Perceptions of Distance Learning Among Faculty of a College of Education

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Abstract

Students and employers laud distance education for its usefulness in overcoming obstacles like location and family and work schedules. College and university administrators hail its cost effectiveness and its usefulness in facilitating enrollment increases. However, faculty members do not necessarily share this enthusiasm. Since the role of faculty members is crucial to the successful implementation of any education program, it is important to understand why faculty members may be reluctant to embrace the non-traditional modes of course delivery standard to distance education. In order to better understand this dynamic, a qualitative study was conducted among faculty of a College of Education at a public regional university located in south Texas to ascertain faculty perception of value and viability of distance education in their context. The results of this study indicate that faculty members studied do not uniformly recognize or embrace the use of distance education. These findings are discussed and recommendations for this College of Education are derived from the analysis.

Keywords: Faculty beliefs, higher education, technology, barriers, distance education

"The world we have created is a product of our thinking; it cannot be changed without changing our thinking."

-Albert Einstein

Introduction

Higher education is facing significant institutional challenges created by new and emerging technologies (Jaffee, 1998). Specifically, digital technology has provided new and flexible means of course delivery and instructional strategies that were largely unavailable just a few years ago. One of the areas of greatest interest to universities is the potential of distance learning to meet the needs of changing student demographics and the potential for expanding enrollments (Magiuka, Shi, & Bonk, 2005). It is assumed that institutions of higher education are not only attuned to change but positioned for leadership in the change process. It appears that higher education faculties are responding slowly, or even resisting, the non-traditional instructional models innate to distance education. To better understand the dynamics of this faculty disassociation from distance education as a viable means of instructional delivery, a qualitative study was conducted among faculty of a College of Education to ascertain faculty perception of value and viability of distance education. .

Literature Survey

The term distance learning is used in the context of the definition accepted by the United States Distance Learning Association (USDLA): "The acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance." For the purpose of this study, the focus is on computer-mediated online learning. Distance education is a viable way to teach virtually any instructional content (Simonson, Schlosser, & Hanson, 1999). Since the early 1900s, technology (with the use of audiovisual analog devices such as films, slides, radio, tape recordings, etc.) has been a part of academic practice (Reiser, 1987). Furthermore, the emergence of digital technologies contributed significantly to expand delivery mechanisms and interactive processes for distance learning. Additionally, students come to school with ever increasing levels of comfort with the use of technology. In fact, many expect to use technology to assist in learning. Students expect institutions of higher education to keep pace with their skills and interests. According to Jaffee (1998), organizational theories inform the use of technology to meet the demands of institutional change; one would expect organizations of higher education to be able to adapt and meet the demands of this changing environment. Because of their rich history and uniquely recognized intellectual leadership, society looks to institutions of higher education to set the pace for educational innovations.

In reality, higher education is mired in longstanding traditions and modes of operation that make it difficult to enact change (Jaffee, 1998). In general, organizations become highly resistant to external pressures to transform practices and procedures. Moreover, according to Blin and Munro (2008), higher education may be especially prone to resistance since approximately 95% of the academic staff believe or perceive that the traditional lecture model is the most effective means to produce student learning outcomes. The classroom may be regarded as a sacred institution with symbolic (or mythical) meaning for faculty and administrators, who may only be accustomed to learning in the traditional (face-to-face) format (Blin & Munro, 2008; Jaffee, 1998). Based on Margaret Wheatley's research on organizational change, Jaffee (1998) posited that "the greater the degree to which a particular organizational practice defines and reinforces one's core professional identity, the greater will be the opposition and resistance to alternative practices and routines" (p. 27). Face-to-face (i.e., traditional) classroom interactions may be particularly strong in helping to build and maintain an instructor's sense of identity as a content-area expert. This traditional format seems to meet the needs of faculty rather than the evolving needs of the students.

It is commonly assumed that to transition to distance education, it is only necessary to familiarize faculty members with effective distance education programs and to assist them in realizing that distance education is a viable means of instruction. Faculty members can learn to be effective facilitators in distance education, making their instructional efforts widely available to an ever-expanding audience. This, alone, should help to meet the professional identity needs of faculty members (Jaffee, 1998).

