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UNDERSTANDING FACULTY MOTIVATION TO TEACH ONLINE COURSES

By

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ABSTRACT

UNDERSTANDING FACULTY MOTIVATION TO TEACH ONLINE COURSES

By

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This dissertation is a study of faculty motivation to teach online at a major land grant university in the Midwestern United States. Recent growth of interest in online distance education is prompting traditional colleges and universities to adopt online degree programs. With the development of these new degree programs come new policy and programmatic challenges. Faculty are the greatest resource in any university degree program, and the growing demand for online education will increase the need for faculty to teach online. Therefore, a timely issue in higher education is what motivates university faculty to teach online courses.

In this study 71 faculty completed an online survey about factors they felt would or would not motivate them to teach an online course. Participants were asked to rate the factors on a scale of strongly disagree to strongly agree, yielding quantitative data for analysis, as well as one open-ended question allowing participants to comment on their motivation for teaching online or not. The survey was developed considering the domains of professional development suggested by Caffarella and Zinn (1999). Fifteen of the 71 respondents participated in a semi-structured interview, providing the researcher with qualitative data to compare and contrast with the survey results. The interview provided an opportunity for a richer understanding of faculty motivation to teach online.

Results showed issues of teaching and student learning (including concerns about pedagogical quality of online learning, connecting with off-campus students, and new teaching opportunities), issues of time (including tenure process concerns and course development time) and issues of technology support (pedagogical and technical) are major areas affecting faculty motivation to teach online. Analysis of faculty voices from the open ended survey question and interviews highlighted the individuality of faculty perceptions of online teaching and their motivations for teaching or not teaching online. Additionally, the study showed the importance of faculty discourse in the development of policies and structures relating to online learning programs. Results of the survey and interview portions of the study were consistent with each other and confirmed prior research on faculty motivation. The results of this study may prove useful in designing motivational incentives and support structures for university faculty teaching online.

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CHAPTER ONE

INTRODUCTION

New technology is an old educational enchantment – David Cohen

Cohen wrote the above statement in his 1987 piece titled "Educational Technology, Policy, and Practice." He noted that one would never know from reading the literature about computers in schools that the "romance" with technology dates back to at least the first part of the nineteenth century when educators were "enthused about the production and wider distribution of school texts." Excitement over new technologies and their implications for learning has continued over the centuries and the present day is no exception.

Technology, particularly online learning, is revolutionizing higher education, enabling greater reliability, scalability and access to education (Jones, 2004). Increasing numbers of Americans of all ages are turning to online education as a convenient way to earn degrees, gain job skills, and to pursue leisure endeavors. Indeed, the recent proliferation of telecommunications technologies and devices has made computer and World Wide Web (WWW) based distance learning a viable option for many learners (Parker, 1996).

With these advances come new challenges and issues related to teaching, learning, and administration in higher education. New universities are being formed and accredited in which all courses and administration are online. These universities often do not have physical campuses, but exist solely in cyberspace. In response, traditional universities are moving from providing only face-to-face courses on campus to becoming institutions emphasizing the availability of online educational opportunities in addition to

the traditional classroom offerings (Levine, 2000). Additionally, in 2006 Congress repealed a federal financial aid law that had required students to attend institutions that offered a minimum number of face-to-face courses in order to receive financial aid. With the change in federal policy, online-only institutions are more competitive than ever with traditional colleges and universities. Incorporating the technological advancements and benefits of online learning will be important for keeping traditional educational institutions viable and moving them successfully into the 21st century.

Almost ten years ago, the U.S. Department of Education predicted that enrollment in postsecondary institutions would increase by 14% due to factors such as growing high school graduating classes, more high school students attending college, and an increase in the number of non-traditional college students ("A New Virtual University," 1997). Reports published by the National Center for Education Statistics (NCES, 1999; Knapp et al., 2005) reported that by 2004, enrollment in postsecondary institutions had grown by 21% since 1997.

Since the recent explosion of telecommunications technologies available for teaching at a distance, many have realized the potential distance learning holds to improve access to education for all ages, levels of education and diversity (Parker, 1996). Despite the large growth of interest and offerings of distance education, many faculty are not embracing online teaching. Faculty resistance has been linked to institutional issues such as lack of incentives, inadequate reward systems, and absence of an institutional framework to properly train faculty for teaching online (Olcott & Wright, 1995; Lewis, 1995; Verduin & Clark, 1991). Of particular interest, then, is to investigate how and to what extent research universities are integrating online offerings into their curricula.

Since these universities are primarily charged with conducting and publishing research (Rice & Austin, 1990), which often overshadows teaching responsibilities, moving toward quality online teaching and course offerings can be difficult and often requires re-prioritizing goals and responsibilities.

Traditionally, faculty involved in online teaching have been the "early adopters" (Rogers, 1962) of technology on campus. With the enormous growth of online course offerings, however, the number of faculty needed to keep pace with increasing demand for online courses is more than the number of "early adopter" faculty at most universities. Online program administrators are challenged as they search for ways to motivate faculty to participate in online course offerings. How faculty develop and sustain motivation to create and teach online courses is a multifaceted issue, touching on domains such as life history, teaching beliefs, intrinsic and extrinsic incentives, current social and professional practices, technology availability, and opportunities for scholarship and intellectual renewal.

Statement of the Problem

This new focus on technology brings challenges about how teaching and learning occur in new technology enhanced environments. Students must *re-learn* how to learn within an environment much different than they have experienced in their prior education. Teachers must also modify teaching styles to accommodate technology enhanced environments while, at the same time, maintaining the pedagogical commitments that underlie their teaching styles. Administrators are struggling with staffing online programs as student interest is outstripping faculty motivation and maintaining high quality course offerings by expert instructors in all formats remains a top priority.

According to a 2005 report (Sloan Consortium, 2005) 56% of Carnegie Doctoral - Extensive universities now cite online learning as an important part of their long-term plans. The same report noted that online learning growth has continued at a rate of around 20% per year during the period of 2003-2005. Growth in 2005 was estimated at about 360,000 new students participating in online learning. This growth rate exceeds the overall growth rate in higher education, and 74% of the universities who participated in the study expected that their online enrollments would continue to increase over the coming years. Smaller schools, such as private colleges and those that do not offer graduate degrees were least likely to agree that online enrollments would continue to rise. While online learning programs are now growing in popularity at the undergraduate level, many established online learning programs are aimed at masters level students.

The demand for faculty, and particularly for online teachers, is expected to grow 36% or more by 2014, coupled with an expected increase in the population of 18-24 year

olds and a growing demand for lifelong learning (U.S. Bureau of Labor Statistics, 2004). The new generation of students who have grown up with computers will *expect* university faculty to use technology well and in an "inspiring" way (Oblinger, 2003). Faculty need to learn to use technology and integrate it into their instruction, even if specialists are employed to support the curriculum development and teaching process (Austin, 2003). Additionally, as more institutions incorporate online learning into their programs, faculty will be expected to use technology-based teaching and to provide online course offerings (Gilbert, 1996; Green, 1996, 1997; Levine, 2000). Also noteworthy is the notion that the success of technology depends partly on a phenomenon quite familiar to reformers, the persistence of traditional modes of teaching (Cohen, 1987). The combination of these influences is making faculty motivation to teach online courses a timely issue in the field.

Purpose of the Study

While development of new technologies and recruitment of students are important in online teaching and learning, faculty are essential. Without faculty universities cannot staff programs, provide quality instruction, or provide knowledgeable mentors for students. Indeed, the success of any distance education effort rests primarily on the commitment of the faculty (Gottschalk, 1996), and evidence suggests that a good instructor is the key to student persistence in an online course (Palloff & Pratt, 2001). Olcott and Wright (1995) noted that a renewed commitment to faculty across the American higher education system is required for the development of distance education programs.

As student demand for online courses has grown over the years, faculty interest in teaching online has largely stagnated. The apparent lack of interest from faculty may be due, in part, to minimal research time and effort focusing on faculty and their roles in online teaching. To date, most online learning research has focused on the students and instructional design aspects of creating online courses, not on faculty needs. Much of the research on online learning has primarily been based on data obtained as student and faculty perceptions of quality (Swan, 2003), rather than constructive questioning used to make changes to the design of instructional environments and alternative teaching methods. There are few qualitative studies investigating faculty interest in online teaching and how institutional structures affect faculty participation in online teaching. Specifically, this study seeks to understand:

Why are faculty interested in and motivated to teach online courses?

If faculty are not interested in online teaching and learning, why?

What do faculty believe are important motivating factors to teach online?

Does the motivational value of these factors change after faculty have participated in a prior online teaching experience? If so, how?

How does the social environment in which the faculty are practicing teaching online affect their participation or non-participation?

Do members with certain demographic characteristics tend to participate more or less in online teaching? If so, why?

This study aims to identify characteristics of faculty in a college of education who participate in online teaching compared to those who do not, and to better understand how the social context affects participation in online teaching. This study seeks to

understand a specific population in depth in order to develop recommendations for practice applicable to the college in question and other similar research institutions.

Significance of Study

The fast growth of online learning worldwide has outpaced the rate at which researchers are publishing work related to the field. Of the studies published on online learning, many focus on student participation and experience, rather than on faculty. Relatively few studies have been published that focus on faculty motivation regarding online teaching and, of those, most have focused on quantitatively measured pre-identified factors in relative isolation from the broader context. While there is merit to understanding more about factors that can be measured quantitatively, it is also important to look qualitatively at faculty's career involvement with technology and change and at their perceptions of the current social and professional environment in which they are practicing the profession. The use of interviews provides a richer, qualitative view, allowing the researcher to probe more deeply and more fully understand this complex field.

Research Questions

The greatest resource in developing and maintaining online course programs are the faculty who teach the courses. What motivates or inhibits faculty participation in teaching online courses is a topic that is at the forefront of the demand for high quality online course offerings. In order to study faculty motivation to teach online courses, it is necessary to ask a three-part question:

1. What motivates faculty who teach online courses at this college to teach them? What are some of the challenges and limitations of their online teaching?
2. Why are the faculty who do not teach online courses at this college unmotivated or uninterested in doing so?
3. What institutional policies and structures affect faculty motivation to teach online at this college?

Both the personal and professional lives of faculty engaged in teaching online must be considered in order to better understand their motivation. The two are difficult to separate, as factors from personal life are likely to affect motivation to participate in online teaching, as are professional incentives, expectations and experiences such as the training and enculturation they received as doctoral students and junior faculty.

Limitations of the Study

Limitations of the study include the relatively small population within the college studied. This population, while sufficient for studying policy and practice within the college, is limited in its ability to be generalizable to other populations. It should be noted that the researcher is a member of the college community, both as a doctoral student and as an academic specialist working to help faculty integrate technology into their teaching and research. The role the researcher has in this organization brought both

advantages and disadvantages to the research. The researcher had pre-established relationships with many of the participants in the study and was able to use the repoire he has established with faculty in the college to gain a deeper level of knowledge about the participant and their views during the interviews. While the relationships the researcher has established with the faculty participants were helpful, they also created a dilemma for the researcher in his reporting of results. As results were reported the researcher was careful not to betray the trust and relationships he had established with participants, sometimes to the point of not being as descriptive in reporting data as he could have been. This lack of detail helped the researcher to protect the identities and ideas of the participants, but also caused the researcher not to examine some statements as thoroughly.

An assumption of the research is that faculty answers and interview responses were truthful. Due to the nature of self reported data however, the possibility exists for reporting by participants to be less truthful. This is especially important to note when thinking about online teaching and technology adoption as most humans have difficulty admitting to fear, and fear is often a part of what prevents faculty from adopting online teaching or using technology in the classroom.

While the literature shows evidence of differences between perceived barriers and incentives to the adoption of instructional technology between early adopter (faculty who are quick to adopt new innovation) and those who may be slower in their adoption (mainstream faculty), these two groups were not differentiated during this study as the purpose was to understand why faculty do or do not participate in teaching online. Second, administrators and non-teaching faculty were not invited to participate in this

study as the focus of the study is on the faculty who are members of the college and their understanding of and interest in teaching online courses.

Chapter Summary

Online learning is growing rapidly in the United States and around the world. Current growth of online learning is outpacing faculty adoption of online teaching methods, putting strain on programs attempting to meet the demands of students. This study examines reasons that faculty at a particular college of education do and do not participate in online teaching in an attempt to understand how administrators and program coordinators can encourage faculty participation in online teaching.

CHAPTER TWO

REVIEW OF LITERATURE

The study of faculty motivation to teach online courses is a relatively new area due to the recent interest colleges and universities have taken in online course offerings. Studying motivation in this sense is a complex and sometimes problematic area. Because the nature of the domain is complex, and motivation to teach online courses has both a social and psychological realm, it must be studied looking at the organizational and individual levels. By combining the two realms, a more salient picture of this complex area can be crafted.

This literature review will approach faculty motivation first from a historical look at distance learning, then moving to prior research on online teaching. The review will also cover the organizational and individual levels of studying online teaching by looking at change and innovation in schools and organizations, as well as faculty professional development, adult learning, and intrinsic theories of motivation. Each of these areas should be studied in isolation from one another, in connection with one another, and situated within the social milieu in which they occur to fully understand their impact on faculty motivation to teach online.

A Historical Look at Distance Learning in America

Because online learning is the newest rendition of distance learning, a brief review of the history of distance education in the American educational system is appropriate. Distance education has now become almost wholly synonymous with online learning. Early forms of distance education date back to the late 19th century with the

correspondence courses offered by such places as Chautaqua College of Liberal Arts and Cornell University (Nasseh, 1997). As communications technologies became more advanced during the 20th century, distance education was delivered over radio and television. Radio has long been used as a delivery method for educational content, especially in developing countries (Kirby & Thompson, 1987). During the years between World War I and World War II the United States government granted radio licenses to over 200 colleges and universities (Nasseh, 1997) but by 1940 only one credit bearing college course was delivered by radio, and this course failed to have any enrollments (Atkinson, 1941). Despite its apparent failure, educational radio bred interest for educational television later in the 20th century. The late 1970s and 1980s brought television course offerings through satellite and cable connections (Watkins & Wright, 1991). These course offerings continued through the mid 1990's, with new computer-based networking opportunities being integrated as they were developed. Wallace (1991) suggested that internet mail be incorporated into television courses as a way of facilitating better communication between students and instructors.

Around the time the World Wide Web (WWW) started to become more widespread in the early 1990s, some faculty at institutions around the world began to look at the WWW as a place to make their courses available to students at a distance. This new medium offered the ability to combine text and graphic material with discussion opportunities all in one place. Additionally, the WWW offered the ability for easy updating and corrections as well as instant distribution of course materials. Out of this early work came what we know today as the field of online learning.

Recently, online learning has been established as an acceptable and sometimes preferred method of teaching at colleges and universities in the United States. Originally, online programs were only offered by universities that exist entirely online such as University of Phoenix and Capella University. Online programs have now permeated established higher education institutions, with top tier education schools such as Michigan State University, Harvard University and the University of Wisconsin now offering online programs as a part of their curriculum. Online programs at these institutions are generally administered solely through the WWW. In addition to online course offerings, institutions are now beginning to offer hybrid models of instruction that combine the advantages of classroom and online instruction into one course, substituting classroom seat time for online activities. Though many researchers use the terms distance education and online learning interchangeably, in the present study the term online learning will be used to refer to courses that are taught at distance using the WWW as a delivery method.

Prior Research on Faculty Teaching Online

> *Assisting faculty efforts to integrate information technology into instruction remains the single most important information technology issue confronting American colleges and universities (Green, 1999).*

Previous Studies

Since online education is a relatively new field of study, few have clearly identified motivators that propel faculty to teach online (Parker, 2003). Previous studies on this topic have been survey-based, with large populations answering general questions about their motivation for teaching online (e.g., Betts, 1998). The studies conducted using interview research or other non-survey research have focused more on faculty career structures (Wolcott, 1997) than on a comprehensive investigation of the faculty member's life, career, and situational influences.

Studies involving faculty teaching online

Relatively few studies involving faculty motivations for teaching online have been published. Most research published in the area has been in the form of doctoral dissertations or non-traditional publishing methods such as websites. In contrast, there are many studies that have looked at faculty motivation to teach with technology. These studies focused mainly on samples from across departments and disciplines at the university level, rather than on a specific case from a college or department.

Studies of faculty motivation and experiences teaching with technology have been conducted less in the social sciences and more in the applied and traditional sciences, with studies found in fields as varied as mathematics and poultry science (e.g., Hogle, Pesti & King, 2000; Pankowski 2003). These studies found that faculty are often

motivated to use technology in their teaching when concerns such as desired equipment, instructional support, peer support and exposure to ideas and examples about how to use technology are addressed. Others have found that community college faculty generally teach distance learning programs for the same reason they teach traditional courses -- internal rewards. (Miller & Husman, 1999).

Effects of gender, rank and age

Studies on faculty involvement in teaching online have shown that faculty rank, tenure status, age and academic discipline can be indicators of whether and how often they participate in online teaching (Heath, 1996; Hill, 1993; Ruth, 1996).

Milet (1991) conducted a study of college faculty in Pennsylvania and found that there was no significant relation between gender and adoption of new computer technology. Wilson (2003) reported that female faculty members are more likely use university resource centers than male faculty members, suggesting that females may be more willing to "stop and ask for directions" if they get "lost" along the way. Wilson (2003) found few significant differences for age or rank, suggesting that senior faculty are not necessarily at a disadvantage when using instructional technology.

Motivating factors

The largest and most widely cited study on faculty motivation to teach online was conducted by Betts (1998) at the George Washington University. In the study, Betts surveyed 532 faculty and deans from across the university about factors that influence them to participate in distance education. Teaching online as an intellectual challenge, personal motivation to use technology, ability to reach new audiences that cannot attend

classes on campus, and opportunity to develop new ideas were factors found to positively influence faculty participation in distance education. Factors such as lack of release time, lack of technical support from the institution, concern about faculty workload, and lack of grants for materials and expenses negatively influenced faculty participation. Factors such as credit toward promotion and tenure, merit pay and royalties on copyrighted materials did not significantly influence participation.

