amount of work and the time it takes to teach an online class. Many faculty stated the process was extremely labor intensive and time consuming. All 14 interview participants cited that online instruction takes as much time or more time than a face-to-face course.

Philosophical Opposition

Philosophical opposition to online learning was *not* a major barrier to adoption. The survey data showed that most faculty members do not possess a philosophical opposition to online instruction (*M*=3.67, *SD*=1.39). This perspective was supported in the interviews. For example, of the 14 participants, only one professor had a strong philosophical opposition to online instruction.

Problems Teaching Online

The survey data suggests that teaching an online course was *more frustrating* than teaching a traditional face-to-face course (*M*=2.85, *SD*=1.24). However, the participants were not concerned about the loss of control over the teaching and learning process (*M*=3.19, *SD*=1.39). Another barrier that was expressed in the interviews was the fear of being electronically bound to the classroom 24 hours a day, seven days a week. A professor stated that one advantage of the face-to-face class is the ability to leave problems or issues until the next class. The level of frustration teaching an online class and being electronically bound to the classroom were identified barriers.

Academic Integrity

Another major barrier to adoption of online instruction was academic integrity. Cheating and academic dishonesty were serious issues of concern and cited as barriers. A professor said, "It is easier it does seem easier to cheat online. I don't see how you can know that the person on the other hand is who they say they are." Another professor stated, "Yes, I think it's easier for them to cheat in an online environment. . . . This is one of the reasons it takes so long to develop an online course. For every assessment, I have to make multiple versions of the questions." Lastly, another teacher concluded, "My students are good at it [cheating] no matter what. . . . We have to rethink assessment. I would never say quizzes are bad and tests are bad because I use them both, but using activities they have to complete which is hard to cheat."

Technical Skills and Technical Support

Technical support was not found to be a barrier to adoption. The survey items addressed the availability and quality of technical support. The aggregate mean score showed a positive association with technical support (*M*=3.65, *SD*=0.97). Overall, the survey participants did not view technical support as a major barrier.

The faculty reported a positive association with their ability to learn the technical skills to teach online and had a high level of confidence in the ability to obtain technical support. The descriptive statistics concluded that faculty members were not anxious about their ability to teach online (*M*=3.77, *SD*=1.24) possessing a high level of self-efficacy. The participants felt confident in their ability to learn the technology needed to teach online (*M*=3.65, *SD*=1.18). Technical support was not a barrier to adopting online instruction which contradicts the literature.

Perceived Quality of Online Learning

Faculty had a mediocre opinion about the quality of learning outcomes in an online environment. For example, was the outcomes at least as good as a traditional face-to-face course (*M*=2.99, *SD*=1.35). The quality of student work in an online course is at least as good as a traditional face-to-face course (*M*=2.99, *SD*=1.33), or when asked if the quality of the course content is at least as good as a traditional face-to-face course (*M*=2.93, *SD*=1.38).

Perhaps the most telling element regarding quality of online instruction was the feeling that an online course is at least as good as a traditional face-to-face course (*M*=2.83, *SD*=1.34). The interviews produced more negativity towards online instruction. One professor made this very poignant comment. "If you can prove to me that this is a better method of teaching, I would do it. But right now, is not better than what I'm doing in the classroom." This is a major finding of the study.

The faculty expressed the lowest confidence in the ability to create deeper comprehension and understanding of the content online (*M*=2.44, *SD*=1.16). In other words, the faculty struggle with creating critical thinking skills in the online environment.

Overall, the sample felt the same learning objectives could be accomplished in an online environment; however, they had a negative feeling toward the quality of instruction in an online environment which may impact the adoption process.

DISCUSSION AND CONCLUSIONS

A little less than half of the sample had experience teaching online, and more women than men teach online. The breakdown among the tenure status is relatively equal as with the breakdown of faculty ranks. Those who teach online were older and have more experience teaching in higher education. This is an interesting finding of this study. Many would conclude that younger faculty members would adopt technology faster than older professionals. Therefore, educational planners may focus their efforts on more seasoned faculty members.