Methods

Noting that faculty professional identity needs are an essential part of substantive change, this study was conducted to assess faculty's current perceptions of distance education and whether this College of Education is ready to embrace the changes necessary to facilitate online learning. A deductive qualitative approach incorporating grounded theory method was used in this study. This approach is based on a process that provisionally identifies the boundaries of collection and analysis (Miles & Huberman, 1994). The research questions operationalize the conceptual framework. In the grounded theory method, like all qualitative research, emphasis is placed on data analysis throughout the data collection process. The researchers designed a structure based on a conceptual framework developed by Miles and Huberman (1994) to depict the areas of inquiry interest, variables and key concepts to be studied (Figure 1).

This framework is a useful tool to assist clear identification of variables that influence the use, or non-use, of distance education among higher education faculty. Using this paradigm, the researchers initiated a study among university faculty in a College of Education in a regional state university in south Texas.

A survey instrument was designed to include two sections: 1) demographic variables regarding age, gender, years teaching, faculty rank, and technology competence, and 2) five open-ended questions to gather data about faculty perceptions and beliefs concerning online learning. The questions were:

- What are your perceptions of the use of technology in higher education?
- What is your perception of distance education?

- What barriers would you anticipate you might experience if you taught a distance class?
- What elements would influence your decision to design and teach an online class?
- What significant differences do you perceive between distance education and on campus education classes?
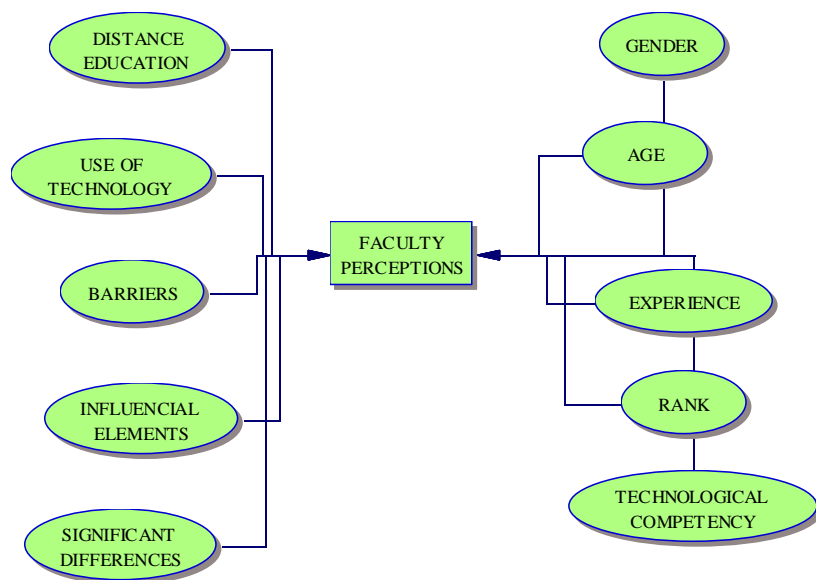

Figure 1. Conceptual Framework for Antecedents and Consequences of Study

The survey was made available online on a secure server system maintained in the College's technology center with the approval of the University's Institutional Review Board. An e-mail invitation to participate with directions about how to access the URL address for the survey was sent to all teaching faculty in the College of Education. The survey was left open for a period of two weeks and three reminders were sent during that time period to optimize the response rate. At the conclusion of this time period, data were downloaded and analyzed, using Atlas.ti. Based on the guiding conceptual framework, codes were developed by the researchers as they analyzed key words in the data. The narrative data was coded independently by the researchers. The research team then met to compare the individual codes and developed themes based on coding families.

Results

All faculty members of the College of Education were included in the invitation to participate. Of a total of 84 possible participants, 22 accessed the instrument and completed the demographics section of the survey. Figure 2 below shows a breakdown by academic rank of the 22 faculty members who participated.