In that study, there were no significant differences between what faculty members and deans identified as motivating factors, however there were significant differences between what faculty members identified as inhibiting factors and what deans perceived as inhibiting factors. Of the participants who had never taught a distance education course, 64 percent said they would be interested in teaching at a distance in the future, but many of these participants noted they were not sure where to obtain information about distance education at the university or how to become involved in teaching a distance education course, suggesting the importance of well designed support structures for faculty teaching at a distance. This study also found that faculty members who had extensive experience in higher education and faculty members who were already tenured faculty were more likely to participate in distance education. Faculty were also found to be more likely to participate in distance education if administrators eliminated inhibiting factors and stress intrinsic benefits involved in distance education. The faculty members generally recognized the value of distance education.

Based on Betts' study, Schifter (2000) conducted a study of 263 faculty at a research I, state funded university representing all colleges within the institution. The top five motivating factors for participants who had taught online previously were personal

motivation to use technology, opportunity to develop new ideas, opportunity to improve their teaching, opportunity to diversify program offerings, and course flexibility for students. In the same study, faculty who had not taught an online before rated opportunity to develop new ideas first, technical support provided by the institution, personal motivation to use technology, intellectual challenge, and overall job satisfaction.

All groups in the study rated lack of technical support provided by the institution as the top inhibiting factor. The top five inhibiting factors rated by faculty who had taught online before were lack of technical support provided by the institution, lack of released time, concern about faculty workload, lack of grants for materials and expenses, and concern about quality of courses. For people who had not taught online before lack of technical support provided by the institution, concern about quality of courses, concern about faculty workload, lack of distance education training provided by the institution, and lack of release time were the top five inhibiting factors. Faculty members found that their involvement in distance education gave them certain benefits, such as carving out a professional niche for themselves, increasing their visibility and reputation at state and national levels, and establishing and maintaining critical relationships on campus.

In a follow-up article (Wolcott & Betts, 1999) Betts reported faculty ranked all factors very similarly but added two extrinsic factors to the top-ranked items: technical support provided by the institution and an increase in salary. By contrast, most nonparticipating faculty rated extrinsic factors such as: an increase in salary, monetary support for participation, working conditions, technical support provided by the institution, and release time as most important for teaching a future course online. Faculty in this study reported themselves in the position of having to do all the other

things in addition to distance education. Frequently cited reasons for nonparticipation were lack of time, concern about the absence of face-to-face interaction, and lack of skills needed to become involved in distance education. Time constraints and preference for traditional teaching were also noted. Lack of recognition for the amount of work and time involved in developing and teaching online courses emerged as a major demotivating factor for participants. Concerns about lack of technical, administrative, and financial support, lack of release time, and absence of grants and materials were also cited as examples of reasons not to teach an online course.

Early adopters and training programs

Faculty members who are likely to be easily recruited to distance education characterized themselves or were characterized by their peers as *early adopters* (Wolcott & Betts, 1999). Distance education held a strong appeal for faculty who were intrigued by technology and motivated by the opportunity to learn to use and integrate the systems. Faculty who are innovative, who are looking for challenge or who are intrigued by the technology, are those who generally teach online courses.

Faculty training programs tend to be limited on how to use the technologies or software in traditional classrooms on campus, not how to teach at a distance (Schifter, 2000). Barriers to effective faculty training and development programs include lack of access to adequate hardware and software, lack of active support from administration, time constraints, limited recognition of the potential technology has for education, and faculty who are uninterested or unwilling to take the risk and commit their time (Irani & Telg, 2002). Spotts (1999) indicated that if instructors are expected to use instructional

technologies they may need technical support and training support.

Time and rewards

The reward system, whether written or unwritten, is of primary importance to faculty and their attitudes towards distance education (Gannon-Cook & Crawford, 2002). Wolcott and Betts (1999) stated that participation in distance education hinges on how the faculty perceive their return on investment, and distance education has been shown to return intrinsic benefits more than extrinsic gains. The design process for an online course takes valuable time and energy away from the traditional reward system and therefore is a concern for untenured faculty (Gannon-Cook & Crawford, 2002). For non-tenured faculty time they spend teaching or developing an online course is time not spent on tasks that are traditionally part of the reward structure. Because of this, tenured faculty have less to lose by getting involved as it does not have the potential to cost them as much as it might cost in junior faculty member.

Time for faculty to design and develop instructional technology tools is an important part of the motivational structure. Wilson (2003) noted that time is a critical element to faculty participation in using instructional technology. In their study, Gannon-Cook and Crawford (2002) found that tenure consideration was a top priority for those faculty who had not yet achieved tenure. They also note that many faculty already carry full or overload teaching and administrative workloads, so it is difficult to persuade them to do the additional work for distance education courses without some type of compensation. Understanding and recognizing the faculty members' efforts in online teaching in the form of tenure and promotion was important to some faculty (Irani &

Telg, 2000). A participant in Irani and Telg's study stated "faculty understand the benefits and importance of learning new strategies and techniques to teach at a distance, but they are not motivated to take training because they have competing priorities and believe their efforts are not rewarded and not recognized." Although activity in distance teaching itself may not be accorded direct credit for tenure and promotion, the possibilities that participating in distance education could contribute to individuals' tenure files was noted (Wolcott & Betts, 1999).

The Wolcott and Betts (1999) study reinforces the idea that distance education courses involved a considerable amount of work, especially the investment of time at the beginning. A participant in this study noted

> *It takes time to do the development properly, and I think if we're going to make technology work we have to do it right. It's a lot more than putting your lecture notes together at the last moment before you walk into class; you have to do it well or it fails miserably.*

The question of workload emerged as a major concern to the faculty, and they were divided on their answers to the issue. Some participants thought teaching online was just part of the assignment of the normal course load, others believed it to be above and beyond. Those faculty who have taught online before or those who are involved in distance education administration, tended to believe that teaching online is an additional burden and that there should be some sort of compensation for the additional load faculty are taking on (Wolcott & Betts, 1999). Some faculty saw distance education as a personal challenge to improve their teaching and develop competence in using new delivery media and techniques (Wolcott & Betts, 1999).

There is evidence that commitment from administrators is important to faculty. If commitment from administrators is evidenced by multiple examples of support, faculty

will be more willing to meet them somewhere between the extreme's (Gannon-Cook & Crawford, 2002).

Rewards for faculty can include money, however many studies have noted that rewards such as recognition or tenure and promotion can work as well or better (Wilson, 2003). As noted previously, teaching online is more likely to return intrinsic benefits than to return extrinsic gains (Wolcott & Betts, 1999).

Olcott and White (1995) found that external rewards are not typically a primary incentive for faculty to teach at a distance. Wilson's (2003) faculty participants reported that intrinsic incentives and those that benefit students had the strongest influence on their interest in teaching with technology. Benton (1997) noted that faculty tend to excel in teaching activities due primarily to their desire for intrinsic rewards such as feelings of personal satisfaction, a sense of accomplishment, and seeing students succeed. Miller and Husman (1999) conducted a study of 53 community college faculty and found that factors influencing motivation included internal rewards and incentives such as enjoyment of teaching and professional challenge as reasons to teach at a distance. Responding to student needs, institutional atmosphere, obligation, and sense of empowerment also were rated highly on their scale.

Taylor and White (1991) also argued that intrinsic rewards such as self-fulfillment and the enjoyment of teaching were central to a pursuit of teaching in distance education programs. Dillon and Walsh (1992) identified rewards and incentives as key issues relating to faculty participation. Those faculty members in this study were not enticed to teach distance education courses by the promise of external rewards, or were not in it for the money. Wolcott and Betts (1999) noted that their participants taught online to fulfill

one of several personal or socially derived satisfactions such as the ability to reach new audiences, opportunity to develop new ideas, personal motivation to use technology, technology use as an intellectual challenge, and overall job satisfaction.

Wilson (2003) also found that money was a strong "dissatisfier" among faculty participants, but was a weak satisfier. However, motivators found to be important in the study by Gannon-Cook & Crawford (2002) were increased salary, monetary stipend, and compensation time. A participant in Irani and Telg's (2000) study noted the importance of monetary compensation for faculty within their departments. Community college faculty agreed least with the incentives of relationship with administrators, enjoyment of playing with technology, external rewards such as merit pay reduced teaching load or credit toward tenure and promotion (Miller & Husman, 1999). Data from Miller and Husman's study also indicated that faculty do not participate in distance learning because they want to explore using technology, contradicting results of the reported by Wolcott and Betts (1999) and others.

Change in Schools and Organizations

Theories that conceptualize organizations as rational entities would expect that higher education would respond to the current changes in technology by developing internal policies and structures that would help them adapt. In reality, higher education traditionally has failed to conform to the rational model of organizational structure (Jaffee, 1998). Schools naturally resist changes that put pressure on existing practices (Cohen, 1987; Cuban, 1986) even if these changes are necessary and beneficial. Cohen observed that the persistence of traditions of teaching is a major factor that affects the success of technology integration. Tyack (1974) noted that schools are systems for

preserving certain values and practices, while at the same time minimizing or eliminating others in order to perform more efficiently.

Much has been written about the problem of technology use in school classrooms (Becker, 2001; Cuban, 2001; Zhao et al., 2002). Schools are often directly at odds with new technologies, having implemented structures that prevent widespread use of computers, perhaps because a school's main focus is to perpetuate a knowledge system. Problems range from limited space and outdated equipment to lack of access to technology and technical support needed to teach. Other studies indicate that teacher's attitudes and expertise with technology are often key factors in their use of technology (Zhao & Frank, 2003). While these examples are taken from research on K-12 classrooms, it is likely that results will be similar for university faculty. Applicable to all levels of teaching with technology are concerns about the value of technology in teaching and learning (Cuban, 1999), as well as reliability issues with the technology being used.

Institutions of higher education are social organizations characterized by traditions, cultures, and norms, and institutional missions. Because higher education has a "loosely coupled" organizational system, for example the administration is only "formally" a supervisory and authoritative role, it is hard for rapid and comprehensive organizational change to occur. In academia, obstacles to change are closely associated with the established practices and cultural traditions of the teaching faculty. Thus, we must understand that faculty are the key to creating widespread organizational change.

Online teaching, in contrast to other forms of instructional technology, poses a challenge to faculty who value, are committed to and have a vested interest in conventional classroom teaching. In a sense, they pose a challenge to one of the most

cherished institutions in the academy. Jaffee (1998) notes that the classroom has taken on the status of a sacred institution in educational organizations, a place where a standardized set of props and objects carry symbolic meaning and a social institution that assigns roles, expectations and status to participants. Jaffee goes on to note that the classroom has historically centralized power and influence in the hands of the instructor. Online teaching changes this dynamic in major ways, making it easier to achieve that sometimes elusive goal of student centered learning.

Organizational resistance can be defined as "people's assertion of their identity as the presently construct it" (Maurer, 1996). This suggests that identity may play a large role in faculty opposition to organizational change, and in turn, adoption of technologies for teaching and learning. Looking at faculty identity through the eyes of a university professor, we see the inherent challenge in changing institutional practice to foster the adoption of online teaching at a widespread level. As a professor in the traditional sense, the faculty member is seen as the expert, source of knowledge and leader in pedagogical knowledge and practice. Understanding how to adopt instructional technology, while still maintaining one's pedagogical commitments is a key part of enabling faculty to see the merits of teaching online courses (Baker & Schopieray, 2004). Because the identity of the professoriate is so closely tied with that of being an expert in teaching and pedagogical knowledge, discussions of pedagogical practices that work when teaching online can potentially result in opening of dialogue with resistant faculty.

Frames of reference

When considering the changes information technology makes to an organization, understanding how organization members make sense of technology (their frames of reference) is vital to understanding how to influence their actions (Davidson, 2006). Individuals are constantly interacting with the world around them, and what an individual brings to an experience (i.e. prior knowledge or experience) shapes their interaction with the situation (Dewey, 1913). Goffman (1974) similarly suggested that the frames of reference people bring to situations influence their perceptions of and decisions regarding those situations. A frame of reference is the context, viewpoint, or set of presuppositions or evaluative criteria within which a person's perception and thinking seem always to occur, and which constrains selectively the course and outcome of these activities (Bullock, Stallybrass, & Trombley, 2000)

Social cognitivism proposes that people act on the basis of their interpretations of the world, and in doing so enact particular social realities and endow them with meaning. The frames of reference held by organizational members are implicit guidelines that serve to organize and shape their interpretations of organizational phenomena and give these interpretations meaning. By shaping individual's interpretations of organizational phenomena, frames of reference implicitly help them to make sense of and take action in organizations. Frames of reference structure organizational experience, allow interpretation of ambiguous situations, reduce uncertainty and conditions of complexity and change, and provide a basis for taking action. Frames can be constraining when they reinforce unreflective reliance on established assumptions and knowledge, distort information to make it fit existing cognitive structures, and inhibit creative problem

solving.

The social cognitive perspective suggests that while members of a particular community develop individual interpretations (i.e. they hold different frames of reference), they also have similar values. Socialization may be seen as an attempt by members of the community to instill the use of a particular cognitive schema and others especially in new members. The socio-cognitive literature acknowledges the strong effect of group or departmental membership, which influences the particular systems of knowledge, meaning, and norms to which members are exposed, and creates differences in interests and orientations among communities. People tend to share assumptions, and knowledge, and expectations with others with whom they have close working relationships.

Most discussions of social cognition do not specifically address technology. The term "technological frames" is used to identify that subset of members' organizational frames concerning assumptions, expectations and knowledge they use to understand technology and organizations. Technology frames are the understandings that members of social group come to have of particular technological artifacts within and outside of their groups. They include not only knowledge about the particular technology but also local understanding of specific uses and settings in which it is used. Bloomberg (1986) showed how a users' perspective on the technology influenced and shaped the way it was embedded in their work process. Technological frames have powerful effects on people's assumptions, expectations and knowledge about the purpose, context, and importance of the technology. They will also strongly influence choices made regarding the designed use of those technologies. Because technologies are social artifacts, and material form

and function will embody their sponsors and developers objectives, values, interests, and knowledge of that technology.

To interact with technology, people have to make sense of it. In this sense-making process, they develop particular assumptions, expectations, and knowledge of the technology, which then serve to shape subsequent actions towards it (Orlikowski & Gash, 1993). Orlikowski and Gash (2004) developed a framework that focused on what they termed technological frames of reference (TFR). Their TFR framework has been widely cited in the study of information technology and its effects on organizations and organizational change.

The TFR theory suggests that when technological frames of reference are significantly different between groups, difficulties and conflict can arise around the development, use and value of technology in an organization (Orlikowski and Gash, 1994). When considering technological frames of reference and looking at the role technology plays in an organization, one must consider the congruency of technological frames in that organization. Congruency of technological frames implies that actors in the organizations have similar expectations of the role that technology plays in the organization. When there is incongruence among members' technological frames, organizations may be likely to experience difficulty or conflict around the implementation of the technologies. In considering faculty adoption of online courses, understanding how they come to have congruent technological frames is vital to understanding processes of adoption.

Developing congruent technological frames in an organization is an act of socialization, facilitated by the values and traditions of a particular organization. Many

faculty are committed to their institutions and feel a sense of duty to fulfill the missions of their institutions (Kennedy, 1997). This process can start with a "top down" approach from the administration. Note, however, that while faculty are generally classified as a rather homogeneous group on many topics, they often have incongruent frames of reference about technology. Therefore, even the most senior professor would need to be treated as a new member and be socialized into the group which participates in online teaching. For university, college and program level administrators seeking faculty involvement in online teaching, it is vital to understand congruence of frames of reference regarding technology. Knowing which technological frames exist in an organization can be helpful for administrators seeking to change organizational views about teaching online.

Two theories of technology adoption

There are two main theories about the ways in which innovations are adopted that are relevant to faculty teaching online courses. Rogers' (1962) diffusion of innovation theory is perhaps the most widely cited, though a recent theory based on ecological theory proposed by Zhao and Frank (2003) also provides a useful perspective with which to study adoption of innovation in educational settings.

Rogers proposed his diffusion of innovation theory in his book (1962) by the same title. In his work, Rogers defined diffusion as the process by which an innovation is communicated to members of a social system over time. He proposed that adoption of new innovations follows a bell curve shape, with the so called "innovators" on the right side and "laggards" on the left side. Rogers' work suggests that teacher's attitudes toward, and experience with technology are often key factors associated with their uses of

technology. Unless the teacher also has a positive attitude toward technology, it is not likely that he or she will use it in teaching. The technology itself also affects the amount of its own use. Problems such as conflicting ideas about the value in uses of technology, the constantly changing nature of technology, and unreliability of technology can make technology adoption difficult.

Geoghegan (1994) applied Rogers' model to the question of faculty involvement in instructional technology use. Geoghegan presented a model of the bell curve Rogers used upon which he situated five types of faculty surrounding instructional use. He noted the biggest transition occurs between the early adopters and the early majority and is the place where many colleges and universities find themselves stuck. Suggestions for bridging this gap include recognizing the gap exists, facilitating the dissemination of information about technology, encouraging peer support, avoiding unrealistic claims about the benefits of technology, and providing compelling reasons about why faculty will want to buy into technology.

While Rogers' model is a powerful model for looking at diffusion of innovation, it has a flaw when using it to studying faculty motivation to teach online. It assumes a certain level of rationality in the system and does not accommodate for the complexity of a social system such as a school. The assumption is that faculty fit into one of the categories and their adoption of new technology can be explained by a certain, limited set of characteristics. This model does not account for the complexity of a school system where traditions of theory and practice may override a faculty member's competency level or interest in technology.

Ecological approaches provide a powerful framework for understanding complex human social issues (Zhao & Frank, 2003) and are not a new idea by any means. Ecological theories have been employed by researchers and social science for many years to study phenomena involving human beings. For example, Bronfenbrenner (1979) describes social environments as multilevel, characterized by micro and macro nested structures "each inside the next like a set of Russian dolls." Lemke (1994) used the term "ecosocial system" in his application of an ecological approach to the study of cultural change. Keiny (2002) argued that an education system can be viewed as consisting of systems such as teachers, students, and researchers. These components are connected with and influence each other, making education an organic system that promotes growth and development.

The ecological model of technology adoption proposed by Zhao and Frank (2003) is another useful framework for studying technology diffusion in organizations. The ecological model recognizes the importance of the individual, the system and the individual's place within the system. Zhao & Frank (2003) suggest that factors influencing technology use are often looked at "in isolation from each other or from the system in which they interact" (p. 809). This framework proposes understanding technology integration into an organization in a way similar to how ecologists understand a new species entering an ecosystem. In their model, technology is compared to an invasive species in an ecosystem. As attempts are made to infuse technology into an organization, there is active resistance because of the changes it makes to the status quo. It is therefore likely that in times of widespread change to institutional norms, technology stands a greater chance of assimilating into the culture. We are now in the midst of one of

these opportune times for change. The changes that are occurring throughout higher education suggest a culture beginning to recognize the power of online course offerings, as well as a changing student population seeking more flexible opportunities for obtaining higher education.

