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Relating Training to Job Satisfaction: A Survey of Online Faculty Members

Abstract

As the online education market continues to mature, institutions of higher education will respond to student demand by employing quality faculty members. Faculty members need unique training to successfully teach online. While the effect of training on job satisfaction has been investigated in the realm of business, it has not been tested extensively in the realm of online higher education. A convenience sample of 497 Iowa Community College Online Consortium (ICCOC) faculty members was invited to participate, and 148 responded. A quantitative study utilizing regression analysis investigated the relationship between the training methodology of online course module completion and job satisfaction and the amount of training received and job satisfaction reported for faculty members who teach online, while controlling for the factors of gender and age. A survey methodology was used, whereby faculty members self-reported the training individual faculty members received, as well as the amount of training received. Overall job satisfaction was operationalized to assess current overall faculty job satisfaction through the use of the Index of Job Satisfaction (IJS) created and tested by Brayfield and Rothe (1951). Specifically, this study surveyed faculty members who teach for the ICCOC. The study was unable to find a statistically significant relationship for either training as a yes/no variable and overall job satisfaction ($p=.463>.05$) or a relationship between training as a continuous variable and overall job satisfaction ($p=.330>.05$), controlling for age and gender. There was also not enough evidence for a relationship between gender and job satisfaction (RQ1 $p=.557>.05$ and RQ2 $p=.542>.05$) for either research question. There is evidence in this study to support the literature review, of a linear relationship between age and overall job satisfaction (RQ1 $p=.023<.05$ iii and RQ2 $p=.028<.05$). The results of this study will be useful for school administrators as they seek cost conscious ways to improve faculty job satisfaction in a changing online environment.

Keywords

job satisfaction, Index of Job Satisfaction, Iowa Community College Online Consortium (ICCOC), online course module completion

Disciplines

Higher Education | Online and Distance Education | Training and Development

Comments

- A dissertation submitted to the graduate faculty of the School of Education of Northcentral University in partial fulfillment for the degree of DOCTOR OF EDUCATION
- Dr. Leah Wickersham, Major Professor
- © 2013 Brian Hoekstra

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Relating Training to Job Satisfaction: A Survey of Online Faculty Members

Dissertation Manuscript

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Graduate Faculty of the School of Education
in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF EDUCATION

by

BRIAN HOEKSTRA

Prescott Valley, Arizona
October 2013

APPROVAL PAGE

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Abstract

As the online education market continues to mature, institutions of higher education will respond to student demand by employing quality faculty members. Faculty members need unique training to successfully teach online. While the effect of training on job satisfaction has been investigated in the realm of business, it has not been tested extensively in the realm of online higher education. A convenience sample of 497 Iowa Community College Online Consortium (ICCOC) faculty members was invited to participate, and 148 responded. A quantitative study utilizing regression analysis investigated the relationship between the training methodology of online course module completion and job satisfaction and the amount of training received and job satisfaction reported for faculty members who teach online, while controlling for the factors of gender and age. A survey methodology was used, whereby faculty members self-reported the training individual faculty members received, as well as the amount of training received. Overall job satisfaction was operationalized to assess current overall faculty job satisfaction through the use of the Index of Job Satisfaction (IJS) created and tested by Brayfield and Rothe (1951). Specifically, this study surveyed faculty members who teach for the ICCOC. The study was unable to find a statistically significant relationship for either training as a yes/no variable and overall job satisfaction ($p=.463>.05$) or a relationship between training as a continuous variable and overall job satisfaction ($p=.330>.05$), controlling for age and gender. There was also not enough evidence for a relationship between gender and job satisfaction (RQ1 $p=.557>.05$ and RQ2 $p=.542>.05$) for either research question. There is evidence in this study to support the literature review, of a linear relationship between age and overall job satisfaction (RQ1 $p=.023<.05$

and RQ2 $p=.028<.05$). The results of this study will be useful for school administrators as they seek cost conscious ways to improve faculty job satisfaction in a changing online environment.