Researchers chose this multiple case sampling approach in the belief that by looking at a range of similar and diverse faculty characteristics including rank, we could develop theories about obstacles and benefits of using distance education by higher education faculty (Miles & Huberman, 1994). There were 84 possible participants; 22 individuals completed the demographic section of the survey, 7 respondents did not complete section two, which included the five open-ended questions, and 15 respondents completed the entire instrument, section one and section two,. The sample included 9 male and13 female respondents.
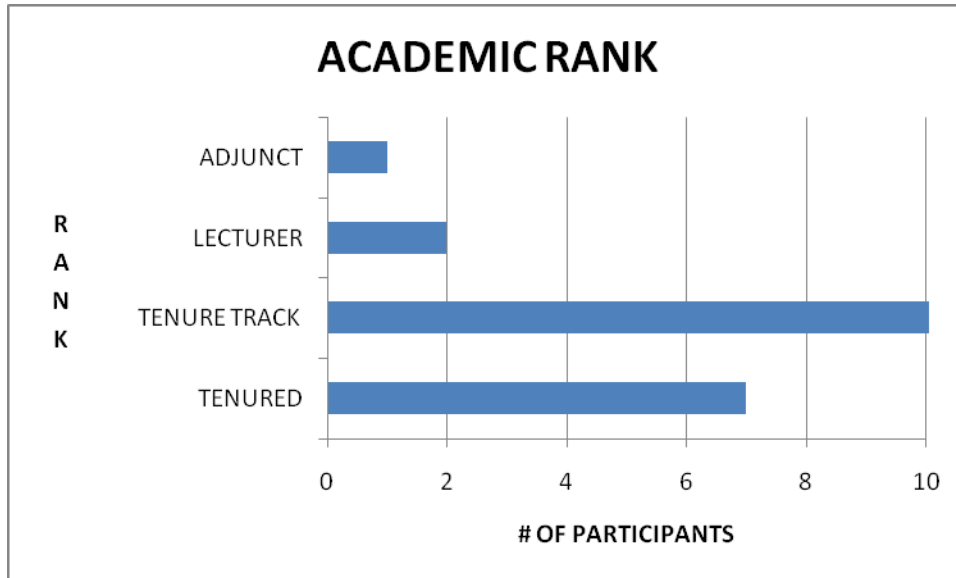
ACADEMIC RANK

Figure 2. Academic Rank of Participants

Since technological innovations have occurred rapidly in recent years, researchers considered age as a potential affective variable (Figure 3). Another variable measured was the number of years of experience in higher education (Figure 4).
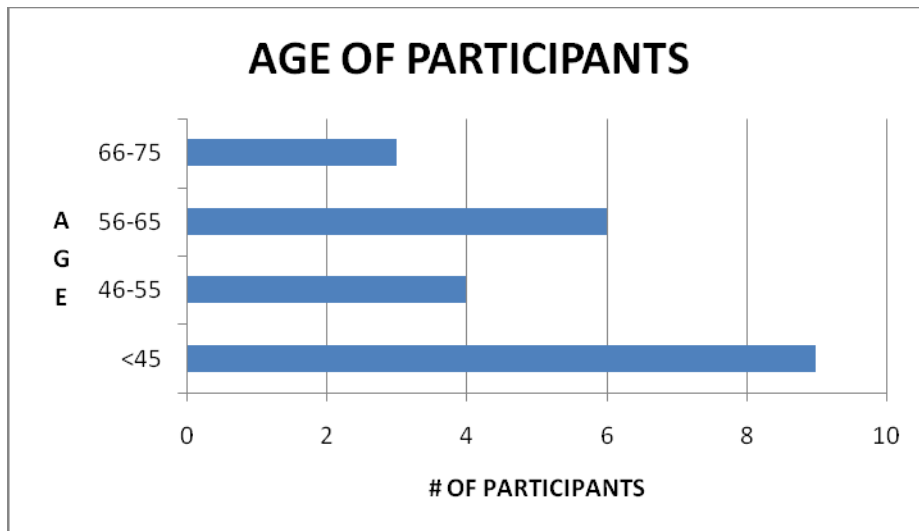
AGE OF PARTICIPANTS