Domains of Participation in Faculty Development

Implementing new teaching skills requires time and support, and adopting online teaching is no exception. Zinn's (1997) work with school leaders provides a helpful framework for considering faculty development. Though Zinn's work was conducted with K-12 staff, it has proven useful in considering higher education faculty as well (Caffarella & Zinn, 1999). Zinn concluded there are four domains within which supports and barriers to development are clustered: people and interpersonal relationships, institutional structures, personal considerations and commitments, and intellectual and psychosocial characteristics. The domains help to understand the complex nature of faculty involvement in development activities and are applicable when studying online teaching because of the large skill and conceptual development that must take place when teaching online.

People and interpersonal relationships include relationships with other faculty, administrators, friends and family at home. This domain considers the supports and barriers others in the faculty member's lives bring to their relationships. Often these relationships are positive, such as collegial support or recognition from a superior. However these relationships can easily become barriers to faculty participation as well. For instance, resistance to a faculty member's participation in a development activity by a

spouse can be a strong barrier to further participation in the development activity. Likewise, strong encouragement by a spouse or co-worker can sometimes mean the difference between participation and non-participation in a development activity.

Institutional structures are the second of the four domains and can be both supportive and a barrier at times. Availability of growth opportunities, resources and support in the form of technical assistance are examples of institutional structures that encourage participation. When support or resources are not provided, this domain can become a barrier to further participation.

Personal considerations and commitments include positive and negative life events, individual goals and desires, and can even include personal or family health. This domain affects the time and willingness faculty have for thinking about participating in development activities. For example, a tragic family event could affect a faculty member's participation in development activities. Likewise, if the development activity is not aligned with the personal and professional goals of a faculty member, participation can be affected.

Intellectual and psychosocial characteristics are related to the scholarly interests and commitments a faculty member has. For instance, faculty members who see the value of continuous professional development or who have a commitment to excellence in their teaching or field may be more likely to participate in related development activities. Conversely, those faculty who are burned out or not interested in furthering their scholarly pursuits may not participate as fully in these development activities. Table 2.1 shows examples of positive and negative factors in each of the four domains.

People and Interpersonal Relationships	Institutional Structures	Personal Considerations and Commitments	Intellectual and Psychosocial Characteristics
+ Personal support systems + Positive working relationships + Encouragement and support by family and friends	+ Availability of ongoing development activities + Availability of resources + Scheduling that takes development into account	+ Resources for private life + Good health + Positive vision of self as faculty member	+ Strong commitment to excellence + Ability to see value of continued development + Interest and enthusiasm in priorities of the professoriate + Ability to thrive with intrinsic rewards
- Tense working relationships - Opposition to work by superiors - Spoken or unspoken disapproval by family or friends	- Insufficient time or schedule - Conflicting committee meetings - Lack of access to information and resources	- Major life transitions or crises - Conflicting values - Lack of support outside of profession	- Reluctance or resistance to change - lack of interest in some priorities of professoriate - exhaustion and burnout as faculty

Table 2.1 Examples of Positive and Negative Factors in Zinn's (1997) Framework

Faculty as Adult Learners & Institutional Commitments

Higher education tends to be staffed by self-motivated individuals who see problems as challenges to solve. These traits are indicative of the fact that faculty are, in a broad sense, adult learners. Adult learners are developmentally, socially and culturally diverse persons who bring with them certain preconceived notions and habits of learning. The most cited reasons by adults for not participating in education are time and money (Merriam & Caffarella, 1999). Johnstone and Rivera (1965) identified ten potential barriers to participation and clustered them into two categories: external (or situational barriers), and internal (or dispositional barriers). External barriers are those that are out of individuals' control. They are things such as cost of a program, time it is offered, etc. Internal barriers are those beliefs and attitudes individuals hold. They are things such as the belief that one is too old or too young to learn or participate. Understanding more

about these barriers and how to overcome them is essential in designing education for adult learners.

A recent UNESCO survey revealed that women were more likely to cite family as a reason for non-participation than men and that men were more likely to cite work demands as a reason for non-participation (Merriam & Caffarella, 1999). This is not surprising considering traditional role expectations. Women tend to be seen as caretakers and men as the "breadwinners." These social attitudes are barriers to both men and women, as they tend to prevent women from taking advantage of some opportunities and men from taking advantage of others. Clearly though, women are affected much more so than men are. Take for instance the doctors who took part in Linden West's study reported in *Doctors on the Edge* (2002). In the case of Dr. Sarah Cotton (p. 107) who had an arrangement with her husband that transcended the traditional woman's role, she still dealt with the fallout of the socialization of women. Though her husband took care of many things that are traditionally "female" activities around the house, she still felt the need to be the nurturing mother when her child was diagnosed with a medical problem. Though these doctors reside in Great Britain, their situation is very similar to many American women in similar positions.

Faculty as adult learners bring with them unique characteristics related to their field. In addition to the usual considerations with adult learners, we must also consider that university faculty are already inquisitive, interested learners who are committed to lifelong learning. They are often heavily influenced by the predominant paradigms of professional organizations to which they belong (J.M. Dirkx, personal communication, June, 2005). Their characteristics suggest that administrators should capitalize on existing

intellectual curiosity. The social conditions in which faculty work must also be favorable to the use of technology. Rice and Austin (1990) note, "Despite the self motivated nature of these individuals, most of them still require an organizational environment that affirms the dignity of their work, rewards teaching and sustains morale."

These results suggest that, whether real or perceived, the belief that technology is not adequately supported by the institution can be a powerful deterrent for using technology in any teaching and learning activity. Schools overseen by deans with distance education teaching experience and who held positive views toward distance education have been shown to have larger percentages of faculty participating in distance education (Betts, 1998).

Another consideration when looking at the social environment in which the faculty participate is to note the type of university in which they work. The primary mission of research universities is to produce and publish new knowledge, and though teaching is often said to be an equally important part of a faculty job, implicit and explicit signals emphasize the primacy of research in these institutions (Rice & Austin, 1990). Boyer (1987) and Bowen & Schuster (1986) found that faculty at research institutions feel strong pressure to produce research, often at the expense of teaching. In the early 1990s, calls were made for a renewal of commitment to teaching in higher education (e.g., Boyer, 1990). However, Fairweather (2005) reported that despite these calls for teaching to take a stronger role in higher education, a focus on teaching still has resulted in lower pay for faculty than for those who focus on research.

Institutional commitment to teaching is also expressed through the allocation of resources to teaching related endeavors (Rice & Austin, 1990). If teaching is a primary

institutional goal, it should be reflected in the reward structure. Likewise, if online teaching is a goal of the institution, participation in the activity should be reflected in the reward structure. Just as universities that want to encourage excellent teaching find ways to assist faculty in integrating their teaching and research (Rice & Austin, 1990), developing faculty motivation to teach online courses requires finding ways to integrate their use of technology with their research agendas. Deans and chairpersons can recognize the importance of teaching with technology by regularly discussing its importance and by recognizing those who are participating. Programs for current graduate students are now addressing the need for future faculty members to understand the importance and likelihood of using technology in their classrooms (Austin, 2002).

Individual Motivation

Just as the study of what organizational factors may or may not contribute to faculty motivation, it is important to consider the Faculty motivation to teach is largely seen as being intrinsic (Blackburn & Lawrence, 1995; Fairweather, 2002), so intrinsic theories of motivation such as self-efficacy perceptions and self-determination are helpful in considering the problem.

Understanding faculty member's feelings of self-efficacy are important to considering their willingness to participate in online teaching and learning. Research has shown that effort and persistence in achievement situations are greater when people possess a sense of efficacy (Brophy, 1998). Self-efficacy perceptions are those judgments a person makes of their capabilities in a given situation. Self-efficacy perceptions are especially important in situations that contain novel, unpredictable, or stressful features

(Bandura & Schunk, 1981), which are common features of online teaching for novices. Blackburn and Lawrence (1995) suggest that self-efficacy theory is important when thinking about faculty motivation to teach, and Colbeck, Cabrera & Marine (2002) note that "capability beliefs" are necessary to help individuals attain instructional goals.

Self-Determination Theory (Deci & Ryan, 1985 & 1991) can also provide important clues to why faculty may be motivated to engage in online instruction. Self-Determination theory assumes that motivation is derived from a free choice by the self, rather than controlled from an outside force or an internal need. Self-determined motivation is especially interesting in this situation, as it posits that people engage in actions because they want to and do not require any sort of motivating consequences to do them.

Developing a motivated faculty requires a comprehensive support structure. The prevailing method of faculty motivation is more reminiscent of Skinnerian operant conditioning, rather than reflecting current trends in motivational research. Often faculty are offered monetary or other extrinsic incentives by the administration in order to entice them to teach online. Many of the studies conducted have shown extrinsic motivators are not necessarily as effective as their use suggests (e.g., Betts, 1998). Using "the right" methods for motivating faculty is vital to the successful implementation of technology-based distance education programs.

CHAPTER THREE

RESEARCH DESIGN AND METHODS

Background

This study was conducted in a college of education at a research I, land-grant university in the midwestern United States. During the 2005-2006 academic year, the college employed 125 full-time[1] tenured and tenure-stream faculty, and a staff of academic specialists, administrative professionals and clerical workers who support the research, service and teaching mission of the college and university. In addition to traditional face-to-face instruction, the college offers an online master of arts in education degree program. In the 2005-2006 academic year, 23 tenured and tenure-stream faculty (18% of total faculty) taught online courses in the online masters program. The college is led by a dean who has been enthusiastic and supportive of the use of technology for teaching and learning. The dean has overseen the initial creation of the online masters program, funded initial training and development of online courses, and continues to support the online masters program through monetary and other support mechanisms.

The university the college is located at is an extensive Carnegie doctoral, research I and a land grant university. Having these classifications, research is the university's primary goal, sometimes competing with its teaching and service missions. These characteristics (doctoral, research I and land grant university) along with the tension between research and teaching are shared with over 100 other institutions (National Association of State Universities and Land Grant Colleges, 2006). Agricultural land grant institutions are active in distance education and somewhat homogeneous in terms of

[1] Data obtained from dean's office and cross referenced with faculty research profiles on the college's website - January 21st, 2006

philosophical direction and disciplinary content. As such, they represent opportunities to better understand the structure, format, and issues of distance education programs (Irani & Telg, 2002).

Of particular interest is the way the college developed its online masters program. As the online masters program was created, a focus was put on the exclusive use of tenured and tenure-stream faculty for development and instruction of the courses. This allowed the college to guarantee online course offerings were taught by faculty of equal or better quality to those students would find in an on-campus classroom. Many tenured and tenure-stream faculty at the college are recognized as experts in their respective disciplines, thus their participation in online instruction lends a level of authenticity lacking in many online programs that make use of adjunct instructors or other non-tenure stream faculty. In the event an advanced graduate student or adjunct faculty member teaches a course in this online program, they are supervised by a tenured faculty member.

The dean of the college established a training and support structure for faculty to aid their success in adopting online teaching methods. At its core, the philosophy is focused on enabling faculty to develop technical skills and to form collegial networks within the college. Training and support in the form of a faculty development course, monetary incentives, and college support resources (both human and technological) are provided to each faculty member who commits to teach an online course they develop at least three times. The faculty development course in which faculty participants enroll is a masters level course developed by several faculty members at the college. The focus of the course is to work with a team of masters students from the college's educational

technology program in order to lay the foundations for the online course the faculty members are developing.

Technical and pedagogical support is provided through a variety of services and methods at the college and university level. College level support has been institutionalized through a teaching and learning center that focuses on teaching and learning with technology. This center provides individual and group consulting, technical support for the course management system, and equipment for creating online materials. The center also offers presentations, workshops and colloquia on distance education topics which are identified by center staff and faculty. The center supports pedagogy by working with faculty to think through the pedagogical implications for using certain technologies or methods. Another unit at the college provides on-demand and scheduled hardware and software support. This division of labor enables the teaching and learning center staff to focus on the teaching and learning aspects of using technology and those specific technological problems associated with it, rather than repairing faculty computers.

The university provides technological and pedagogical support through a virtual university group (VU), which is a centrally funded group who assist faculty throughout the university with online instruction. The VU has provided more comprehensive support in previous years than it currently does, but still provides some support for college faculty. A toll-free help line is also provided by the university library that is available twenty four hours per day, seven days a week for faculty to call when they are experiencing problems using the course management system employed by the university. The university also provides support through a technology lecture series, and library

copyright office to help faculty obtain copyright permissions for resources in their courses. Additionally, the university's graduate school provides some monetary support for some faculty teaching online courses.

The online masters program at the college is overseen by the assistant dean for academic outreach. The assistant dean also serves as chair of a college-wide programs and policies committee that focuses on the online masters program. Since the online masters program is a college-wide effort, the planning committee serves as an umbrella group to the departments developing and providing online courses. The committee provides a forum for faculty participating in the online program to raise important issues, as well as to make decisions regarding the present and future of the online program. This committee has been vital in creating a supportive community focused around the online masters program.

Research Questions

Because the greatest resource in developing and maintaining online course programs are the faculty who teach the courses, understanding motivates or inhibits faculty participation in teaching online courses at this college is vital to the continued success of the program. In order to study faculty motivation to teach online courses, this study asked the following questions:

1. What motivates faculty who teach online courses at this college to teach them? What are some of the challenges and limitations of their online teaching?

2. Why are the faculty who do not teach online courses at this college unmotivated or uninterested in doing so?

3. What institutional policies and structures affect faculty motivation to teach online at this college?

The participants were asked about online teaching in terms of both their personal and professional lives, as well as the local and institutional levels in which they work.

Study Design

This study used a mixed methods approach to study the issue of faculty motivation to teach online. Mixed methods approaches offer the opportunity for researchers to combine the strengths of both qualitative and quantitative research methods in order to compare and confirm data from different sources. Mixed methods approaches have become increasingly popular in recent years, with a number of publications being written and mixed methods projects being funded (Creswell, 2003). The study design made use of the domains of participation in professional development outlined by Caffarella and Zinn (1999) as a framework for collecting and analyzing data (see Chapter 2 for an outline of the domains).

The researcher has been a participant in the online masters program in technical support roles since its inception. The first part of data collection consisted of the researcher gathering notes and planning documents dating from the beginning of the program in 2000. These documents included weekly journal entries written by the researcher during the years 2000-2004 and planning documents given to the researcher by the director of the program. Being a participant with online learning at this college allowed the researcher some advantages because of the implicit knowledge gained from working with the faculty for a number of years and the relationships forged with the faculty. Being a participant, however, had disadvantages for the researcher as it was

important not to betray these relationships and the identity of participants through reporting of data or thoughts and ideas about online teaching and learning.

Second, a survey was created to involve as many faculty participants at the college as possible. Survey questions were based on an analysis of the journal entries and memoranda, as well as research findings in the literature. Participants were asked to complete the survey to help identify factors that influence or discourage faculty from teaching online. The survey also was used to gather some basic demographic information about the population and their comfort level with technology. The survey was designed and offered using a commercial, online survey tool, Survey Monkey (http://www.surveymonkey.com/).

Third, semi-structured interview questions were written as a way of further exploring the reasons faculty do and do not teach online courses. The interview questions were based on the survey questions and the results of the literature review and enabled the researcher to probe more deeply into faculty motivation to teach online courses.

The data were organized and analyzed as a series of individual case studies, recognizing there are many similarities across the individual cases. This allowed a focus on individual experiences with teaching online, while still recognizing the importance of the organization to which the participants belong. These case studies were analyzed using grounded theory techniques of open coding and constant comparison to understand which categories emerged as important to faculty participation in online teaching at the college. Case study was chosen because of its usefulness when studying a contemporary issue that exists within real-life situations and also its usefulness in studying complex phenomena that do not contain easily isolatable parts (Yin, 1994). Grounded theory techniques have

also been shown to be appropriate tools for studying organizational cultures (Glaser & Strauss, 1967; Orlikowski, 1993). Using information from multiple data sources and using constant comparison among sources allows for triangulation of the data, a common method used to increase validity of qualitative data.

Initial survey participants (n = 71) helped to identify factors that encourage or discourage faculty from teaching online courses, to gather basic demographic data about the population and develop an understanding of their comfort level with technology. The participants were those who responded to an invitation sent out to all eligible tenured and tenure-stream in the college. Based on survey results, follow-up interviews were conducted with 15 of the survey participants using the open-ended, semi-structured interview protocol. Interviews were designed to provide greater clarity to the survey answers and to determine if any additional factors that encourage or discourage faculty from teaching online could be identified. Participants for interviews were chosen based on survey responses and their involvement or non-involvement in online teaching.

Participants

The study was conducted at a land grant university in the midwestern United States during the 2005-2006 academic year. There are currently 126 full-time, tenure stream faculty employed by the college. Of these, three faculty members were not invited to participate in the study because they held positions that were either removed from teaching altogether or that had not allowed them to teach regularly over the past several years. There were 123 eligible faculty members remaining, all of whom were invited to participate in the study. Invitations to participate were sent by a personalized email invitation from the researcher in early November, 2005, explaining the nature of the

study and asking for their participation. The initial invitation yielded 40 study participants.

Those who had not responded to the survey by the end of the month were sent a follow-up notice by email asking again for their participation in the study. This notice yielded another 4 participants. On December 15th, a third reminder was given to faculty who had not participated. This time the researcher delivered the reminder in the form of a yellow note with a piece of chocolate that was placed in each faculty member's mailbox. This chocolate-laden reminder generated a response from another 19 faculty. A fourth and final reminder notice was sent by email on January 9th, 2006 to faculty who had still not participated in the survey. Another 8 faculty responded to this final reminder. (See Table 3.1)

On January 25th the survey was closed and results were downloaded from the Survey Monkey tool. The total number of participants in the survey portion of the study was 71. It is also notable that due to the position the researcher holds as an information technology professional at the college, he often had informal conversations with potential participants in the hall or elevators during the 2 months the survey was open. These conversations may have influenced some participation in the study.