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Chapter 1: Introduction

According to the Sloan Consortium, 6.1 million students took at least one online course from an institution of higher education during the fall of 2010 (Allen & Seaman, 2011). Online instruction in higher education is ready to take the next step in its growth (Sener, 2010) and students are increasingly choosing this alternative to traditional education because of its accessibility and flexibility (Horvath & Mills, 2011). As web-enhanced teaching continues to expand (Moloney et al., 2010) and as student demand for online courses increases, the resulting demand for qualified faculty to teach distance education courses grows as well. The need for trained faculty in the online environment is clear (Haber & Mills, 2008; Orr, Williams & Pennington, 2009; Pagliari, Batts & McFadden, 2009). During a time of growing student enrollments and institutional competition, the pressure to retain trained faculty increases (Chen, 2011) as colleges and universities respond to student demand by offering quality online courses using best practices and qualified faculty (Baghdadi, 2011).

A quality online course will vary greatly from a quality face-to-face (F2F) course (McClure, 2007). One difference between F2F and online environments are the new pedagogical challenges for online faculty who also need the right skills and competencies to meet these challenges (Marek, 2009; Schneckenberg, 2010). Faculty members who desire to teach a quality online course need training in both technology and instructional methods such as course design (Hoyle, 2010), implementation, delivery, copyright issues (Dempsey, Fisher, Wright, & Anderton, 2008), accommodations for students with disabilities (Gladhart, 2010), and electronic media tools (Yuping, Nian-Shing, & Levy, 2010) as many of these skills are applied uniquely in the online learning environment.

Another important ingredient of online course quality is faculty satisfaction (Bollinger & Wasilik, 2009) which is one of the five pillars of quality for online courses indicated by the Sloan Consortium (2002). Outside of educational research, training opportunities have been found to be positively related to employee satisfaction (Irving & Montes, 2009).

In a review of the literature, Willis and Varner (2010) found research clearly linked faculty satisfaction and student achievement. Faculty simply must have a suitable level of job satisfaction to sustain their efforts for the benefit of their students (Huysman, 2008). According to an Italian study, university student achievement was significantly affected by teacher quality (De Paola, 2009) and high levels of job satisfaction helped teachers create a quality learning environment essential for student achievement (Huysman, 2008). Academic faculty job satisfaction has also been shown to be closely linked to reduced turnover (Chung et al., 2010). In summary, in order to retain faculty members and ensure student success, faculty members need to be satisfied with their jobs. As a result, school administrators need to continue to analyze the relationship between training and job satisfaction in the online environment as recommended by previous scholars (Costen & Salazar, 2011; Perreault, Waldman, Alexander & Zhao, 2008).

Background

Distance education is broadly defined as using technology to provide educational opportunities (Horvath & Mills, 2011) such that students are at a location physically separated from their instructor during the entire course (Ormrod, 2008). Historically, technological advancements have resulted in a number of delivery methods for distance

education including the recent change to web-based instruction (Coe-Regan & Youn, 2008; Zhao, Alexander, Perreault, Waldman, & Truell, 2009). The adaptation of education to the Internet has provided opportunities for faculty and student interaction via two-way communication that was not possible before (Sumner, 2000). Online education is defined as the use of online technologies in higher education for teaching and learning (Sener, 2010), and distance learning is most often mediated by computers in ways which require learners to work alone during much of the learning process (Lee, 2003).

Online education describes a large and expanding segment of the market for higher education (Allen & Seaman, 2007). According to recent research by Allen and Seaman (2010), the demand for online education is increasing more quickly than the demand for traditional courses (Buckenmeyer, Hixon, Barczyk, & Feldman, 2011) particularly for community colleges (Gullickson, 2011). The Instructional Technology Council (2009) survey reported community colleges experienced an 11.3% increase in distance education enrollments above campus enrollments (Smith, 2010)

As students demand distance educational opportunities, institutions of higher education have responded in ways to meet the growing demand (Allen & Seaman, 2007; Orr, Williams, & Pennington, 2009). As a result of student demand, distance learning (DL) programs have propagated (Sussan & Kassira, 2009). Colleges have moved beyond asking if they should offer online courses to asking how to best meet the needs of online learners (Gladhart, 2010).