Figure 3. Age of Participants

Data were analyzed using Strauss and Corbin's (1990) qualitative research method known as grounded theory. A grounded theory is one that is derived from the study of the phenomenon it represents. It is discovered, developed and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon (Strauss & Corbin, 1990, p. 23). Employing Atlas.ti software, three researchers individually coded and categorized data from survey responses so that a grounded theory emerged from these data. This approach to triangulation was an effort to corroborate coding accuracy (Creswell, 2007). The researchers coded all data independently and then compared code and theme identifications to achieve intercoder agreement (Creswell, 2007). This assisted "movement away from the data to abstract thinking, then in returning the data to ground these abstractions in reality" (Strauss & Corbin 1990, p. 199).
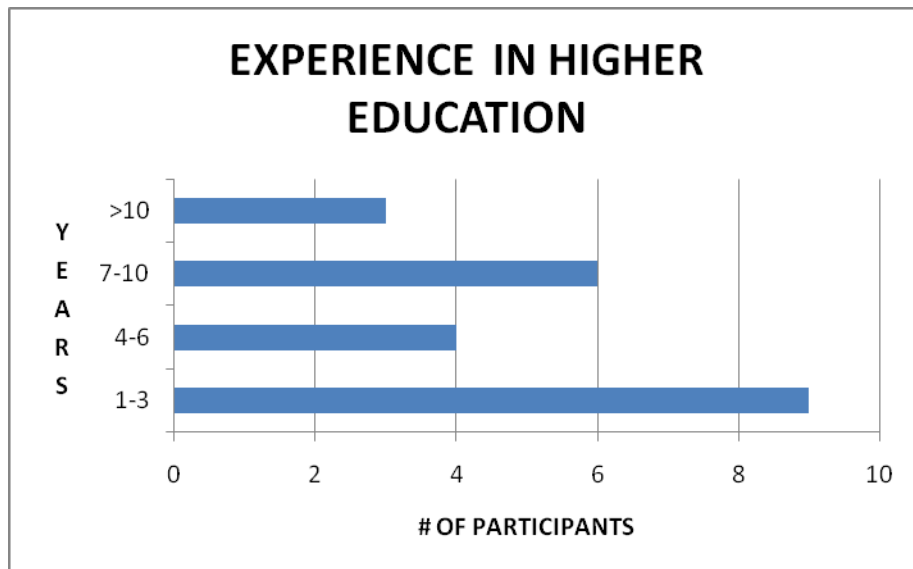
Figure 4. Years of Experience in Higher Education

Discussion

Five major themes emerged from this coding process: *Significance of Distance Education, Technology Competence, Administrative Support, Barriers,* and *Low Response Rate* was identified and interpreted as a separate theme.

Significance of Distance Education All fifteen respondents who completed the entire survey (Sections 1 & 2) indicated that they felt the use of technology was important in higher education. Issues that emerged as very important were the ability to compete with other institutions and the need for increasing student enrollments. Responses included:

"We must get out programs online if we are to compete."

"We need distance education if we are going to remain competitive."

"Distance education can assist to expand graduate enrollment."

"I think distance education is important, particularly for students who cannot easily commute to a university. I also think distance education can be useful for teachers serving students with low-incidence exceptionalities (such as, visual impairments and hearing impairments) for which there may be only one or two regional universities offering courses."

Other respondents indicated that it was important to use technology in teacher preparation classes, especially given the expanding use of technology in K-12 school settings. One respondent stated, "The use of technology is imperative; it facilitates learning processes and thinking skills when used appropriately. It also can make life easier by organizing and archiving important information related to class work."

Faculty members also expressed that distance education would assist students in this region who fit a non-traditional student profile. The demographics for this College of Education (a Hispanic Serving Institution) indicated that most students have outside employment and share responsibilities for both nuclear and extended family structures, placing substantial expectations on students for participation in child rearing and support for aging parents. One respondent stated, "…[M]ost of our students are working and have families. We can be more efficient by offering distance classes to many of our students." Another faculty member responded, "…I believe there are possibilities for some superior outcomes in

distance education application, i.e. increased enrollment at the graduate level, computer supported collaborative learning, etc." Respondents openly acknowledge the significance of technology and distance education, their sentiments were well summarized by one participant's response, "… it is a growing field that needs to be brought into our university."

Administrative Support While respondents seemed to support the use of technology but they expressed concern about having sufficient support systems. Though the university studied has a full department supporting distance education, respondents still perceived scarce resources to support technology and indicated a lack of awareness of university involvement in distance education. One participant stated, "Our department is light years behind in the development and use of Blackboard providing distance education opportunities for students in this area." Another respondent did not seem to realize that the university has online degree programs, one of which resides in the College of Education studied. That respondent stated, "I think it is something good that our university has to develop. We do not have any distance programs."