Date	Type of Invitation	Number of Respondents
November 9, 2005	Email invitation sent to faculty eligible for participation	40
November 29, 2005	Email reminder sent to faculty who had not yet completed the survey	4
December 15, 2005	Reminder postcard placed in faculty mailboxes	19
January 9, 2006	Final email reminder sent to faculty who had not yet completed the survey	8

Table 3.1 Timeline for recruiting study participants

Instruments

Survey

The survey portion of the study served to provide a broad picture based on individual participant data of what does and does not motivate faculty at this college to participate in online teaching. To gain as much insight into the motivations for teaching online, this survey was developed with the intent of all faculty at the college participating in the study.

The survey instrument was developed by the researcher during summer semester 2005. An early version of the survey was pilot tested during June by 5 advanced doctoral students from the college. After taking the survey, each of the participants was interviewed by the researcher about which items seemed to work, which needed adjustment, and what should not be used. Once the interviews were complete, the researcher worked with the chair of the dissertation committee to make adjustments. A second version of the instrument was tested during September 2005 using eight advanced graduate students from the college and two online learning professionals. Advanced

doctoral students in education were used in the pilot offering as they represented the closest point of view to a faculty member at the college of education without using a faculty member. Faculty were not used for the pilot tests as it would potentially eliminate participants from the study. After the second testing, participants were interviewed about the items that worked, needed adjustment or should not be used, and final adjustments were made to the instrument. The final version of the survey was completed October 1, 2005.

The final survey consisted of 49 questions (Appendix A) that ask faculty for demographic information, their comfort level with technology, and to rate how each of the factors or statements provided does or would influence their motivation to teach an online course. The survey starts by asking demographic questions about the participants taking the survey, it then moves on to questions about the technology habits and uses of the participants. Information about the faculty member's comfort level with technology is critical to understanding what skill levels may be associated with positive and negative motivators for providing online teaching.

The largest part of the survey (32 questions) asked participants to rate the extent to which they agree a certain statement or factor would motivate them to teach an online course. Participants were provided with a Likert scale of 1-6 on which to rate their answers. On the scale, 1 represented an answer of "strongly disagree" and 6 represented "strongly agree". A six-point scale was chosen in order that participants would choose answers on either the positive or negative side of the scale. A non-scale item was also included as a possible answer for each question. Titled "Have not considered this," the

question allowed a faculty member who had not thought of a certain factor as being a motivator to opt out of giving a scale answer on that particular question.

This survey was developed in consideration of three of the four domains from the framework proposed by Caffarella and Zinn (1999) for studying faculty participation in professional development activities. The three domains used to develop the survey were People and Interpersonal Relationships, Institutional Structures, and Intellectual and Psychosocial Characteristics. Of the 54 questions in the survey, 32 were based on these domains. Because of the personal nature of the fourth domain, Personal Considerations and Commitments, it was not represented in the survey as the researcher believed it would yield more informative responses in an interview setting. Each of the three domains used in the survey was represented by a series of statements. The statements were distributed approximately equally among the three domains used. A Chi Square analysis of the number of questions in each domain did not yield significant results, suggesting that the distribution of the questions was approximately equal.

Surveys were administered to 123 faculty and 71 were returned providing a response rate of 58%. Data collected from the surveys was used for a general analysis of faculty motivation to participate in online teaching, and focused the questions subsequently used in the semi-structured interviews.

Semi-structured interview

Semi-structured interviews are widely used in social science research and offer greater potential for participants' viewpoints to be expressed than in formal structured interviews (Flick, 1999). The second part of the study consisted of semi-structured

interviews with fifteen (21%) survey respondents (Appendix B) to gain further insight into participants' reasons for teaching or not teaching online.

Participants to be interviewed were selectively chosen based on their experience teaching online courses and their survey responses. As survey responses were collected, the researcher set aside surveys which contained responses of particular interest given the research questions. Since the study is about faculty motivation to teach online, it was important to have representation from a number of faculty who are currently teaching online. Likewise, it was also important to have a group of faculty who are not teaching online yet in order to understand what might persuade them to teach online. The aim of the participant selection was to obtain a representative sample of the survey respondents. An initial 15 survey participants were invited to participate in the interview portion of the study. Four either declined the invitation or did not respond. Four more survey participants were then invited to participate in the interviews and accepted. Participant demographics are discussed in chapter five.

Interviews were focused on participant's interest and experience teaching online, reasons for teaching or not teaching online, and ideas about motivations for their teaching online. Participants were interviewed until the data exhibited signs of saturation and sufficiency (Seidman, 1991). Saturation occurs when responses from interview participants become similar and sufficiency occurs when enough participants have been represented to provide what the researcher feels is a well portrayed picture of the phenomena.

Interviews were conducted in faculty offices in order to minimize distractions and provide a measure of privacy. Each interview was recorded on a digital voice recorder for

later review and transcription. In addition, the researcher took detailed notes of the conversation. After each interview, the researcher wrote a one or two page memo based on themes from the interview and those statements made by the participants that interested the researcher. Audio recordings were archived and stored for later transcription and analysis.

Interview data were analyzed with methods commonly used in grounded theory research (Corbin & Strauss, 1990; Glaser & Strauss, 1967). Specifically, the researcher used line coding techniques to develop categories of data from the interview data. Once categories had been established, the researcher placed data from the interviews into each category and proceeded to combine and divide categories as further data were analyzed. Using a method of constant comparison of each case to the other, the researcher was able to develop a comprehensive picture of the participants' interest and non-interest in teaching online courses.

Reliability and Validity

Reliability and validity were addressed throughout this study. To be reliable, the measure should produce consistent results when repeated in the same populations and settings, even when assessed by different people or at different times (Carmines & Zeller, 1991). An instrument is said to be valid if it does what it is intended to do (Carmines & Zeller, 1991).

To ensure the reliability of the survey and interview instruments used in this study, each of the instruments was pilot tested twice ($n = 4$ & $n = 12$) with advanced doctoral students and online learning professionals, with follow-up interviews taking place with each pilot participant after they had completed the pilot testing. Advanced doctoral students were defined as those who had finished their coursework and were used as they were similar to faculty who would be participating in the study but would not eliminate potential study participants.

Content validity was addressed in the creation of the survey and interview questions. Content validity is a measure of how much a measurement reflects the specific intended domain of content (Carmines & Zeller, 1991). To address content validity in this study, consensus was reached on the survey and interview questions and directions by eight advanced doctoral students and three faculty members. Consensus was reached through 4 iterations of the instruments developed over a four month period during summer semester 2005. During the review process, questions and directions were modified and clarified on the instruments.

Instrument reliability was calculated with Cronbach's (1951) Alpha using SPSS 14.0. Alpha assesses the reliability a group survey answers which measure an underlying

factor. The calculated Cronbach Alpha's for the survey after 71 responses showed high reliability of the survey instrument and domains studied. A summary of reliability results is presented in Table 3.2.

Section of Survey	Cronbach's Alpha	Number of Items
Entire Survey	.966	49
People and Interpersonal Relations Domain	.873	9
Institutional Structures Domain	.959	13
Intellectual and Psychosocial Issues	.922	10

Table 3.2 Reliability analysis of survey

Ethical Considerations

Ethical considerations play an important role in research. In this study, several steps were taken to ensure that ethical standards were met. First, the study and its intent were discussed by the researcher with the director of the online masters program. The dean of the college was also made aware of the study and its goals. Second, the study was submitted to, and approved by, the university's institutional review board (IRB). Third, a consent form was used that informed participants of the nature of the study and its intent. The consent form featured contact information for the researcher and the chair of the IRB. Fourth, participant names or other identifying information was not used in any reporting of the research results. Further, all names were stored in a password protected computer file that was stored on a compact disc that was locked in a cabinet in the researcher's office. Lastly, all study participants were notified of the opportunity to access the results of the study.

Chapter Summary

This chapter reported on the methods used in this study. This study used mixed methods to explore faculty motivation to teach online courses in a college of education at a land grant university in the midwestern United States. A 49 question survey was sent to 123 full time tenured and tenure track faculty members teaching at the college and 71 responses were received. Of the 71 survey participants, fifteen participated in follow-up interviews to further explore their views on online teaching. The next chapter discusses the results of the survey portion of the study.

CHAPTER FOUR

SURVEY RESULTS

Data collected from the surveys were modified in order to remove any identifying information, entered into Advanced Statistical Package for the Social Sciences (SPSS v.14) and analyzed using t-test, Chi Square and one-way analysis of variance, in addition to looking at the descriptive data. Another program, MacBonferroni v.1 was used to calculate Holm's Sequential Bonferroni Adjustment to ensure that experiment-wise error rates were controlled to .05. Holm's Sequential Bonferroni Adjustment was developed by Holm (1979) as a way to provide strong control of the family-wise error rate with greater power than the standard Bonferroni method.

All tests for statistical significance were conducted using an error rate of .05, and were tested for effect size using Cohen's d. Cohen's d is one of the most widely used statistics for effect size. Cohen (1988) defined effect sizes as low at .20, moderate if .50, and high if .80 or above. Effect size is an important statistic to use in addition to statistical significance as it informs the researcher of the size of the relationship between two variables.

The survey also contained an open-ended question that allowed faculty to add anything they felt was important for the researcher to know or which they were not able to say in prior parts of the survey.

Participants

One hundred twenty three (123) tenured and tenure track faculty at the college of education were invited to participate in the study. Of the invited group, 71 faculty members agreed to participate, representing 58% of the tenured and tenure track faculty at the college (see Figure 4.1). Of the 71 respondents, 15 were asked to participate in follow-up interviews. The results of the interviews are discussed in chapter five. Three of the invited faculty chose not to participate in the study and informed the researcher of their intent not to complete the survey.

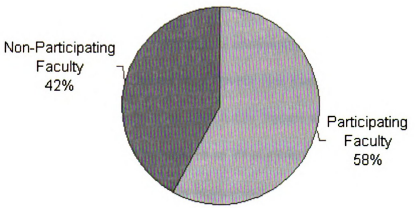

Figure 4.1 Percentage of college faculty participants

Of the 71 study participants, 32 (45%) reported teaching an online course at MSU or at another institution. Tweny-seven of the 32 had taught in the online program at the college. Thirty nine survey participants (55%) had not previously taught online.

The eligible faculty population in the college was approximately evenly split between male and female faculty. There are 62 male faculty and 61 female faculty members who were invited to participate in the study. Of the faculty participating in the study, there were 32 males and 39 females, representing 45% of the sample and 55% of

the sample respectively. A Chi Square analysis of gender indicated no significant difference in participation between groups.

The college consists of four departments: educational psychology, educational administration, kinesiology, and teacher education. With 58 eligible participants, the teacher education department comprises 47% of the population. The educational psychology department is second largest, with 33 eligible participants (27%). The educational administration and kinesiology departments are the two smallest departments in the college, with 21 (16%) and 12 (10%) eligible faculty respectively.

The highest number of study participants came from the teacher education department with 26 people (37%), and second highest from the educational psychology department with 24 people (34%). Educational administration and kinesiology followed with 16 (23%) and 5 (7%) participants respectively (see Figure 4.2). Due to rounding, the sum of percentages may not be equal to 100. A Chi Square analysis found departmental representation to be equal. Notably, with 16 of 20 eligible faculty participating in the study, educational administration has the highest percentage (80%) of faculty per capita participating in the study.

Thirty four (28%) of the eligible faculty participants are non-tenured, assistant professors. The remaining 89 (72%) are tenured faculty, with 36 associate professors (29%) and 53 full professors (43%). Of study participants, 28 (39%) were assistant professors, 20 (28%) were associate professors, and 23 (32%) were full professors (see Figure 3). A Chi Square analysis on participating faculty did not yield significant results, indicating the sample was representative of the college. It is also worth noting that 71%

of assistant professors, 65% of associate professors, and 44% of the full professors in the College participated in the study.

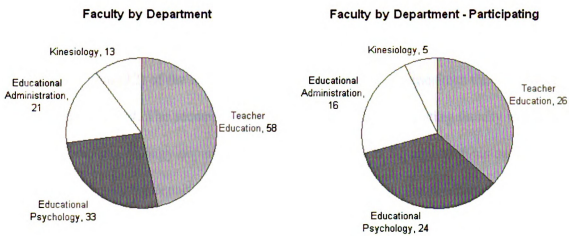

Figure 4.2 Faculty at the college of education by department

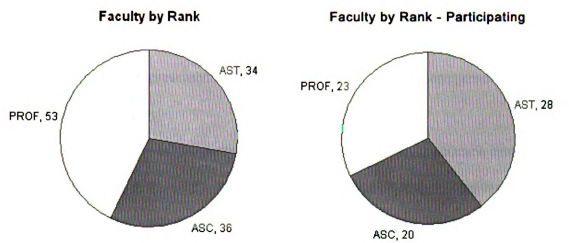

Figure 4.3 Faculty at the college of education by rank

Non-Participants

In looking at study participants, the makeup of those invited who did not participate is equally as interesting as those who did participate. There were 52 faculty invited who did not participate in the study. Three responded to the survey invitation

letting the researcher know of their intent not to respond to the survey. One faculty member was on sabbatical during the time the survey was offered, another could not participate in the study due to prior commitments, and the third was on the verge of retirement and did not feel their participation in the study would be helpful.

Thirty two (32) of the non-participating faculty (62%) came from the teacher education department. The second highest number of non-participating faculty was from the educational psychology department with 9 (17%). A Chi Square analysis on non-participating faculty by department yielded significant results. The teacher education department was largely overrepresented among non-participating faculty while participants from the other three departments were representative.

Forty six (46) of the 52 non-participating faculty (88%) were tenured faculty. There were 6 assistant, 16 associate and 30 full professors that did not participate in the survey. A Chi Square analysis was conducted and significant results were found. Full professors were over-represented and assistant professors were underrepresented among non-participating faculty.

Also noteworthy in this study was the difference in years experience among ranks of those participants in the study. Years experience was reported by the university in its annual pay schedules publication. Non-participating full professors had an average of 33 years of experience, compared with 28 years experience for full professors who participated. Associate professors also differed between groups, the non-participating group had an average of 26 years of experience, compared with 23 years for those who did participate.

Mean Ratings

The survey asked faculty to rate on a scale of one to six how motivating each listed factor would be relating to teaching on online course (see Appendix A for survey, see chapter 3 for discussion of survey). This section looks at the highest and lowest ranked variables on the survey using a mean of 4.5 or higher as criteria for high ranking and 2.5 or lower for a low ranking (see figure 4-4).

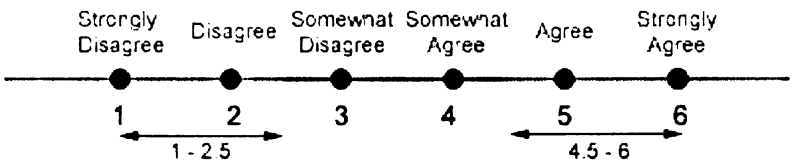

Figure 4.4 Example of survey scale

Highest ranked variables

Table 1 below shows variables with a rating of over 4.5 from all survey participants regarding motivating factors for a future course they might teach online.

Future Course
1. Effective technical support provided in your College (5.02) 2. Opportunity to enrich my teaching by drawing on web resources (4.69) 3. Intellectual challenge of learning a new way of teaching (4.69) 4. Ability to have flexible teaching hours and locations while teaching online courses (4.58)

Table 4.1 Highest rated motivating factors for all survey participants

Faculty who had previously taught online were asked to rate how motivating each factor was before they taught a prior online course and to rate how motivating each factor would be when teaching a future course. Table 4.2 lists the variables rated above 4.5 on the scale when considering a prior and a future course they might teach online.

Prior Course	Future Course
1. Intellectual challenge of learning a new way of teaching (4.83) 2. Ability of online courses to reach new audiences that cannot attend classes on campus (4.65) 3. Opportunity to enrich my teaching by drawing on web resources (4.58)	1. Effective technical support provided in your College (4.96) 2. Ability of online courses to reach new audiences that cannot attend classes on campus (4.83) 3. Opportunity to enrich my teaching by drawing on web resources (4.73) 4. Intellectual challenge of learning a new way of teaching (4.69) 5. Ability to have flexible teaching hours and locations while teaching online courses (4.68) 6. Opportunity for scholarly pursuit in connection with online teaching and learning (4.54)

Table 4.2 Highest rated motivating factors for faculty who have taught online

Faculty who had not previously taught an online course were only asked to thinking about teaching a future course using the same scale and motivating variables. Table 4.3 shows results ranked above 4.5 on the scale.

Future Course
1. Effective technical support provided in your College (5.05) 2. Equipment provided by your college to help you teach your online course (4.82) 3. Effective technical support provided in your Department (4.78) 4. Graduate assistant or similar support provided by your college to help you teach your online course (4.76) 5. Intellectual challenge of learning a new way of teaching (4.68) 6. Training in online teaching methods provided by your College (4.66) 7. Opportunity to develop new ideas about teaching and learning processes (4.65) 8. Opportunities for merit pay, overload or stipend based on your instruction of online courses (4.58) 9. Availability of college or departmental funds for materials and expenses involved with online teaching (4.51) 10. Ability to have flexible teaching hours and locations while teaching online courses (4.51)

Table 4.3 Highest rated motivating factors for faculty who have not taught online

Lowest ranked variables

Lowest ranked means were those ranked under 2.5 on the scale. Only one variable had a mean score of under 2.5. Opportunity for royalties on copyrighted materials had a mean ranking of 2.44 on the scale.

Faculty who had taught online before rated two of the variables under 2.5 on the scale when thinking about both their prior and future course, however added the pressure from their chair to teach online to the group when thinking about a future course.

Online Faculty – Past Course	Online Faculty – Future Course
1. Opportunity for royalties on copyrighted materials (2.14) 2. Pressure by your departmental colleagues to teach online courses (2.40)	1. Opportunity for royalties on copyrighted materials (2.29) 2. Pressure by your departmental colleagues to teach online courses (2.36) 3. Pressure by your department chair to teach online courses (2.48)

Table 4.4 Lowest rated motivating factors for faculty who have taught online

On average, participants who have not taught an online course before did not rank any of the items under 2.5 on the scale.

Analysis of Survey Scale Items

The survey data were analyzed using SPSS 14 (SPSS, 2006) and MacBonferroni (Watkins, 2002). T-tests were conducted for the variables indicating gender and whether a participant has taught online, and one-way ANOVA tests were used for the variables indicating academic rank and department. MacBonferroni was used to calculate Holm's Sequential Bonferroni Adjustment in order to control for error across the test when using t-tests.

All Participants - Future Course

Overall results of the survey were analyzed looking at effects of gender, rank, department, and whether faculty had taught online or not. Because faculty who had not taught online before did not answer questions relating to a prior course, only the future course variables were examined with the entire population of the study.