The major selling point of online education is the ability to learn anytime and anywhere (Allen & Seaman, 2007; Maguire, 2005). Overwhelmingly, the primary motivating factor is flexibility and convenience for both the teacher and the student. Clearly, online instruction provides many relative advantages to face-to-face instruction, including anytime instruction and the elimination of geographic constraints.

More importantly and perhaps the most significant finding of this study is the ability of online instruction to meet the needs of a wide range of

diverse learners. As an example, one professor commented, "My key motivation is to meet the needs of the learners." Another professor stated, "You can make a large class small when you teach online." Additionally, providing equity for all learners has been a long-standing goal in education (Dewey, 1915; Freire, 2000). For example, the unprecedented Salamanca Statement (UNESCO, 1994) called for the countries of the world to include all children in the educational process. If the learner is confined by a physical disability, geographical barriers, or other external commitments, then online learning provides a unique way for diverse learners to obtain an education. From the traditional student who is working, to the business professional that is traveling, or a single mother, online learning is a way to reach their educational objectives. The ability to meet a wide range of underserved or even marginalized learners is a prevailing motivating factor for the adoption of this technology. This is one of the most powerful findings of this study, and an important understanding for educational planners if they want to reach a wider audience of students.

The extra time and a large amount of effort were cited as the primary obstacles to adopting online learning. This is logical and understandable given the heavy teaching loads and demands of scholarship and service. The findings of this study showed faculty members are very busy with multiple priorities. Therefore, if online learning is to be successful, the faculty members must make it a priority, and this is an important consideration for the educational planner.

A more surprising and confounding conclusion is that faculty had very little philosophical opposition to online instruction; yet, the faculty had a fairly negative opinion regarding the quality. The majority of faculty viewed online instruction as less rigorous than a face-to-face class. Some faculty felt the quality of student work was inferior to that of a face-to-face course, and expressed serious concerns about cheating. One faculty member had a rather clear explanation. "Online classes are no better or worse than a face-to-face class. Just as you have good face-to-face classes and teachers, you have good online classes and online teachers." Regardless, there is a stigma attached to online instruction.

To combat this stigma, educational planners should facilitate situations where faculty get to experience high-quality, online instruction. Allowing the faculty member to be the student and see what other faculty are doing in their online classes will spur creative and produce change. Ultimately, this may be uncomfortable and challenge the existing paradigms of traditional instruction for the faculty member. The focus must be on higher-order thinking skills. Nonetheless, engaging in instruction from the students' perspective should propel the development process, and hopefully dispelling the notion that online instruction is inferior.

Finally, the question of academic dishonesty was cited as a substantial barrier. Perhaps this is the most significant finding and contribution of this study. Many answers are just a mouse click away for this copy and paste generation (Watson, & Sottile, 2010). If traditional tests are employed, using a proctored testing center will ensure academic integrity. Another method to increase security is the use of plagiarism software. Other techniques to secure integrity of the assessment process included the time limits on tests, the use of multiple versions, and more subjective open-ended questions. However, this begs a larger question regarding the nature and quality of the assessment process.

This is a complicated issue that requires coordinated and systematic planning. It is important for faculty members to rethink the assessment strategies used in the online, as well as for the face-to-face environments. Multiple-choice tests should give way to more creative activities that foster

deeper and more critical thinking. For example, a multi-step project with milestones creates deeper understanding and is much harder to plagiarize. This places an extra burden on the instructor, but this recommendation should improve quality.

In conclusion, this study is significant because it adds to the collective body of knowledge regarding faculty motivations to teach online. The findings directly support the conclusions reported by Seaman (2009), Tabata and Johnsrud (2008), and Zhen, Garthwait, and Pratt (2008). A clearer picture of the motivators and barriers in the adoption process can help educational planners meet the needs of the expanding volume of online learners.

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