Faculty members also indicated concerns regarding a possible increase in class preparation time as well as extended office hours. One faculty member noted, "… it [distance education] requires acquiring new skills and more preparation for class than traditional formats in which they can rely on their already developed content expertise." Issues about extra reimbursement given for developing an online course due to the extra time to complete the task were also noted. Faculty members expressed unease about the time involved to develop an online course. Most respondents mentioned release time and extra training as requirements for developing an online course. One respondent commented, "To put together a quality course is quite challenging. Putting a course online presents many additional challenges, all of which would require appropriate amounts of time, support and training."

Another issue that surfaced was how faculty workload might be impacted by online teaching, which was perceived as more time consuming. One participant stated, "I would need release time to develop course materials and greater weight for teaching an online course in teaching loads."

Other respondents indicated that they believed distance education is not used because the College of Education does not support it. The following statements of frustration demonstrate a lack of trust in the perceived response of the College to the use of technology as a venue of educating students:

> "I believe our administration has no sense of it and has made no consideration for class preparation, and for other related issues, such as office hours and time involved."

> "My decision would be based on having support from the College of Education, and overall support."

> "I don't feel that technology use is supported by the College of Education."

> "I do not feel supported here within the department."

> "I would think any type of barriers would come from the College of Education. They do not appear to be receptive to an integration of technology; either completely online or a hybrid approach."

This distrust in administrative support for distance education extended to topics of technical support and included concerns about having good technical assistance and creative technicians who are knowledgeable about distance learning delivery platforms. Respondents indicated they could not imagine how to "create meaningful exercises that really help students learn the material." In general respondents believed there is no significant administrative support for distance learning within the College and its departments. Whether these perceptions are true or not, it is important information for the administrative offices of the College.

Technology Competence Concern about personal technical competence was an important theme among respondents. Almost all of the respondents noted their own personal limitation with the use of technology as illustrated in the following comments:

"An important barrier would be my own limitations of the use of technology."

"A barrier for me as the instructor would be a lack of knowledge about some of the possible technologies involved."

"Many of my students would also struggle with it. A lot of them have trouble with Blackboard, so we'd need to have a great deal of training up front."

Another indicator of the lack of personal skill with technology was the low number of respondents who initiated the online survey and the even lower number of respondents who actually completed the survey.

Barriers The category, Barriers, was comprised of participant responses that indicated obstacles to them with regard to teaching online classes. Several sub themes emerged in this category. The lack of trust in non-traditional approaches to course delivery seemed to be the most important. Even though many studies have been completed that indicate that there is no significant difference in learning outcomes between distance and traditional courses, faculty continue to hold the misperceptions that distance courses are inferior. One faculty member stated, "I have some concerns about its [distance education] effectiveness in teaching certain concepts." The following statements clearly indicate the idea that an instructional paradigm change would be very difficult for respondents:

"I have a strong feeling that distance education courses are not as good as campus education courses. Logically, I know this isn't necessarily true and I try not to let myself be lead by my emotions. But it's definitely something I'd work against if I decided to teach an online course!"

In addition to concerns about the effectiveness of distance education, faculty also expressed concerns about legal issues related to copyrighted materials, integrity of exams, and server security as indicated by these statements:

"Also, I think it would be difficult to obtain necessary permission to post copyrighted materials."

"I think it would be difficult to ensure that the student who takes an exam is really the student signed up for the class."

"I have concerns about the quality of instruction in distance classes."

"…lack of infrastructure for computer and server support (and) lack of assistance with uploading large files, such as video to the server…these are specific areas that I have struggled with in my own attempts to use distance learning."

Another issue for respondents was the fear that by not having students in front of them, they would not be able to teach the course effectively. There were a significant number of responses relating to issues surrounding face-to-face interaction with students. The idea of physical proximity to ones' students appeared as an accepted requisite need for learning to occur as demonstrated in the following statements:

"A significant difference would be felt in the ability to touch or hug a student that may be experiencing difficulties."

"Lack of in-person dialogue in distance ed… Not being able to look in my students' eyes…"

"Distance learning works best when the instructor is able to appear in person periodically at each site."