Gender

The first independent variable considered was that of gender. An independent samples t-test combined with Holm's Sequential Bonferroni Adjustment (Holm, 1979) yielded significant results for two variables at the .05 level. Comments made by colleagues about their experiences teaching online (COLCOM2) were more influential to female faculty members (mean = 4.6) than they were to male faculty members (mean = 3.84). Effective technical support provided in the college was also significantly different

between males (4.6) and females (5.4), however both genders ranked the item on the agree side of the scale. Both factors had a medium effect size (.56).

Variable	Male	Female	p	Cohen's d
COLTS2	4.6	5.4	.01	.56
COLCOM2	4.6	3.8	.03	.56

Table 4.5 Significant differences in motivating factors for a future course by gender for all participants

Department

A one-way ANOVA test for the variables by department combined with a Bonferroni post-hoc test yielded no significant differences between departments.

Rank

A one-way ANOVA was conducted for academic rank showed significant differences between all ranks (see Table 4-6). When thinking about online teaching as a way to reach new audiences (NEWAUD2), there was a significant difference and high effect size (.82, .93) between full professors and both associate and assistant professors, but no significant difference between assistant and associate professors. An opportunity to revitalize one's career and explore new options (REVITAL2), revealed a significant difference and high effect size (.82) between assistant and full professors. The importance of online teaching counting towards tenure yielded significant differences and high effect sizes (.94, 1.14) between assistant professors and both associate and full professors, where assistant professors were more likely to be motivated by this possibility.

Variable	AST	PROF	p	Cohen's d
NEWAUD2	4.0	5.1	.00	.93
REVITAL2	3.2	4.3	.01	.82
TENURE2	4.4	2.8	.00	1.1
	AST	**ASC**		
TENURE2	4.4	3.1	.00	.94
	ASC	**PROF**		
NEWAUD2	4.1	5.1	.01	.82

Table 4.6 Significant differences in motivating factors for a future course by rank for all participants

Online or not

There were three differences between faculty who have taught online and those who have not. Pressure from a faculty member's department chair regarding teaching online courses (PRESCHA2) was rated more highly by faculty who had not previously taught online (3.6) than those who had (2.5). There was a medium effect size (.72) for this comparison. It is notable that both means regarding this variable fall on or below the middle of the rating scale. Opportunities for merit pay, overload or stipend based on the teaching of online courses (MOPAY2) also had significant differences between those who had not taught online before (4.6) and those who had (3.5). The effect size for this finding was high (.92). Teaching online counting towards tenure and promotion (TENURE2) was a third significant variable in this group. Those who had not taught online (4.0) ranked this variable higher than those who had taught online (2.8). This finding also had a high effect size (.76).

Variable	Mean – online	Mean – not online	P	Cohen's D
PRESCHA2	2.5	3.6	.01	.72
MOPAY	3.5	4.6	.00	.92
TENURE2	2.8	4.0	.01	.76

Table 4.7 Significant differences in motivating factors for a future course by taught online or not for all participants

Taught online - Prior Course

The next set of tests was conducted only with faculty who had previously taught online (n = 32) reflecting upon a course they have previously taught online. Twenty six of the 32 have taught in the online program at the college, the other six have taught online at other institutions.

Gender

Only one prior course variable was significant between genders. Gaining professional prestige from developing and teaching an online course (PREST1) was rated lower by males (2.38) than by females (3.38) and had a high effect size (.89).

Rank

Three variables were significant for differences between rank using a one-way ANOVA. There was a significant difference between assistant (2.8) and associate professors (5.1) when considering support from the dean (SUPDEA1) as a motivator to teach online. The effect size for this comparison was high (1.4). Opportunities to reach new audiences that cannot attend courses on campus (NEWAUD1) had a significant difference between associate (4.2) and full professors (5.4) with a high effect size (1.3), though both are on the agree side of the scale. Assistant professors (3.2) differed

significantly from full professors (4.9) in terms of online courses as an opportunity to improve their teaching (IMPTEAC1). This comparison also had a high effect size (1.7).

Variable	AST	ASC	p	Cohen's d
SUPDEA1	2.8	5.1	.03	1.4
	ASC	**PROF**		
NEWAUD1	4.2	5.4	.02	1.3
	AST	**PROF**		
IMPTEAC1	3.2	4.9	.02	1.7

Table 4.8 Significant differences in motivating factors for a prior course by rank for faculty who have taught online

Department

Only one variable was significantly different between departments. When considering motivation by equipment provided by the college to help teach online courses (COLEQU1), participants from the educational psychology department rated (4.8) the variable significantly differently than the teacher education department (3.1). The effect size for this comparison was high (1.13).

Taught Online - Future Course

The same group of participants who have taught online were also asked to think about a future course they may teach. After running tests for gender, department and rank for this group of participants, there were no significant differences found for any of the groupings.

Taught Online – Prior Versus Future Course

A paired samples t-test was conducted for faculty who had previously taught online (n = 32) to see if their rating of any factors changed from a previous to a future course. Holm's Sequential Bonferroni test was used to control the experiment-wise error rate. Only one variable, opportunities for merit pay, overload or stipend based on your teaching of online courses (MOPAY), was found to be significant between the time a faculty member first taught an online course and a future course. The effect size for this comparison was high (1.1).

Not Taught Online - Future Course

Faculty who have not taught online (n = 39) were asked to think about a course they might teach online in the future. On the same scale, these participants were asked how much they agreed or disagreed how motivating each variable would be.

Gender

Only two significant differences by gender were found for faculty who have not taught online thinking about a future online course they may teach. Equipment provided by the college to help teach online courses (COLEQU2) was ranked significantly higher by females (5.5) than by males (4.1) with a high effect size (1.5). Availability of college or departmental funds for materials and expenses involved with online teaching (DEP$2) was also rated significantly higher by females (5.0) than males (4.1) with a high effect size (.96).

Variable	Male	Female	p	Cohen's D
COLEQU2	4.1	5.5	.00	1.49
DEP$2	4.1	5.0	.01	.96

Table 4.9 Significant differences in motivating factors for a future course by gender for faculty who have not taught online

Rank

A one-way ANOVA using a Bonferroni post-hoc test yielded one variable with significant differences among rank. Teaching online as credit toward tenure and promotion (TENURE2) was ranked higher by assistant professors (4.5) than by full professors (2.9) with a high effect size (1.4). It is notable that while no significant result was found for associate professors, their mean of 3.8 fell along a downward trend from assistant to full professor.

Variable	AST	PROF	p	Cohen's d
TENURE2	4.5	2.9	.01	1.4.

Table 4.10 Significant differences in motivating factors for a future course by rank for faculty who have not taught online

Department

Using a one-way ANOVA and Bonferroni post-hoc test, two variables were found to have significant differences between departments. Pressure from a faculty member's chairperson to teach online courses (PRESCHA) was significantly different between the educational psychology (4.5) and the teacher education (2.8) departments. There was a large effect size for this comparison (1.2). Pressure from the dean of the college to teach online courses (PRESDEA) was also significantly different between the same two departments, yielding a high effect size (1.3), with educational psychology having a mean of 4.5 and teacher education a mean of 2.7.

Variable	Educational Psychology	Teacher Education	p	Cohen's d
PRESCHA2	4.5	2.8	.050	1.2.
PRESDEA2	4.5	2.7	.016	1.3

Table 4.11 Significant differences in motivating factors for a future course by department for faculty who have not taught online

Analysis of Open Ended Question

The open-ended question at the end of the survey gave participants an opportunity to comment on anything the survey did not cover or that they thought would help the study. Forty three of the 71 respondents (61%) used the opportunity to comment on the survey or their experiences with online teaching. Of the 43 responding to the open ended question, 23 (53%) had previously taught online and 20 (47%) had not taught online. There were 12 assistant professors, 15 associate professors, and 16 full professors that provided comments. Nineteen males and 24 females provided comments, and there were 12 participants from the educational psychology and educational administration departments, 2 from kinesiology and 17 from the teacher education department. These results were compiled into the Microsoft Excel spreadsheet software and coded into categories (as described in Chapter 3). Results of the analyses of faculty responses to this open ended question are presented in the next section.

Issues of Teaching & Student Learning

Issues surrounding teaching and student learning were the largest category of statements made in this portion of the survey. Three distinct subcategories emerged from the data: teaching opportunities and challenges, concerns about pedagogical quality of online courses, and opportunities to connect with off campus students.

Teaching opportunities and challenges

Many of the participants noted they were teaching online as an opportunity to expand and improve their teaching skills (e.g. case 61) or because of the intellectual challenge teaching online represented (e.g. cases 33, 41, & 64).

I was initially skeptical, but came to cherish the development of that first course as a means to think deeply about teaching - not just 'teaching on-line' but teaching as an intellectual and professional art (Case 33)

Those participants mentioning an interest in the intellectual challenge of online teaching were mostly tenured faculty members. Only one assistant professor stated an interest in this aspect, "I was interested in learning about the challenge of the on-line environment, how teachers and students would figure out how to interact and what it meant to take a class on-line" (Case 35).

Other participants found online teaching to be an "opportunity to use resources that are relevant and affordable" and an environment in which students can move at their own pace (Case 12). Another participant noted that "Online discussions [in her course] have been the best discussions I've ever witnessed compared with what often appears that way in live classes" (Case 16), and another commented she appreciated the opportunity online teaching has given her to, "enrich meaningful dialogue between students and students and faculty" (Case 12).

Some participants observed the importance of the changes technology is causing to the nature of teaching and learning. One participant who has previously taught online said he is primarily motivated to teach online "because of the changing context of teaching and learning in postsecondary education" (Case 41). A participant who has not taught online noted "It's [online learning] clearly part of the future of university teaching and outreach" (Case 32). Another participant who has not taught online stated, "As someone who enjoys teaching very much and teaches about teaching, I am motivated to do more on-line because it is something I believe I should know how to do first-hand" (Case 43).

Concerns about pedagogical quality

Concerns about the nature of student-teacher interactions in an online environment were another sub-category that emerged from participant responses. Some faculty noted their perception that interactions cannot be as good as face-to-face interactions. Others were concerned about interactions from a standpoint of their teaching methods and classroom management or their enjoyment of engaging in face-to-face discussion with students. "I don't think I can effectively teach my students when I don't have the cues that I have from them in a face-to-face classroom environment" (Case 53) said one participant.

Another participant stated, "We are often told that on-line teaching is lucrative for the college and necessary to reach students who can't come to campus. But what we are not told is whether this instructional format is effective - as effective or more effective than face-to-face" (Case 23). While being critical of online teaching and learning, this participant and others also noted the potential for new opportunities with online teaching, "I don't doubt that there are new and exciting instructional opportunities in an online format, but I also think that important elements of classroom learning are lost" (Case 70) said another.

A larger number of participants commented regarding the interactions and relationships they establish with their students.

> *"I do not find the work to be personally fulfilling because I do not experience a satisfying relationship with the students, teaching has become a matter of putting up assignments to be completed rather than a real-time interactive process" (Case 7).*

"A concern I have is that I enjoy greatly my face to face interactions with students" mentioned another. Faculty were often split as to the merits of interaction with students in online environments. One participant who has taught online noted she was "disappointed in the lack of face-to-face interactions, particularly when trouble with two students came up, I wasn't able to anticipate and take care of the trouble as early as I could have with students in my face to face class" (Case 71). However, another participant who has also taught online noted she has "realized all that can remain 'hidden' or gets glossed over in a F2F class in terms of being able to assess what individual students really understand and how they're thinking" (Case 16).

Opportunities to connect with off-campus students

Supporting students who are unable to come to campus for various reasons was another sub-category that emerged from the data. Many of those participants who have previously taught online mentioned the motivational value of having a more diverse classroom. Participants who have not taught online were also interested in the potential that having a more diverse classroom offered to their students. Some participants were interested in giving students opportunities that online teaching provides, while others were somewhat negative about the interest that students have in online learning.

"[Teaching online] has been a great opportunity to learn how to support students that I rarely if ever see" (Case 22) said one participant who has taught online. Another participant noted a specific interest in teaching students outside of the United States (Case 27). A participant who has not taught online noted

> *My understanding from others is that the online class attracts students from different backgrounds, experiences, cultures, and ethnicities--particularly when it is open to international students. This diversity will greatly contribute to the quality of discussions that I can have with my students. (Case 68).*

Another participant noted she would be motivated to teach an online course, "because I think that some my students should have the experience of taking an online course, even if they wouldn't otherwise do it, and because I think that some of my students want the opportunities to take online courses" (Case 1).

There was some interest by participants regarding the flexibility that students have when learning online. "I do, admittedly, also like the convenience of the on-line format, much as my students do" stated one (Case 35). Several other participants noted the potential importance of flexibility for students and instructors in their interest in teaching online (cases 36, 61, 63).

Some participants were not convinced of student or instructor interest in online courses. "Many [students] prefer an in-person class and resented having to take the course online" (Case 10) and "The students did not like the experience much, nor did I or most of the other instructors" (Case 51) noted two participants who have taught online but do not anymore. Another participant, who is enthusiastic about online teaching, commented, "While I'm personally interested in pursuing some online teaching, I am not at all convinced that this is what many of our students want; the signs or data just aren't there, or I haven't seen many M.A. students expressing any interest at all in online courses" (Case 16).

Issues of Technology Support

One of the largest categories of comments made was that of support for teaching online courses. Support was mentioned in two distinct ways, as technical and as pedagogical. On the technical side, faculty noted the importance technical support has

played in their past uses of online courses. They also mentioned the availability of technical support is a motivator in whether or not they teach online in the future. On the pedagogical side, faculty mentioned the importance the faculty development course offered by the college held in their development of online courses. They showed interest in incorporating more opportunities to have discussions about online learning and in seeing examples of others work.

Technical support for faculty

Technology support is a major issue for faculty attempting to teach online courses. In addition to rating technology support provided at the college level as the highest scale item on the survey, many participants used the open ended question as an opportunity to comment about technology support. "Having easily available support in the form of graduate assistants or others who are able to answer questions or help when needed--this is a key factor that interests me" (Case 43) noted one participant who is considering teaching online. "Lots of technical support is essential, especially for technological dinosaurs like me" (Case 70) said another participant who has not yet taught online. Faculty who have previously taught online commented on the important role the central technology support they received from the virtual university (VU) (see chapter 3) was. "Having the support of the VU was a really important facet of developing a course" (Case 49) said one participant.

Some participants focused on the diminishing support for their online teaching and the need for continued support. "Continued support for 2nd and 3rd generation instructors of a given course is critical" (Case 24) commented a participant who has taught online several times. Three faculty who have previously taught online noted they

believed support for their online teaching had diminished after they had begun teaching their online courses (Cases 24, 29 & 69). However, others believe that upgrades to university facilities, such as the adoption of the ANGEL course management system, allowed for technology support to become less important to their success in teaching online (Case 37).

Pedagogical support for faculty

Participants took the opportunity to talk about pedagogical support for their online teaching in addition to the technical support. "Having access to a variety of successful examples from other colleagues who have organized their online teaching in different ways -- this is another very useful source of support" (Case 43) noted one participant. Another participant said "Having forums where faculty shared their course designs and experiences would possibly be motivating to me. Another motivating factor could be whether faculty have examples of other people's on-line courses to explore" (Case 46).

In addition to exploring colleagues' courses, another participant noted the importance of outside scholars.

> *One of the most motivating factors for me -- in deciding that I would like to develop an on-line or hybrid course in the future -- was to hear Nick Burbules theorize and talk about his own on-line teaching at U of Illinois. This opened my imagination. This intellectual discussion around teaching was very motivating (and imagination-opening) for me and I imagined that other similar discussions would be also. (Case 62)*

Another participant who previously taught online observed, "Now, as I am thinking about designing and teaching a new course, I am more motivated to think about design and technology, particularly as I see other colleagues who are doing really interesting things" (Case 35). One participant noted that getting faculty to teach online is a function of

understanding their instructional goals. "If you want to persuade people to use it, you have to find out what THEIR instructional goals are and then show them how they can achieve those better with technology" (Case 18).

Issues of Time

Time emerged as one of the major issues relating to faculty interest in teaching online courses. Participants who have taught online and those who have not talked about the time online courses take during their development and teaching. Participants who have taught online were generally optimistic about issues of time, often noting that while there is a lot of time required, that the payoff in learning for students and faculty is worth it. "A major point I make is how much more time it takes to teach an on-line course or a blended courses and yet how much more learning occurs for students and the professor" (Case 69) said one participant. Others mentioned that the work never seems to end (Case 16), and that maintaining the course during the offering is a lot of work (Case 10). "I found that the course was much more work than I expected, that it did not free me to pursue other work (research) and I had been led to believe it would, and the institutional support diminished" reported another participant (Case 29).

Faculty who have not taught online reported hearing from colleagues who do teach online about the amount of time they spend on their online courses. "My key worry about teaching online is the great amount of time required that is reported by many colleagues who have done it." (Case 43) and "Everyone says that developing and even teaching in an online format takes a great deal of time" (Case 70) were comments made by two participants who have not taught online before. One participant mentioned "My colleagues who have taught online courses have indicated that although the flexibility of

online teaching is a great feature, it does require the same amount and, in some cases, even more time to get used to teaching online than teaching other classes" (Case 17).

Some participants suggested solutions to the problem of time, both having to do with modifying existing institutional structures. "I think the time it took to develop the course was substantial (making incentives important for faculty to take the time to develop the courses, perhaps)" (Case 49) said one participant. Another said "I believe in most cases an on-line graduate level course should be seen as the equivalent of two face to face courses!" (Case 69).

Negative comments about online teaching

There were very few comments made that were negative about teaching online courses at the college. One participant, who had not previously taught online, noted a belief that the faculty who teach online courses are stretched to the limit, and they receive insufficient support and compensation in the form of technical assistance or release time (Case 8).

Chapter Summary

This chapter presented results obtained from a quantitative analysis of the survey responses using SPSS 14.0 and MacBonferroni to conduct independent sample t-tests, paired samples t-tests, and one-way ANOVA tests. The quantitative analysis of the survey indicated that technology support provided at the college level and opportunities to enrich teaching with web resources were highly ranked motivators for faculty teaching online. Technology support provided at the college level and equipment provided by the college to help with developing online courses were the most highly ranked motivators

for those participants who have not taught online. Few differences were found between departments, gender or whether faculty have taught online before, but a number of differences were found among the different faculty ranks when all participants considered a future course they might teach online. The qualitative analysis of the open-ended question in the survey yielded three important categories that affect faculty motivation to teach online: issues of teaching, issues of technological and pedagogical support, and issues of time.