In 1999, the Iowa Community College Online Consortium (ICCOC), a group of seven community colleges located in Iowa, began teaching online courses. When the ICCOC started, there were 11 faculty members serving 273 students (G. Bartelson,

personal communication, March 12, 2013). During the 2011-2012 academic year, the ICCOC employed approximately 497 faculty members who served over 30,000 students. Historically, the ICCOC has addressed online faculty training in a variety of ways including face-to-face via trainers, conferences, and workshops. Some training has also been accomplished through online training modules offered by the Learning Management System (LMS) provider Pearson Learning Studio©.

The timing of this study is opportune, as the ICCOC has recently negotiated training modules to be included in the price of the Pearson Learning Studio© system (G. Bartelson, personal communication, April 2, 2012). If individual colleges in the consortium move to requiring faculty to complete training modules to be taken, it may be beneficial for administrators to predict the resulting effect on job satisfaction for ICCOC faculty members, if any.

Research on online instructor satisfaction is extremely limited in the field of higher education (McLawhon & Cutright, 2011). Prior studies have analyzed job satisfaction of faculty members (Bolin, 2007; Gullickson, 2011) but these studies have not investigated whether the levels of job satisfaction reported were related to training the faculty members received. Recent research on the ICCOC in the area of job satisfaction has been performed, although the prior study did not investigate training as part of the analysis of job satisfaction (Gullickson, 2011). This study will extend Gullickson's (2011) analysis of job satisfaction of ICCOC faculty to include training. The research in this study builds on the gap in current literature in light of recent changes in the agreement between the ICCOC and Pearson Learning Studio©. It is anticipated the

results of this study will support administrators in improving job satisfaction and performance of individual faculty members.

In conclusion, there will be increasing demands made by the general public for accountability and transparency surrounding the costs and benefits of higher education (Trower, 2010), and as a result, understanding the relationship between costly training and online faculty satisfaction is a worthwhile endeavor.

Statement of the Problem

As online education continues to grow generally in the United States (Allen & Seaman, 2011; Moloney et al., 2010), enrollments have grown specifically at the Iowa Community College Online Consortium (ICCOC) according to the Dean of Distance Learning at Northwest Iowa Community College and member of the ICCOC oversight committee (G. Bartelson, personal communication, April 2, 2012). The ICCOC is made up of seven community colleges located in Iowa who joined together in 1999 to offer courses online. Each ICCOC college trains faculty to teach quality courses online through various methods such as F2F training at each campus, a Spring Conference, Fall Workshop, Faculty Mentor Colleagues, as well as up to six online course modules. The online course modules from Pearson eTeaching Institute© have recently been negotiated into the Pearson Learning Studio© contract. Although member colleges have formed a consortium, there is no standard policy regarding faculty training and each college makes its own decisions regarding the method and amount of required training (G. Bartelson, personal communication, July 27, 2012). Thus, each college has different training requirements regarding the completion of online course modules for faculty which may affect job satisfaction, faculty retention, and ultimately student achievement.

As research has found the benefits of faculty job satisfaction to be improved retention and student achievement, and, as the ICCOC is using the online course modules as a means to train and support online faculty, the specific problem is the ICCOC does not know whether the expensive online course modules result in increased job satisfaction for online faculty members. As training has been linked to employee job satisfaction in other arenas but not yet for online faculty, the results of this study will direct practitioner efforts to increase job satisfaction for online faculty and may guide ICCOC decision makers in future training policy decisions.

Purpose of the Study

The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC. While the ICCOC offers various types of training, this study focused exclusively on the formal training modules offered to ICCOC faculty through the Pearson eTeaching Institute© (“Are you ready,” n.d.). Using a correlational design, a one-time online survey was sent to all ICCOC faculty members who taught online for the ICCOC during the 2011-2012 academic year to collect data on training received and job satisfaction. The study population is comprised of approximately 497 faculty members were invited to participate in the survey. An initial power analysis using the G*Power® 3.1 software program (Freeman, Pisani, & Purves, 2007) indicated a sample size of 81 respondents is required to achieve a power of 0.80. The independent variable of training was operationalized by two different questions assessing whether respondents have taken any training modules, and if so, how many. The dependent variable job satisfaction was

measured with the Index of Job Satisfaction (Brayfield & Rothe, 1951). Regression analyses were used to identify the degree of relationship, if any, between a) training (yes/no) and job satisfaction, and b) training (how much) and job satisfaction for online faculty members. The use of regression in this study allowed for the control of variables including age and gender which are known to be related to faculty satisfaction.