"I still like to see my students face-to-face so that I can read their body language, etc. to know if they need additional help, etc. Unfortunately, I do not think technology can completely replace the face-to-face element of instruction."

Respondents seemed to believe that teaching and learning were dependent upon being able to see students and for students to see them, as indicated by the following statements:

> "[W]e would have limited ability to interact face-to-face with our students. We would face challenges in reading body language, voice inflections, etc. in trying to determine if a student does or does not need additional help."

> "I feel that as an educator I must have one on one contact with students. I feel that distance takes away from the personal touch that I feel is necessary for best content delivery."

Interestingly, one respondent placed this need for face-to-face contact in a cultural context stating that distance education might not be appropriate for Hispanic populations due to the perceived need for close physical proximity to achieve effective communication. Clearly, the lack of confidence in technology supported education was perceived as a detriment to teaching distance education courses.

Lack of direct personal experience with technology was another important issue for faculty members. One respondent stated, "I've never experienced a good distance education course myself, so I don't have any personal experience with how it would work, and I certainly wouldn't know how to put a good distance education course together." Lack of personal experience with distance education appeared to create resistance to the alternative delivery modes of distance education.

Fear of the use of technology also emerged as an important barrier as stated by one respondent, "There's a lack of knowledge about how technology can transform teaching. Some faculty are scared by it, some don't have time to learn about it, some just don't see the importance." Fear of integrating technology in an expert manner into coursework seemed to indicate respondents' lack of confidence in their knowledge and ability in use of technology. Respondents also expressed discomfort with the idea of students knowing more about uses of technology than they do.

Low Response Rate Given the size of the target population (84), the number of attempted surveys (22) represents only 18% of the total. There are several interpretations possible for the low response rate. It may indicate a lack of technical skill since the survey was administered online; it may indicate a lack of interest in distance education; or, it may indicate that a large number of the population do not use e-mail and therefore were not aware of the survey invitation.

The sample in this study was very small and may not represent the beliefs and perceptions of the broader audience. However, the sample was well distributed across the academic ranks and respondents represented all of the departments in this College of Education.

Conclusions

This study was initiated in a College of Education (COE) in a south Texas university. An open-ended survey questionnaire was made available online to 84 COE faculty members representing all academic ranks to answer the following research questions:

1. What is your perception of the use of technology in higher education?
2. What is your perception of distance education?
3. What barriers would you anticipate you might experience if you taught a distance class?
4. What elements would influence your decision to design and teach an online class?
5. What significant differences do you perceive between distance education and on campus education classes?

While the target population was 84, only 22 (26%) individuals responded to the survey, and out of that 22 only 15 (18%) actually completed the full survey and the five open-ended questions. This low response rate is one of the most significant findings. After the initial low response, researchers followed with three more invitations to participate in the survey with no increase in responses. Several assumptions may be drawn from this low response outcome. It could indicate a relationship between the level of interest in distance learning and the low response rate. It could indicate that the target audience lacks the technical skills to feel comfortable with online survey responses. Another more dramatic interpretation is that this

target audience was unaware of the survey due to a disassociation with technology-based communication. Given this assumption, this particular sample group may be more disinclined to believe in the viability of distance learning as compared to a broader group of main-stream university educators.

In this context, a striking dichotomy emerged in that those who did respond all indicated that distance education was important to maintaining student enrollment at a competitive level yet they all felt uncomfortable and distrustful with the concept of distance education. While many participants claimed that they used their computers for e-mail, developing PowerPoint presentations, writing articles, and searching the Internet, they could not envision using their computers to educate students outside of the face-to-face classroom setting. These faculty members are capable experts within their content areas but their self-defined lack of technology expertise impairs their confidence in use of technology as a tool for teaching and learning.

In addition, respondents were hampered with the belief that students may not have the technical skills for a complete online course, or that students may lack resources to own a home computer or have access to a computer at the university or city library. This misperception represents another disassociation with the reality of the inestimable use of technology by today's students clearly evident in the university environment where the study took place. With availability of multiple computer labs, wireless networks, readily available mobile lab equipment and the fact that most students report to classes with a laptop as standard equipment, it would seem difficult to conclude that students lack technical skill or resources.