CHAPTER FIVE

INTERVIEW RESULTS

This chapter reports the results of interview portion of the study. The interview consisted of a set of semi-structured interview questions about faculty members' reasons for teaching or not teaching online. Due to time limitations and availability of participants, 15 of the 71 survey participants were interviewed. Interview participants were chosen based on survey results and other factors including rank, gender, department and technology adopter type. As an instructional technology professional at this college of education, the researcher had some knowledge regarding faculty use of technologies for teaching and when they adopted these technologies.

There were fifteen interview participants, eight females and seven males from three of the four departments and representing all three academic ranks. Eight of the participants had never taught online before and seven had taught in the online degree program at the college. Because there is currently no opportunity for faculty from the kinesiology department to teach in the online program, no faculty from that department were invited to participate in the interviews. The remaining three departments (educational psychology, educational administration and teacher education) each had 5 faculty who participated. Of the fifteen interviewees, 6 were assistant professors, 5 associate professors, and 4 full professors. This selection allowed the researcher a sample that was approximately representative of the 70 survey participants.

General Trends

Analysis of the interview data (see chapter 3 for methods) yielded four major categories as important to faculty teaching online courses: issues of teaching and student learning, issues of time, professional opportunities and challenges, and support (technical, pedagogical and emotional) for online teaching.

Issues of Teaching and Student Learning

Faculty most often talked about interests and concerns related to their teaching and student learning. Subcategories that emerged in this category are: interest and enjoyment of face-to-face teaching, questions about the pedagogical quality of online learning, online teaching as a new professional opportunity, and supporting student learning

Interest and enjoyment of face-to-face teaching

Several interview participants who had not previously taught online talked about how much they enjoy teaching in a face-to-face (FTF) environment, and how they feel their role as a teacher is much more defined and structured in a classroom. One full professor stated that classroom teaching is one of the "most enjoyable aspects of my career" and that she really liked teaching students in an FTF setting. Other participants felt they are energized by the social interactions that occur in a FTF environment. One said that one of the things he enjoys most about teaching in a classroom is the "performance aspect" (Case 19) of teaching in front of an audience. Participants who expressed a strong liking for FTF instruction also tended to feel strong commitments to the classroom, "perhaps because of my experiences when I was in school," one said.

Even though many faculty seemed to enjoy and become energized by teaching online, there were several others who commented that there is an "emotional stress" that teaching in general elicits. One non-tenured participant with no experience teaching online commented that online teaching seems like it would be less emotionally draining than an FTF course, that the emotional stress of teaching would seem to be removed by teaching online (Case 62). Other faculty, who have taught online thought the emotional stress of teaching changes when teaching online. They noted it becomes a stress of "always being on" or always being electronically available to students.

Concerns about pedagogical quality

Comments from participants focused on the pedagogical quality of online teaching. Interestingly, most of the concerns were from faculty who had not yet taught an online course. One participant felt that online instruction seemed to put the teacher in a role that was not as powerful as that of a teacher in a FTF classroom, noting that there seemed to be a loss of agency by the instructor when teaching in an online environment.

> *I'm still thinking about whether it's a good idea or not... I recognize that there might be some populations where online learning is necessary, whether it's in rural areas or some sort of degree program. It's something that's the way of the future and it's very cost effective to do, and it might earn [the university] a lot of money. But in terms of learning, I'm not convinced that it's better. Now someone might be able to make the case to me that it's no worse, in which case the other benefits might make it something I'm willing to go with. (Case 23)*

Other instructors felt more can be accomplished in a FTF environment, stating "it feels like things will be missing online" (Case 43). Other participants believe that the social interaction in a FTF course is good for students and that "something about communication face-to-face" (Case 62) is vital for learning and cannot be replicated in an online environment. Still others believe that students need face-to-face contact with an

instructor to promote good learning outcomes.

Only one participant who had previously taught online questioned the pedagogical quality of teaching online. "Sometimes, as I am thinking about my online course, I question the [pedagogical] validity of some of the decisions I make about how to teach online or present content" she noted (Case 24).

Supporting student learning

Supporting students and making opportunities available to a wider audience came up frequently in the interviews. Several of the participants saw online courses as an opportunity to "get a better mix of students than on campus" (Case 42) and to "get the international perspective" (Case 17) on the topics they are teaching. Other participants were committed to learners "who may not have the opportunity to come to campus as easily," (Case 13) especially underserved populations. Some participants see online courses as an experience students should have as a part of their schooling, and that their teaching online allows those students an opportunity to have that experience.

> *While I certainly think there are opportunities students should have that are only available in the online format, I also think there are certain things, such as diversity issues, which are quite hard to recreate in an online setting... For example, it's different talking to someone you think might be different from you and sitting next to a black man for the first time in a class. (Case 1)*

Issues of Time

The second largest set of concerns involved the issue of time. Faculty noted in both the open-ended survey question (see chapter 4) and the interviews a general feeling that teaching online is a very labor and time intensive activity. The issue of time fell into two main subcategories: concern about the amount of time it takes to develop and teach online, and concern about the amount of time taken away from activities that are

traditionally required for achieving tenure. Teaching online was seen largely as a developmental process in which one learns new skills by study participants. One participant said,

> *The time is the biggest barrier for me because I take teaching with technology to be sort of a developmental process, I would go through a developmental process in doing that and I feel as though that process would take a lot of time. (Case 62)*

Online teaching takes a lot of work

Faculty generally felt online teaching takes a lot of work in up-front development time and in time teaching the course. Many mentioned they have many commitments with their jobs and personal lives and that teaching online would be one more thing that they would need to focus their time on. One participant commented,

> *I don't think it's a resistance at all to online teaching. I think it's just one more thing to add to a basket full of challenging professional activities and in order to do things up to that person's standards, it would take sacrificing something else (Case 13)*

Many participants said they were wary of the time commitment because teaching online is not "something you can stop doing once you start." One non-tenured faculty member said, "Teaching an online course would be too much. I'm still trying to figure out where to get my haircut, go to the dentist, etc.!" (Case 62)

This same participant thought it would take much more time to do it competently and since she feels she is a competent classroom teacher, she would end up investing an "enormous amount of time" to be a competent online teacher. Other participants observed that some faculty are "just so incredibly engaged and busy with other things" (Case 42) that taking the time to teach online would just not be a possibility.

Time and Tenure

Many tenured and non-tenured faculty participants noted the importance of time in the tenure process. One participant said that many non-tenured faculty are skeptical about how the policy works in the college. Another noted that the course evaluations, which non-tenured faculty rely on as part of the tenure process, are not very rigorous for online courses and "do not reflect what really happens in online teaching." (Case 24) Many non-tenured faculty noted that teaching online would be a risk because they are not sure about how teaching online would count in the tenure process. "I've been unwilling, unwilling to risk giving up time in that way [to teach online] because I see it as a risk" commented one non-tenured participant (Case 62). Some tenured faculty participants also noted many non-tenured faculty are "scared" that online teaching takes away from scholarship (Case 42).

Professional Opportunities and Challenges

Many faculty participants reported that online teaching is or could be an opportunity for professional growth, career revitalization and as a way to challenge them in ways they are not being challenged while teaching face-to-face courses. Some tenured participants who have taught online stated they had been looking for a "fresh opportunity" to do something different with their teaching and when the opportunity to teach online presented itself, they took it (e.g. case 33). For them, online teaching provided the potential for excitement in teaching and a way to revive their careers and renew their interest. "I think some faculty members who have been teaching for a while find it revitalized their teaching or rejuvenating or something like that in it," observed one of the participants (Case 62). This revitalization has resulted in growing interest in

teaching online. "I, ah, I'm amazed, I'm really impressed with a lot of the folks, when they talk about the teaching that they do, their investment in it, their interest and their excitement is really high" said a participant who has previously taught online (Case 37).

Faculty who have taught online before often remarked about how online environments offer an opportunity for them to try new teaching methods and improve their teaching skills. One participant commented that he had begun teaching online because of the opportunity to "try new things" and "think about teaching" (Case 3). Another participant said she had been feeling "intellectually stale," so when the opportunity to teach online arose, she took it and found teaching online a way to be "more knowledgeable" about teaching (Case 33). This same participant found the search for resources that occurs in an online course is part of the appeal for her. Another participant thought the possibility of using new resources in their teaching was motivating. Other participants found that teaching online afforded an, "...opportunity to develop a new course based on a timely subject" in their field (Case 42).

Other participants were drawn to the potential challenges that online teaching could provide for them. Some faculty participated to see what it was like to teach online because they love teaching and were curious about how online teaching might fit in. They felt getting their "hands in it, trying it out" (Case 3) was a way to become more interested in teaching again. Several faculty reported being intrigued by the format of an online course and have become increasingly more excited the more they learn.

Support for Faculty Work

The issue of support and who faculty feel gives them support arose frequently at

several different levels in the interviews. Participants were asked to talk about how each of four groups: colleagues, department chairs, college level administrators, and university level administrators do or might provide encouragement and support for their efforts to teach an online course.

Collegial support

There was a general sense that collegial support for teaching online is essential, both to those who are currently teaching online and to those who have not yet taught online. Participants reported that they felt their colleagues did support them in their online teaching, for differing reasons and in formal and informal ways.

Two participants noted that their departmental colleagues supported online teaching within the department because of the money that teaching an online course brings to the department. "We all like the money online courses generate for the program, so my colleagues are very supportive of my teaching online" said one participant (Case 33). Some participants, who are members of the planning committee that oversees the online program, mentioned how helpful the collegial support of the group is to their teaching. "Colleagues become cheerleaders for one another" said one participant (Case 37). Other participants commented that the advisory committee provides intellectual and emotional support for others teaching online (Case 42). Some participants also mentioned that collegial support developed from relationships they established when participating in the faculty development course offered by the college.

> *The faculty development course offered a great opportunity for me to talk about teaching with my faculty colleagues. You might think that we talk about teaching often, but we don't. We sit around and talk about research with one another, but not teaching. So this provided a great opportunity for us to talk about teaching with one another. (Case 33)*

Other participants were engaged by hearing reports at faculty meetings by colleagues about their experience teaching online and successes of the program. One faculty member who is not a part of the advisory committee expressed an interest in a support group of faculty who are teaching online (Case 58).

Many participants commented on informal support provided by colleagues. Many, those who have and have not taught online, reported having informative conversations about online learning with colleagues around the college. They reported their discussions about both the positive and negative aspects of online teaching, mostly about issues surrounding pedagogy and less about technology used to teach online.

> *The colleagues that I respect as teachers are the ones who I would go to. I would go to those who I know are thoughtful about teaching, and I don't know whether they are good at online teaching, but I know they are good teachers and are very thoughtful about it, so I would go to them to ask pedagogical questions about online teaching. (Case 23)*

Participants observed that some colleagues enthusiastically shared their experiences and that these experiences were interesting to them, especially from colleagues that they respect as good teachers.

Department chair

Department chairs were the second group of participants asked about with regard to support and encouragement. Participants were positive about the support provided by their department chairs, ten of the interviewees stated their department chairs were, or they believe would be, very supportive of their teaching online. Department chairs were seen as willing to support faculty in whatever way they could, offering praise when necessary, passing along important information from the dean, and encouraging wise use of time. In one department, the leadership is more decentralized, with two unit

coordinators working on the day-to-day issues that faculty face. In this department these unit coordinators were seen as offering support similar to the department chairperson.

Department chairs often were able to offer monetary incentives to faculty who are teaching online (e.g. case 19). Faculty who do not teach online were also aware of the availability of monetary incentives (e.g. case 17). All of the faculty interviewed noted that money came back to their department from the online courses. One participant commented that although they feel the department chair supports them in their work, it took several years for their chair to notice they were bringing money into the department from their online course (Case 37). Another participant from the same department noted that they have no idea where the money generated from their online course goes and that they have never had a conversation with the department chair about it (Case 42).

In contrast, other faculty stated their department chair is very clear about where the money in their department goes and what it is used for (e.g. cases 3, 33, 43, 36). They also stated that department chairs often let them decide where and how the money they generate from their courses is spent. Several participants noted that their department chair liked the money that comes in from the online courses, which presumably made them more supportive of online teaching (cases 17 & 33). One participant reported their department chair talked with them about how to get funding for developing their online course as they began development (Case 19).

In addition to monetary support, department chairs also are able to help gather institutional resources to help faculty teach online. Graduate student support was mentioned by some of the participants as a resource their department chair provided them to develop and teach their online course. Other participants said they were able to choose

the course they wanted to teach, as well as to teach those courses as a part of their regular course load.

Though many of the participants talked of the encouragement and support offered by their department chairs, several also commented that they did not feel support from their department chair would be necessary or offered (e.g. cases 23 & 54). One participant, who has taught online, stated that his department chair was not a factor in his decision to teach online, nor would his chair be a factor in future decisions (Case 37). Others, who had not taught online before, mentioned that they did not think their department chair would give them any particular or explicit help (Case 1).

Dean of the college

The dean of the college was seen by participants to be enthusiastic and supportive of online teaching at the college. One participant noted that it is "quite evident the dean thinks it's important" (Case 24). Others mentioned that the dean makes it very clear she sees the online program as a value-added part of the college's curriculum (Case 62). Another participant noted the dean was excited and supportive of the online program but they had some skepticism about how ongoing support would be provided and how faculty would be supported with the "nuts and bolts" of building and teaching an online course (Case 23). The participant who noted that support from the department chair did not influence his decisions regarding online teaching also mentioned that while he knew the dean was excited about the online program, it didn't influence his decision (Case 37). Others noted that the dean's supportiveness for faculty teaching online varies by the department they are in (Case 42).

The dean was seen to be very supportive in providing resources for faculty teaching online. Several of the participants noted that the dean was the one who ultimately was responsible for providing financial incentives for faculty teaching online (e.g.13, 17, 58). Technical support provided at the college level was mentioned by many participants. They noted the dean has "put the resources into place" to help ensure faculty have the proper computer and technology support to help them teach online (Case 13). Several others mentioned the importance of the dean's support of the faculty development course offered in the college. Another participant mentioned help from the dean in resolving load issues due to their teaching online (Case 23).

The dean was seen as very encouraging for faculty teaching online courses. More than half of the participants directly noted that the dean has been supportive and encouraging to themselves and their colleagues regarding online teaching. One participant saw the dean as very responsive to the needs of those teaching online (Case 42). One non-tenured participant noted that, while they believed the dean would be encouraging and supportive of them teaching an online course, they also believed the dean would encourage the wise use of time to make sure that the research and service components of being a faculty member were being considered (Case 17).

University administrators

On the whole, university level administrators were not seen as directly very supportive or encouraging of faculty teaching online. Over half of the participants noted that administrators above the college level were not doing anything they knew of to directly support online teaching. One tenured faculty member who has taught online mentioned he did not believe there was any support at that level, but also that he had

"never bothered to find out" if there was (Case 37). Despite reporting there was no evident support from university administrators, the participants then went on to talk about the many programs and places where there is support available for teaching online courses.

The virtual university group (VU) was the most widely named support group outside of the college. Many of the faculty who have taught online at the college initially received help and support from the VU. "VU support was instrumental the first time I taught online," said one participant (Case 33). Others agreed, noting that the VU provided good support when they taught online and helped with "creative ways to teach." One of the participants commented that support from VU was best the first time they taught their online course and that since then it seems that VU has been "shirking responsibility" for supporting those courses they helped to construct (Case 24). One participant who recently developed an online course did receive some help from VU, but "only indirectly" through working with college level support (Case 19).

Other areas on campus that were mentioned as support areas for online teaching were the training programs provided by the university's centrally funded unit overseeing technology. Other sources of support mentioned were library staff and their 24/7 help desk, Lilly seminars offered by the university's faculty development office, and other centers on campus such as the writing center. One participant who has not taught online before mentioned that these centers on campus have been instrumental in his thinking about online teaching in a scholarly way (Case 3).

Reasons for Teaching Online

Those faculty who had taught online before (n = 7) were asked to discuss their reasons for teaching online. Out of these answers two main categories emerged: reasons of interest and opportunity, and reasons of teaching and scholarship. These categories match very closely with two of the categories reported in the general trends section above. Of these participants, only one cited any sort of coercion by a department chair, dean or other administrator as one of their reasons for teaching online. Many participants talked about the flexibility online teaching offers, in terms of time and location from which they teach.

Some participants were interested in teaching online because it provided a "fresh opportunity" and chance to do something different and exciting (Case 33). Others found they were "intrigued by the format," (Case 19) or that they wanted to find out what it was like to teach an online course (Case 54). One participant said in the beginning they were skeptical of how online teaching would work and were interested in teaching online to explore this skepticism (Case 37). Another participant has always been interested in technology and for them this was another opportunity to explore it further (Case 36).

Faculty were also interested in participating due to reasons regarding teaching and scholarship (Case 54). Some faculty welcomed an opportunity to think about teaching in a different way from how they had been teaching and to develop a variety of approaches to teaching. Other participants had been feeling "intellectually stale" and saw teaching online as a way to liven up their teaching and become more knowledgeable about their subject area (Case 33). Still other participants found teaching online to be an opportunity to develop a new course they had wanted to teach, or that was a timely topic in education

(Case 42).

A few reasons cited by participants about why they decided to teach online that did not fit into a major category, but do give some insight into reasons for participation. Only one participant (non-tenured) said they had taught online as an opportunity to conduct research (Case 54). Another participant noted the flexibility of teaching while abroad was a motivation for them to develop and teach their online course (Case 19). A tenured participant also noted that one of the reasons they teach online still is because of the collegial support that comes with online teaching (Case 24).

Reasons for Not Teaching Online

The group of participants who had not taught online (n = 8) were also asked about their reasons for non-participation in teaching online. Two main categories emerged from this group; subject area concerns, and teaching concerns. None of the participants explicitly said they were not interested in online teaching and none of them cited lack of incentives or support from leadership as preventing them from teaching online.

The largest number of reasons for not teaching online were categorized as subject area concerns. Many of the faculty who had not taught online before cited reasons such as ethical concerns about teaching their subject online, or lack of opportunities to teach their subject area in an online setting.