Research Questions

The purpose of the proposed study was explored through the following research questions.

Q1. What relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

Q2. What relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute© training modules completed, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

Hypotheses

H1₀. There is no relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H1_a. There is significant relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2₀. There is no relationship between training, defined as the number of Pearson eTraining Institute© training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2_a. There is significant relationship between training, defined as the number of Pearson eTraining Institute training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

Nature of the Study

The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC. The intent of this study was not to determine whether the training that takes place was effective, if that was the intent, an experimental approach would work well. This study did not try to measure the effectiveness of one training method over another, rather the study investigated the relationship of online module completion training to online faculty satisfaction. As a result of the purpose of this study, a quantitative, correlational research study was designed to examine whether there was a relationship between training and job satisfaction for faculty members who teach online. This method leverages the benefits of survey research, the main benefit in this case was the ability to collect data from geographically dispersed respondents. Other data collection options were considered such as faculty interviews or focus groups; however, because of the constraints of time and resources, and because survey research gathers attitudinal data well, survey research was determined to be the best method. Regression analysis was used to analyze the data and answer the research questions. The use of regression analysis

also allowed for the ability to make predictions without presuming causality, as well as control for covariates (Vogt, 2007).

After permission was granted from the Iowa Community College Online Consortium (ICCOC) and the Institutional Review Board of Northcentral University, a convenience sampling strategy was employed. The population of approximately 497 faculty members who taught in the 2011-2012 academic year for the Iowa Community College Online Consortium (ICCOC) were invited to voluntarily participate in this study. According to an initial power analysis a sample size of 81 participants was needed from this population. An online survey was used to determine whether or not faculty members had received specific training, the amount of training courses taken, and measure overall job satisfaction. The Index of Job Satisfaction (IJS) (Brayfield & Rothe, 1951), an existing 18 item instrument which measures overall job satisfaction, was part of the survey. The survey consisted of two items which operationalized the variable of training, and the IJS measured the variable of job satisfaction. The survey results were then downloaded into the IBM Statistical Package for Social Sciences (SPSS), version 21 for analysis.

Regression analysis was used to analyze the relationship of training and overall job satisfaction, if any, for faculty members who teach online. The use of regression analysis used the presence of training to predict overall job satisfaction, as well as whether increased training resulted in increased job satisfaction, while controlling for known variables of age and gender. The results of the analysis were used to confirm or disconfirm if there is a relationship between training and job satisfaction. The results of

this study will guide future decisions regarding the allocation of valuable time and resources to training.

Significance of the Study

This was a significant study because it is expected to help leaders and administrators clearly recognize the relationship between Pearson© training modules and job satisfaction for faculty members who teach online. Specifically, the findings from this study will provide Iowa Community Online Consortium (ICCOC) leaders with information that may be useful in making decisions about whether to use the Pearson© training modules and how many, if any, Pearson© training modules should be offered to ICCOC faculty members. Also, the results of this study may potentially support both the Sloan Consortium Quality Framework (n.d.) and the Middle States Commission on Higher Education (2011) which highlighted the need for satisfied faculty and the need to support faculty members who teach online.

The Sloan Consortium Quality Framework (n.d.) offers five pillars which support online education and which demonstrate quality. One pillar of the Sloan Consortium Quality Framework is faculty satisfaction. This quality framework describes faculty satisfaction in terms of personal and institutional factors. This study may help confirm the need to institutionally support faculty through training. According to the Sloan Consortium, investing in faculty satisfaction in the online environment on the micro level includes institutional support in the form of training (“Quality Framework”, n.d.). The Middle States Commission on Higher Education, which offers nine guidelines for the evaluation of distance education, offered a guideline for administrators which states: “Faculty responsible for delivering the online learning curricula and evaluating the

students' success in achieving the online learning goals are appropriately qualified and effectively supported" (Middle States Commission on Higher Education, 2011, p. 11).

The results of this study could support one or both of these documents which guide online education in the areas of training and faculty job satisfaction.

Policy makers, decision makers, faculty, and school administrators will be interested in the outcomes of this study. As distance education is used widely outside academia this study may prove useful for corporate trainers and training coordinators as well. This study will also make valuable contributions to existing knowledge by extending what is known about the relationship between training and job satisfaction in the online teaching and learning environment.