Respondents also indicated little awareness of existing support for distance learning within the university infrastructure. Some respondents did not even realize that the university had a complete unit to serve distance education needs and were unaware that COE has one of its Master's programs completely online. This is even stronger evidence of the sample groups' disassociation with actuality especially given that the unit to serve distance educations needs is located in the same building where the majority of COE faculty is housed.

Many respondents expressed lack of confidence in administrative support for distance learning. Respondents indicated concerns about increased class preparation time, extended office hours and the acquisition of new technological skills to develop online courses. The belief that technology competence can hinder the learning process is an important consideration for the college. While the administration may believe that they are supporting distance education; the current message may not have sufficient substance to inform and convince faculty of the administrative willingness to support distance education endeavors.

Personal lack of technology competence was a strong theme. Most respondents indicated that their own skill limitations would be a barrier to creating a distance education course. As Jaffee (1998) posited, the identity and professional self-esteem of faculty members is threatened when alternative practices deviate from the traditional methodologies that have formed their beliefs about how they should interact with students. They do not want students to see their indecisiveness and inexperience with technology believing that they will lose status with their students.

Additionally, an interesting issue emerged with regard to the learning process itself. Based in the traditional paradigm of teaching and learning where the faculty member plays the central role in disseminating information, the idea that students could learn without their physical presence was beyond their comfort level. Changing the professorial role from central to facilitator was perceived as a threatening change.

Given the array of misperceptions about distance education, availability of technology and technical support, it appears that these respondents do not know what they don't know. Expressed fears were based upon inaccurate and incorrect perceptions of technology and institutional support. In fact technological advances and this university's established infrastructure have solved many of the issues and concerns expressed by the respondents. Copyright issues and test taking have been improved greatly since the beginnings of distance education. In addition, this university has provided a centralized entity to assist all faculty members with the development of distance education courses but respondents seemed to be unaware of its existence or distrust the capabilities of this organization.

Given the noted faculty disassociations with the actual state of technology use and technical support for distance education in the environment where the study took place, there appears to be an urgent need for leadership and better communication if change is desired. The necessary first step for faculty members is to learn more about the realities of teaching and learning in distance education, rather than relying on weak or inaccurate perceptions.

Additionally, the College administration should assure faculty members that administrative and technical support for distance education is available. Administration should clearly communicate recognition that distance education is a viable means to teaching and learning. The authors feel that without overt administrative statements directed toward this sample population, departments will have little reason to provide resources and time allocation for the development of online classes, leaving faculty members with little reason to associate with the adoption of online learning. Reassurances that entry into distance education is supported with resources and expertise is critical to the success of this college in developing distance education programs in order to keep pace with main-stream higher education.

References

Blin, F., & Munro, M. (2008). Why hasn't technology disrupted academics' teaching practices? Understanding resistance to change through the lens of activity theory. *Computers and Education, 50*, 475-490.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: SAGE.

Hurt, J. (2008). The advantages and disadvantages of teaching and learning on-line. *The Delta Kappa Gamma Bulletin, 74*(4), 5-11.

Jaffee, D. (1998). Institutional resistance to asynchronous learning networks. *Journal of Asynchronous Online Learning, 2*(2), 21-32.

Magiuka, R. J., Shi, M., & Bonk, C. J. (2005). Critical design and administrative issues in online education. *Online Journal of Distance Learning Administration, 8*(4), Retrieved from http://www.westga.edu/~distance/ojdla/winter84/magjuka84.htm

Maguire, L. L. (2005). Literature review—Faculty participation in online distance education: Barriers and motivators. *Online Journal of Distance Learning Administration, 8*(1). Retrieved from http://www.westga.edu/~distance/ojdla/spring81/maguire81.htm

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.) Thousand Oaks, CA: SAGE.

Reiser, R. A. (1987). Instructional technology: A history. In R. M. Gagne (Ed.), *Instructional technology: Foundations.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Simonson, M., Schlosser, C., & Hanson, D. (1999). Theory and distance education: A new discussion. *The American Journal of Distance Education, 13*(1), 60-75.

United States Distance Learning Association (2008). Research, statistics and distance learning resources. Retrieved from http://www.usdla.org/html/aboutUs/researchInfo.htm

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