> *A couple of the courses I teach I think would be difficult to teach online because it requires a lot of close supervision of students, so that wouldn't really work well online. I know there are other universities that have online courses for the same subject, but I think there are some big ethical issues with that... at least with the technology we have currently. (Case 17)*

Another participant noted that nobody had asked him to teach an online course yet (Case 13) and another said that they would be interested in trying an online course, but that no online courses in their subject area were offered so he has not yet participated (Case 23). Other participants noted they are limited in the number of courses they can teach each year, and courses they are required to teach are not courses that can be put online (cases 1 & 62).

Teaching concerns were another area that kept faculty from teaching online. Many faculty who had not taught online cited a love of teaching in a classroom and the social interactions that go on there. "I'm very energized by the interactions that go on in my class" said one participant (Case 62). Another participant noted that she really liked teaching in a classroom and that she thinks more can be accomplished by teaching in a face-to-face setting (Case 43). Others thought classroom instruction provides more instructional opportunities than online teaching. "I'm still thinking about whether teaching online is a good idea or not. I think there are some things you do in a classroom that you just can't do online" (Case 23).

Only one participant mentioned fear of technology, saying "I'm not a tinkerer, I want technology to be transparent." Another participant said, "I get physically fatigued by sitting at the computer," despite being someone who, from earlier actions and current interests might otherwise be interested in online teaching. When asked why some of his colleagues do not teach online, one participant replied "They don't understand it. They simply don't understand it."

Likes, Dislikes and Challenges of Online Teaching

Participants who have taught online before (n = 7) were asked what they liked about teaching online, disliked about teaching online, and what some challenges associated with teaching online were.

Likes of online teaching

One of the most cited reasons for liking teaching online was the flexibility of time and place that comes with teaching an online course. They appreciated the flexibility of being able to teach at times that are convenient for them and in places that are comfortable or accessible to them. Another often cited reason for online teaching were aspects of course design and classroom management. "I like the ability to create a very deliberate environment," said one participant (Case 37). "It makes you think carefully about what you are going to teach. You can't just walk into class and pull out your notes when you are teaching online," observed another participant (Case 19).

Two participants liked the way that student work is visibly represented in an online course. "You have a record of their work that is permanent and you have a larger time window for seizing teachable moments in an online course," one of them commented (Case 42). Other participants liked the questions that online teaching raises about what it means to be an instructor and what it means to teach (Case 24).

Dislikes of online teaching

The most cited dislike by the participants was the amount of time they spend with developing and teaching the online course. Some participants did mention that over time it has become easier to manage the time they spend on their course. For instance, one

participant noted that when she first began teaching online she would check her email constantly because she believed the students needed an immediate response.

> *Now I manage my time more, I manage when I'm accessible and when I'm not. I have my online office hours and I'm available to respond to email regularly, but I communicate to my students when I'm available so I'm not completely consumed by the class. The first time I taught online I would get back to students every couple hours so they wouldn't get irate...But that was very hard to do, especially given my other responsibilities. (Case 24)*

Other participants stated they really like the classroom and miss some of the face-to-face interactions that they are not able to reproduce in the online environment. One participant mentioned they miss the ability to "ad-lib" when teaching an online course. "You cannot ad-lib online, you're more confined to what you did in the beginning," he said (Case 19). "It's sometimes quite monotonous, lots of reading" another said about her online course (Case 33).

Only one participant mentioned problems with the technology as a dislike of teaching online. He noted there are "some nuances with ANGEL [the course management system used] " that prevent them from doing more within their course. Another participant said it was hard to "make it work" the first time he taught his course, but over time he became more comfortable with how to use the technology (Case 33).

Challenges of online teaching

After recounting both their likes and dislikes of teaching online, participants were asked to talk about the challenges they face with teaching online. Some were the same as challenges they face in the classroom, such as student participation and engagement in class activities (Case 42). Other teaching related challenges mentioned include creating a

community, setting up rules for interaction, understanding "what works" online, and giving feedback to students in a timely manner.

A "lack of creativity," as one participant called it (Case 1), was mentioned by several participants as a challenge in teaching online courses. They noted that while they are able to work much of the technology in their courses, they have trouble thinking "creatively" about what they might do to make their online courses more than just reading or class discussion. "My VU producer was quite a big help when I first started teaching online, he helped me to think about what was possible..." (Case 33)

Keeping up with the work involved in maintaining the course and giving proper student feedback was mentioned by other participants as being a particular challenge (cases 24 & 42). Finding discreet blocks of time during which to work on the course was one of the biggest challenges for one of the participants. Revising the course and keeping it current were challenges for two others (cases 3 & 37).

Another challenge that was cited by several participants was understanding the new role for the instructor in online courses. They found that understanding and accepting the sometimes "sideline" role that instructors take in online courses was different from what they have known in their traditional face-to-face courses on campus.

Chapter Summary

This chapter analyzed faculty responses from the interview portion of this study. The participants (n = 15) represented all departments, ranks and genders that participate in the online program at the college. General trends found in the interviews included: issues of teaching and student learning, issues of time, professional opportunities and

challenges, and support for faculty work. The faculty voices reflected in the direct quotes presented here convey the intellectual and emotional engagement of faculty in the ongoing discussion of the role of online learning in education.

CHAPTER SIX

DISCUSSION OF RESULTS AND CONCLUSIONS

This study provided a detailed look at faculty motivation to teach online courses in a particular setting, a college of education at a Midwestern land grant university. Results from the study, presented in chapters four and five, were consistent with previous studies on the topic and indicated that faculty at this college are motivated to teach online by similar reasons as faculty at other colleges and universities across the nation (e.g. Betts, 1998; Osborne, 2006; Schifter, 2000). The results suggest that faculty who are not currently teaching online courses see the changes it is bringing to the profession and while many of these faculty may not be early adopters, they are certainly not resistant faculty either. Faculty who have taught online previously had a more focused idea of what would motivate them to teach another online course than did faculty who have not taught online. Note here about the self reporting issue... revisit it...!

The faculty development participation model proposed by Caffarella and Zinn (1999) worked well for purposes of organizing this study and for guiding the analysis. Data collected fit the model, suggesting that teaching online is indeed a developmental process and that frameworks for studying faculty participation in development activities may be helpful in future studies. Of the four domains presented in the framework the People and Interpersonal relations domain was the least represented in this study, suggesting that this domain is less important when considering faculty motivation to teach online courses. The Institutional Structures domain was the most represented. This domain included the policies and programs set in place by college administrators, in addition to support and resources that faculty might consider when teaching online. The

prominence of this domain suggests the importance of institutional structures in the motivational aspects of teaching online. While the four domains help to understand on a broad level why faculty teach online, there became a need to further refine them with subcategories for this study. Additionally, the use of other theories (outlined below) helps to create a more rounded picture of faculty motivation to teach online.

Roger's diffusion of innovation model (1962), as modified by Geoghegan (1995) to focus specifically on instructional technology, provided a useful framework for understanding why some faculty may be more resistant than others when it comes to adopting technology. We can see from results of this study that an underlying current of fear arose. Fear was not specifically spoken of by any of the participants, yet indicators such as a reliance on technical support or a need to have readily available support and resources, suggests that fear is a part of their non-participation. Geoghegan suggests that the late adopters and resisters in the model may be motivated to not participate due to reasons of fear. Geoghegan's discussion of the "technology alliance" which he calls the common collaboration of early adopters, tech support and vendors, is very useful to this analysis as he notes that some late adopter and resistant faculty are "locked out" of discussions about online teaching due to the closed nature of the alliance. Identifying and eliminating any technology alliances that have formed at this college can be a step towards motivating those late adopter and resistant faculty to teach online.

The ecological model of adoption proposed by Zhao and Frank (2003) provided a useful framework for understanding the participants and their views towards technology and online learning. Zhao and Frank's model proved to be especially useful when considering reasons why some faculty resist adopting online teaching methods from an

organizational standpoint. Keeping in mind that online learning is a relatively new field (in Zhao and Frank's terms, it may be considered a new "species") it becomes easier to understand why online learning may be seen with skeptical eyes by teachers who have been successful in the classroom for many years. Understanding that working online learning into the organization as a valued part of the "ecosystem" can help to change the minds and acceptance of faculty is important to keep in mind as we move ahead with online learning.

Orlikowksi's technological frames of reference (TFR) theory works in conjunction with Zhao and Frank's theory in this study. As Orlikowski points out, when a technology becomes an important part of the organizations frame of reference as well as those actors within the organization, (i.e. as frames become congruent) it becomes much more mainstream and accepted. This acceptance, Zhao and Frank note, can lead to adoption.

Sustaining Faculty Motivation to Teach Online

Faculty motivation to teach online is a multifaceted issue, with no one area taking precedence in the decision making process. Faculty generally teach online for reasons related to their teaching and scholarship, professional opportunities, and personal interests. Supporting faculty and maintaining their motivation to teach online requires addressing these areas. Extrinsic incentives such as opportunities for merit pay or overload pay were less important to those faculty who have already taught an online course.

Intrinsic Benefits

For faculty who have previously taught online, sustained motivation comes mainly from the intrinsic benefits of teaching online. The results of this study suggest that once a faculty member has taught an online course, their motivation to continue is sustained by positive experiences and benefits from teaching the course. Examples of these benefits include satisfaction with the teaching experience, professional growth, and opportunities for intellectual challenges. These findings compliment other studies conducted in the area that have shown intrinsic motivators to be an important issue in considering faculty motivation to teach online or at a distance (e.g. Betts, 1998; Schifter, 2000).

Technical Support

Providing quality technical support at the college level was the highest ranked motivator for faculty who have already taught an online course. Faculty reported that it was this technical support that allowed them to be successful in accomplishing some of the goals they had for their courses. This support also gives faculty a place to turn to when they encounter problems with their courses. This technical support must be available when faculty need it and for a sustained period of time beyond the completion of the course. One study participant (Case 24), noted the importance of technical support for 2nd and 3rd generation instructors (i.e. those who are teaching a course developed by another faculty member). Continued support aids faculty in the maintenance and enhancement of their courses and thus helps to sustain motivation by ensuring faculty are able to find support when they need it.

Issues of Teaching and Student Learning

Education faculty are most interested in issues of teaching and student learning. Many participants noted the role online teaching has played in further developing their teaching skills. They believe that teaching online offers them opportunities to teach in new ways, use new materials, and to connect students in different ways. Colleges and universities must support these beliefs if they wish to sustain faculty motivation. Programs outlining the pedagogical aspects of online teaching and offering exposure and training on new tools and materials can be offered through teaching and learning centers as a support mechanism. Faculty groups can also play a role in supporting teaching by offering faculty an opportunity to share with others their successes in online teaching. Several faculty reported a "lack of creativity" when thinking about what they might do in an online course. However, faculty groups can bridge this "lack of creativity" and help faculty to better understand possibilities associated with online teaching.

Intellectual Opportunities

Teaching online also provides an intellectual opportunity for some faculty. These faculty reported being intrigued by the questions that arise when teaching an online course, and some have produced scholarly work in the form or journal articles and conference presentations stemming from these questions. Understanding this and supporting faculty who are teaching online to capitalize on these intellectual opportunities as they arise are important roles that colleges and universities can provide when supporting online teaching.

Motivating Faculty to Adopt Online Teaching

The results of this study provide insight into motivating faculty who have not taught online to adopt online teaching. Faculty who have not taught online were primarily concerned with issues relating to resources and technical support. Time spent developing and teaching an online course was also a concern for many faculty who have not taught online. Other motivational factors include the importance of technical support at the departmental level and opportunities for merit pay, overload or stipends associated with their online teaching. Non-tenured faculty were concerned with issues of tenure and how online teaching would affect their activities that traditionally are considered part of the tenure process.

Access to Relevant Resources & Support

Access to resources for teaching online is a large part of motivating faculty to start teaching online courses. Resources such as equipment, money to purchase books or other items, and labor in the form of graduate students were all ranked very highly on the motivational scale by study participants. Assuring faculty who are new to online teaching that these resources are in place to support them, and giving them examples of these resources are an important part of fostering motivation to teach online. In addition to the availability of resources, access to them must be seamless in order for effective faculty use. Availability of graduate assistants to help develop and teach an online course can ease the time commitment for faculty in the up-front development of the course materials and in responding to student work.

Faculty in this study noted the importance of resources from their colleges and departments, but in many cases also showed a lack of knowledge of support structures that already exist within the college. Making current and future support structures and policies clear to faculty and easy to access can make some faculty more likely to teach an online course.

Support groups for faculty teaching online courses that take the form of seminars, regularly scheduled meetings, or courses such as the faculty development course offered at this college can be useful in motivating faculty to teach online. Several of the study participants are members of the advisory group that oversees the online masters program. These participants spoke fondly of the group, noting the emotional, pedagogical and technical support the group provided. Other participants who have not taught online also talked about the importance of forums where they can share their concerns and hear from colleagues who have taught online. One participant noted the establishment of collegial groups may be the largest motivating factor for him to teach online. Clearly, faculty value their colleagues' opinions about teaching and research, but too often (as case 33 noted) discussions among colleagues center around research and not teaching. Developing and maintaining faculty support groups can be a powerful way of encouraging faculty discussion about teaching.

Adequate technical support is another area in which institutions can help faculty to ease the time spent on developing online courses. Participants who were early adopters of online teaching reported they received much more help from technical support units such as the virtual university than those who have developed their courses more recently. Ensuring this technical support is available and able to help faculty with their needs can

make the time commitment more manageable for faculty by taking over some of the "nuts and bolts" parts of building online courses that faculty may not necessarily need to be involved in.

Monetary Incentives

Monetary incentives, in the form of discretionary funds to buy equipment and copyright permissions, and as an addition to faculty salaries were noted by several participants as being important motivators for online teaching. Programs developed by colleges and universities that offer faculty a bonus or other form of monetary incentive when they begin teaching an online course can be helpful in motivating faculty who have not taught online. As noted in the section on sustaining faculty motivation to teach online, study results suggest these programs need only be offered to faculty new to online teaching and not as a method of sustaining motivation.

Training Opportunities

Access to training opportunities both in technological skills and pedagogical skills for teaching online was another area faculty who have not taught online suggested would be a motivating factor for them when teaching an online course. Structured training opportunities offered through teaching and learning centers, as well as one-on-one opportunities for support would be helpful to those who have not taught online. Some faculty mentioned help with pedagogical decisions would be vital to their online teaching as they already are comfortable with the technology. Others thought the opposite to be true and suggested a need for technological help. Few study participants noted a fear of

the technology, rather they said they would need help in obtaining a certain comfort level with it.

Tenure Policy & Administrative Support

Results of this study show that non-tenured faculty need clear and credible policy guidelines on how teaching online fits into the requirements for tenure. Achieving tenure is a primary concern of junior faculty at research universities, and anything that is seen as an extraneous task that will not help them to achieve tenure will be dismissed as unimportant. Therefore, colleges and universities need to be sure that online teaching is seen as both important to their mission, and as a valued part of the tenure process if promoting online teaching is a priority. Clear policies on the role that online teaching plays in the tenure process should be developed and communicated to all faculty.

Some study participants noted mixed signals coming from college administrators about the importance of online teaching. Teaching online is said to be important to college administrators and the mission of the college, however some faculty have reported that they were discouraged to teach online by administrators and other faculty. For instance, in motivating non-tenured faculty it is likely important to tie their online teaching to their scholarship in a way that will be meaningful to them in the tenure process. While tenured faculty are more likely motivated by connecting online teaching with scholarship as a way to revitalize themselves, try something new and get back into being passionate about what they are doing. However, some faculty are either outright discouraged from teaching online (i.e. tenured faculty advising junior faculty to not teach online until they have tenure), or are indirectly discouraged by a perceived unwillingness

to provide the support needed in order to make online teaching scholarly and to integrate it into their research programs. Listening to faculty needs for teaching online and providing them with these needs is a vital part of getting faculty to teach online for the first time. Once a faculty member teaches online, their motivations for teaching online usually become much clearer, thus their resource and support needs become more focused.

Technology's Role in the Organization

When technology is valued in an organization, faculty members' technological frames are more malleable and are more likely to become congruent with the institution's goals. Colleges and universities must focus the attention of doctoral students and other future faculty and administrators on the importance of online teaching. These large scale changes will begin to produce faculty members who enter the professoriate with an understanding of the importance technology plays in the modern college setting. Changes must also be made to the organizational culture of the existing faculty members. If the culture is not changed to see the advantages and necessity of using technology, new faculty members coming out of doctoral programs who are interested in online teaching will quickly become assimilated into the culture that does not value online learning, and like novice teachers, will lose the idealism and enthusiasm that they bring with them.

Teaching and Student Learning

Many faculty who have not taught online before noted their concern about the pedagogical quality of online teaching. Many commented they had lingering doubt

whether online teaching was as good as classroom instruction, whether they would develop the same relationships with students, and whether the students would learn as much as they do in classrooms.

With the change of medium, some of the ways in which teaching occurs will change as well. Changes in teaching offer some advantages and disadvantages when compared with face-to-face teaching. As faculty who have taught online engage in discussions with those who have not taught online, the fears some may have about the validity of online teaching can change. Recently researchers have begun to produce more rigorous studies about online teaching, which can also help to ease concerns. Improving the clarity with which the results of research in this area is communicated to faculty considering online teaching is necessary for those faculty new to or considering online teaching.

Interestingly, though many faculty at the college seem to believe that they are "learner centered" instructors, results of this study show that many are still teaching in a predominantly teacher-centered mode of instruction. Moving from teacher-centered to learner-centered instruction is an important part of developing interest in online teaching as it can require a more student-centered approach. Faculty have traditionally focused on the delivery of content in a class, rather than being designers of learning materials and experiences. Indeed, this research showed that many faculty were and are motivated to teach by the opportunity to "perform" in a classroom each week. This experience makes the faculty members feel good and energizes them to continue teaching. Because of this, one can see why there may be resistance to online teaching by those faculty who have always loved teaching in the classroom.

Results of the study suggest faculty who may have an easier time adjusting to teaching online are those who have adopted learner centered modes of instruction, love the act of teaching and are interested in all types of instruction, want to reform or restructure teaching, or were never quite comfortable in the classroom. There are examples of all four of these areas represented in several of the accomplished online teachers participating in the study.

The amount of time spent teaching an online course was mentioned in almost every interview and in several surveys. Time and related issues may be the largest barrier and complaint that faculty have about teaching online. Time issues fall into two separate categories: faculty-controlled time and institutional demands on faculty time.

A faculty member's pedagogical commitments often play a large role in the time involved with their online teaching. Certain pedagogical commitments require more time in an online setting than they do in a traditional classroom. For instance, those faculty who are committed to social constructivist methods of teaching or collaborative learning must make certain decisions about how they structure their online course. These decisions often require much student discussion, which results in time spent by the faculty member to read and comment on the discussion. Other faculty who have different commitments to teaching may be able to use less time intensive methods of delivery. Support specialists provided at the college or university level can help faculty to "sort out" their pedagogical commitments when constructing an online course in order to find a viable solution.

Because faculty teaching, service commitments and research commitments are in competition with one another for faculty time, many faculty are hesitant to adopt online

teaching, knowing that time spent teaching online is time that is not spent elsewhere. Administrators and faculty can work together to find options, as some participants in this study have done, for structuring their time to allow for online teaching. As online learning continues to grow, other institutional structures such as the role of online learning in the tenure process need to be considered.

Suggestions for Future Research

While this study adds to the literature regarding faculty motivation to teach online, it is by no means a comprehensive look at the subject. Results from this study suggest a few areas for future research. Differences were considered between faculty ranks, but not by years experience or years in a given rank, which could provide more information about what stages in their careers faculty are more or less likely to teach online. Perhaps more valuable would be longitudinal studies of faculty development as they teach online for several years. Focus group discussions with small groups of faculty talking with each other could yield insights into faculty discourse about online learning. Interviews with college administrators and support staff working closely with the online masters program could provide useful information about institutional and human resource structures that support or inhibit online teaching. Given the growing importance of online learning, clearly this is an area where more research is needed.

The results of this study speak to different constituencies that may be more interested in some of the results than others. Further exploration of these data and the phenomena described from the frames these constituencies bring to the field will prove

helpful in furthering understanding of all aspects involved in teaching and learning in online environments.

Conclusion

This study is both timely and important in the field of online distance education. Global changes, many enabled by technology, are affecting all aspects of higher education. Online teaching and learning seems certain to play an ever increasing role in higher education, as demand for online education continues to grow and universities continue to respond to this demand by creating new online course offerings. As faculty make greater use of online course delivery, technology support departments will be expected to offer instructional support similar to that found in distance, adult, and extension education services (University of Wisconsin Extension, 2005).

This study advances knowledge of faculty participation in online teaching. Studies such as this provide guidance for online program administrators and others to better understand program successes and failures and how to support faculty participation in online education in their specific situations. By identifying obstacles to faculty motivation to teach online courses and identifying those reasons faculty teach online courses, the results of this study are useful in aiding development and restructuring of online learning programs.

The university provides an idea environment for using research studies such as this to inform and improve teaching and learning. The open-ended interview portions of this study may be seen as giving voice to faculty. These faculty voices express a full range of views – positive, negative and uncertain – regarding online teaching and

learning. What comes through this analysis and the selected quotations is the faculty's personal engagement in the ongoing discussion of the role of online teaching and learning in higher education. Fostering a climate of open discourse among faculty and listening to the different views may be one of the most important determinants of success in any online program.

However, organizational change is a process that takes time, especially in an institution with traditions that run as deep as education. To ask for widespread acceptance of online teaching and learning is to ask for a change of culture. Securing faculty participation in online learning to begin to keep pace with the growth of online learning will be a challenge, but a challenge to be seen within the context of broader changes affecting higher education.

APPENDICES

APPENDIX A
SURVEY OF FACULTY MOTIVATION TO TEACH ONLINE

Faculty Motivation to Teach Online Courses

Demographic Information

1. Please provide your full name:

2. What year did you receive your doctoral degree?

3. What year did you graduate from high school?

4. How many years have you been a university faculty member? (Count all institutions you've served at)

5. How many years have you been at your current rank?

6. In what field did you receive your doctoral degree?

Your history and habits with technology

7. Approximately what year did you first use a computer?

8. Approximately what year did you or your family first own a computer?

9. How many hours per week do you use a computer at your office?

10. How many hours per week do you use a computer at your home?

11. Do you know how to replace parts of your computer such as memory or a hard drive?

Yes No Maybe

12. Do you have a hobby that involves "tinkering" with objects? (e.g. model building, computer/radio repair, woodworking, etc.)

Yes No

13. Do you have a high speed (DSL or Cable Modem) Internet connection at your home?

Yes No

14. Have you used the World Wide Web as a supplement to an on-campus course you have taught?

Yes No

15. Have you previously used the World Wide Web to assign student activities that take the place of classroom seat time (usually called a "Hybrid" course)?

Yes No

16. Have you ever taught a fully online course (including this semester)?

Yes No

People and Interpersonal Relations

*(**Note**: Participants answering Yes to question 16 answered questions 1 and 2 in this section, participants answering No to question 16 were not required to answer questions 1 and 2. Participants answering No to question 16 were also not required to fill out the "previous course" line in the questions)*

You have just indicated that you have taught at least one fully online course in the past. If you have taught more than one online course in the past, please choose one to focus on when answering the questions below (Previous Course). Also, please imagine you are now about to start developing and teaching a new online course (New Course).

1. Please enter the course code and number of the previous course you are focusing on (for example: TE 891).

2. Please enter the semester and year that you taught this course (for example: Fall 2001)

On a scale of 1-6 (1 being strongly disagree and 6 being strongly agree), please choose the extent to which you agree that each factor was motivating when developing and teaching your previous online course, and how much you agree that each factor would be motivating to teach a new online course.

3. Pressure by your departmental colleagues to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

4. Pressure by your department chair to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

5. Pressure by your dean to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

6. Support and encouragement by your departmental colleagues to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

7. Support and encouragement from your department chair to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

8. Support and encouragement from your dean to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

9. Support and encouragement from university administrators (e.g. president, provost) to teach online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

10. Support and encouragement from family at home

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

11. Comments made by colleagues about their experiences teaching online

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Intellectual and Psychosocial Characteristics

Continuing to think about your past and future courses. On a scale of 1-6 (1 being strongly disagree and 6 being strongly agree), please choose the extent to which you agree that each factor was motivating when developing and teaching your previous online course, and how much you agree that each factor would be motivating to teach a new online course.

12. Ability of online courses to reach new audiences that cannot attend classes on campus

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

13. Opportunity for scholarly pursuit in connection with online teaching and learning

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

14. Opportunity to "revitalize" your career and explore new options

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

15. Opportunity to improve your teaching skills

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

16. Visibility for jobs at other institutions or organizations

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

17. Opportunity for royalties on copyrighted materials

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

18. Intellectual challenge of learning a new way of teaching

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

19. Opportunity to conduct research on your development and teaching of an online course

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

20. Opportunity to enrich my teaching by drawing on web resources

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

21. Gaining professional prestige from developing and teaching an online course

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Institutional Structures

Continuing to think about your past and future courses. On a scale of 1-6 (1 being strongly disagree and 6 being strongly agree), please choose the extent to which you agree that each factor was motivating when developing and teaching your previous online course, and how much you agree that each factor would be motivating to teach a new online course.

22. Opportunities for merit pay, overload or stipend based on your teaching of online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

23. Credit toward tenure and promotion

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

24. Possibility of reduced on-campus teaching load while teaching an online course

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

25. Ability to have flexible teaching hours and locations while teaching online courses

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

26. Equipment provided by your college to help you teach your online course

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

27. Graduate assistant or similar support provided by your college to help you teach your online course

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

28. Opportunities to apply for grants for materials and expenses involved with online teaching

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

29. Availability of college or departmental funds for materials and expenses involved with online teaching

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

30. Effective technical support provided in your department

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

31. Effective technical support provided in your college

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

32. Effective technical support provided at your university

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

33. Training in online teaching methods provided by your college

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

34. Training in online teaching methods provided by your university

Previous Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
New Course	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Open Ended Question

1. Please enter any comments or thoughts regarding your motivation to teach/not teach an online course that were not covered by this survey, or that you think may benefit this study.

Thank you for your participation in this survey.

APPENDIX B
FACULTY INTERVIEW PROTOCOL: ONLINE TEACHER

FACULTY INTERVIEW PROTOCOL
Faculty who have taught online

Interview Number:_____
Date:_____

Introduction

THANK YOU FOR PARTICIPATING IN THE INTERVIEW PART OF THIS STUDY. THIS INTERVIEW IS A FOLLOW UP TO THE SURVEY YOU RECENTLY TOOK REGARDING MOTIVATION TO TEACH ONLINE COURSES. DURING THE INTERVIEW, I'LL BE ASKING QUESTIONS THAT HELP ME TO CLARIFY ANSWERS YOU GAVE TO THE SURVEY, AS WELL AS TO PROBE MORE DEEPLY INTO REASONS FOR YOUR PARTICIPATION/NON-PARTICIPATION IN TEACHING ONLINE. THERE ARE TWO PARTS TO THIS INTERVIEW. PART ONE ASKS GENERAL QUESTIONS ABOUT YOUR PARTICIPATION/NON-PARTICIPATION IN ONLINE TEACHING. PART TWO ASKS FOLLOW-UP QUESTIONS RELATED TO YOUR SURVEY ANSWERS. THIS INTERVIEW SHOULD LAST APPROXIMATELY 60 MINUTES. IF YOU NEED TO TAKE A BREAK AT ANY TIME, PLEASE LET ME KNOW. YOU MAY REFRAIN FROM ANSWERING ANY QUESTION OR STOP THE INTERVIEW AT ANY TIME WITHOUT PENALTY.

BEFORE WE BEGIN I WANT TO REASSURE YOU THAT THE INFORMATION YOU GIVE WILL BE KEPT CONFIDENTIAL. YOUR NAME WILL NOT APPEAR IN ANY RESULTS FROM THIS STUDY. IT WOULD BE HELPFUL TO ME IF I TAPED OUR INTERVIEW. IS THIS OK WITH YOU?

YES → Start Tape Recorder
NO

Start Time:_____ AM / PM

Part 1 – General Questions

1. In general, why have you decided / not decided to teach an online course?

2. Are there any specific experiences you've had during your life/career either recently or in the past that you think directly influenced your decision in question 1?

3. If you **are** teaching online, what do you really like about teaching online? What do you really dislike about teaching online? What are some challenges associated with teaching online?

4. Do you believe the following groups provide encouragement and support for yourself and others teaching online courses?

   Colleagues
   Dept. Chair
   College Administrators
   University Administrators

   If yes, how so? If no, why not?

5. Have you received technical support from the college and/or university for teaching an online course? If yes, how so? If no, why not?

6. Is there any one person or place, either at the College or University level, that has provided or provides more support than others? If yes, how so? What do they do that makes their support more than others?

7. If you have taught an online course, what do you think were the two biggest motivators for you to teach that online course?

8. If you have taught an online course, what are some barriers that would prevent you from teaching another online course?

9. Do you believe your rank/tenure status affects a faculty member's ability/opportunities to teach online? If so, how?

10. Thinking about your colleagues who participate in online teaching, why do you think they teach online?

11. Thinking about your colleagues who **do not** participate in online teaching, why do you think they **do not** teach online?

Part 2 – Questions related to participant's survey answers

Note: Due to the nature of the study, I will be unable to identify the specific questions to be asked in this section until after the surveys have been collected. Questions posed in this area will follow the format below and will be followed upon with probes for more information. All questions asked in this section will be taken directly from the faculty survey (Appendix A).

THIS PART OF THE INTERVIEW ASKS QUESTIONS RELATED TO YOUR SURVEY ANSWERS IN AN ATTEMPT TO MORE DEEPLY UNDERSTAND SOME OF YOUR RESPONSES. I HAVE IDENTIFIED SEVERAL QUESTIONS FROM YOUR SURVEY THAT INTEREST ME AND WILL BE ASKING YOU ABOUT THEM ONE-BY-ONE. REMEMBER: THIS SURVEY ASKED ABOUT MOTIVATIONAL FACTORS INVOLVED WITH TEACHING ONLINE AND YOU WERE ASKED TO RANK HOW MOTIVATING EACH FACTOR WOULD BE ON A SCALE OF 1-6

<SHOW PARTICIPANT PRINTED COPY OF THE QUESTIONS AND THEIR ANSWERS YOU WILL BE ASKING THEM ABOUT>

General Probes:
(taken from Bogdan & Biklen, 2003)

What do you mean?
I'm not sure that I am following you
Would you explain that?
What were you thinking at the time?
Give me an example
Take me through the experience

Conclusion

WE ARE NOW FINSHED WITH THE INTERVIEW. I WANT TO THANK YOU FOR YOUR TIME AND WILLINGNESS TO PARTICIPATE IN THIS STUDY. YOUR INPUT WILL BE VERY HELPFUL TO ME. IF YOU ARE INTERESTED IN RECEIVING A COPY OF THE STUDY WHEN FINISHED PLEASE LET ME KNOW AND I WOULD BE HAPPY TO ADD YOU TO MY LIST. THANKS AGAIN.

APPENDIX C
FACULTY INTERVIEW PROTOCOL: NON-ONLINE TEACHER

FACULTY INTERVIEW PROTOCOL
Non-Online Teacher

Interview Number:_____
Date:_____

Introduction

THANK YOU FOR PARTICIPATING IN THE INTERVIEW PART OF THIS STUDY. THIS INTERVIEW IS A FOLLOW UP TO THE SURVEY YOU RECENTLY TOOK REGARDING MOTIVATION TO TEACH ONLINE COURSES. DURING THE INTERVIEW, I'LL BE ASKING QUESTIONS THAT HELP ME TO CLARIFY ANSWERS YOU GAVE TO THE SURVEY, AS WELL AS TO PROBE MORE DEEPLY INTO REASONS FOR YOUR PARTICIPATION/NON-PARTICIPATION IN TEACHING ONLINE. THERE ARE TWO PARTS TO THIS INTERVIEW. PART ONE ASKS GENERAL QUESTIONS ABOUT YOUR PARTICIPATION/NON-PARTICIPATION IN ONLINE TEACHING. PART TWO ASKS FOLLOW-UP QUESTIONS RELATED TO YOUR SURVEY ANSWERS. THIS INTERVIEW SHOULD LAST APPROXIMATELY 60 MINUTES. IF YOU NEED TO TAKE A BREAK AT ANY TIME, PLEASE LET ME KNOW. YOU MAY REFRAIN FROM ANSWERING ANY QUESTION OR STOP THE INTERVIEW AT ANY TIME WITHOUT PENALTY.

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YES → Start Tape Recorder
NO

Start Time:_____ AM / PM

Part 1 – General Questions

12. In general, why have you decided / not decided to teach an online course?

13. Are there any specific experiences you've had during your life/career either recently or in the past that you think directly influenced your decision in question 1?

14. If you **are not** teaching online, do you use any technology when teaching your on-campus courses? If so, what technologies do you use? If not, why not?

15. Do you believe the following groups provide encouragement and support for yourself and others teaching online courses?

    Colleagues
    Dept. Chair
    College Administrators
    University Administrators

    If yes, how so? If no, why not?

16. Do you believe you would receive technical support provided by the college and/or university for teaching an online course? If yes, how so? If no, why not?

17. Is there any one person or place, either at the College or University level, that has provided or provides more support than others? If yes, how so? What do they do that makes their support more than others?

18. If you have not taught an online course, what do you think would most motivate you to teach an online course?

19. If you have not taught an online course, what are some of the barriers that have prevented you from teaching an online course?

20. Do you believe your rank/tenure status affects a faculty member's ability/opportunities to teach online? If so, how?

21. Thinking about your colleagues who participate in online teaching, why do you think they teach online?

22. Thinking about your colleagues who **do not** participate in online teaching, why do you think they **do not** teach online?

Part 2 – Questions related to participant's survey answers

Note: Due to the nature of the study, I will be unable to identify the specific questions to be asked in this section until after the surveys have been collected. Questions posed in this area will follow the format below and will be followed upon with probes for more information. All questions asked in this section will be taken directly from the faculty survey (Appendix A).

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<SHOW PARTICIPANT PRINTED COPY OF THE QUESTIONS AND THEIR ANSWERS YOU WILL BE ASKING THEM ABOUT>

General Probes:
(taken from Bogdan & Biklen, 2003)

What do you mean?
I'm not sure that I am following you
Would you explain that?
What were you thinking at the time?
Give me an example
Take me through the experience

Conclusion

WE ARE NOW FINSHED WITH THE INTERVIEW. I WANT TO THANK YOU FOR YOUR TIME AND WILLINGNESS TO PARTICIPATE IN THIS STUDY. YOUR INPUT WILL BE VERY HELPFUL TO ME. IF YOU ARE INTERESTED IN RECEIVING A COPY OF THE STUDY WHEN FINISHED PLEASE LET ME KNOW AND I WOULD BE HAPPY TO ADD YOU TO MY LIST. THANKS AGAIN.

APPENDIX D
CONSENT LETTER SUBMITTED TO INSTITUTIONAL REVIEW BOARD

Faculty Motivation to Teach Online Courses

This study investigates reasons that tenure stream faculty at research universities choose to participate in online teaching. Participation in this study will consist of taking a 50 question online survey that should take about 25 minutes, and the possibility of a 1 hour interview. The survey asks you to respond to a number of factors that may or may not motivate you to participate in online teaching as well as some basic information about yourself.

If you choose to participate in the study you will be asked to give your name on the first page of the survey. This will help us to identify your survey results when we are choosing interview participants. Upon receiving your survey results, your name will be deleted from the survey and replaced with an ID number. We will keep a record of the ID numbers and names in a locked cabinet that only the researchers have access to. If you are chosen for an interview, **we will be audio recording** your responses during the session. All data, including the audio tapes will be stored in the office of the investigators and only the investigators will have access to the tapes and other identifiying data. All data will be treated with strict confidence and your name will not be used in any report of the research finding. Your privacy will be protected to the maximum extent allowable by law. At the end of 5 years all files will be destroyed.

Your participation is entirely voluntary. You have freedom to discontinue the study at any time without penalty. You have the freedom to not respond to certain items. Participation in this study is unrelated to your commitment as a faculty member at the university.

If you have any questions about this study feel free to contact:

Scott Schopieray
517-432-4329
schopie1@msu.edu

Dr. Patrick Dickson
517-355-4737
pdickson@msu.edu

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish –

Peter Vasilenko, Ph.D
Chair of the University Committee on
Research Involving Human Subjects (UCRISHS)
202 Olds Hall
East Lansing, MI 48824

Phone: (517) 355-2180
Fax: (517) 432-4503
ucrihs@msu.edu

Please click "Next" to indicate your voluntary agreement to participate in this study.

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