Definition of Key Terms

Key terms that were used in this study are defined specifically as they relate to this study.

Distance education. The National Center for Education Statistics (NCES) has defined distance education as education delivered through audio, video, or computer technologies including synchronous and/or asynchronous instruction (NCES, 2003).

ICCOC. The Iowa Community College Online Consortium (ICCOC) is a consortium of seven community colleges in Iowa who joined together in 1999 to offer online courses ("ICCOC – About us", n.d.).

Institutional support. Institutional support is any type of formal policy, faculty development program, or support service offered by the institution in an attempt to enhance or improve the quality and/or effectiveness of instruction faculty members provide to students.

Job satisfaction. Job satisfaction has been defined over time as a positive emotional state resulting from evaluating one's job experiences (Mathis & Jackson, 2008).

Job satisfaction for online faculty. Online faculty satisfaction has been defined by the American Distance Education Consortium (n.d.) as "the perception that teaching in the online environment is effective and professionally beneficial" (para 10). For the purpose of this study online faculty satisfaction is defined as a faculty member's desire to feel positive and confident about their ability to teach in the online environment.

Online learning. Online learning is a teaching/learning experience in which the majority of the students' course experience takes place via computer and Internet connection (Mitchell & Geva-May, 2009).

Online teaching. Online teaching occurs when content is delivered primarily over the Internet rather than in face-to-face classroom meetings (Marek, 2009).

Pearson Learning Studio© (formerly branded as "eCollege"). The Learning Management System (LMS) used by the Iowa Community College Online Consortium to offer online courses ("Are you ready", n.d).

Training. Training is the process people follow to acquire capabilities to perform jobs (Mathis & Jackson, 2008).

Summary

The Sloan Consortium indicated that online education is vital to many institutions' long-term goals and continues to grow in student numbers (Allen & Seaman, 2010). Online education has become increasingly popular in higher education (Fish & Wickersham, 2009), and this growth will require more faculty members to teach in an

online environment (Hixon, Barczyk, Buckenmeyer & Feldman, 2011). For online courses to be a successful method of online instruction, courses must be constructed based on principles of best practice and taught by highly qualified teachers (Baghdadi, 2011). An online faculty member needs skills developed in the areas of communication, technology, and pedagogy to teach online successfully.

The purpose of the present study was to determine whether a relationship exists between training and job satisfaction and what type of relationship exists. Using a correlational design, a one-time online survey was sent to a population of approximately 497 faculty members who taught online for the ICCOC during the 2011-2012 academic year. This survey collected participant responses regarding training received and job satisfaction. Regression analyses were used to analyze respondent data to identify the degree of relationship, if any, between a) training (yes/no) and job satisfaction and b) training (how much) and job satisfaction for online faculty members. The use of regression in this study allowed for the control of variables including age and gender which are known to be related to faculty satisfaction.

Understanding what is lacking in the online teaching literature is critical to helping researchers and practitioners develop programs and support mechanisms for online teachers in higher education (Baran, Correia, & Thompson, 2011). As prior research has been rather conclusive when considering the effects of age and gender on overall job satisfaction, these factors were controlled in this study to more clearly consider the relationship between training and job satisfaction.

Chapter 2: Literature Review

The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the Iowa Community College Online Consortium (ICCOC). The literature review will focus on prior research relating to training and job satisfaction in higher education, specifically the online teaching environment. The literature review will begin with a background investigation of distance education (DE) including recent and expected growth of online student enrollments. As some faculty resist distance education, a review of the literature will highlight the need for institutional support, and specifically training, for faculty who teach online. A close look at factors that influence the job satisfaction of faculty members, specifically training, will be investigated. A review of the literature concludes by reviewing what is known about training and job satisfaction.

Documentation

The literature search strategy included the search of various databases such as business, education and psychology: Academic Search Premier, ERIC, EBSCOhost, JSTOR, Business Source Elite. LexisNexis Academic, ProQuest, Worldwide WorldCat, and finally, Google scholar (scholar.google.com). Key words searched in the previously mentioned databases included combinations of the following words and phrases: job satisfaction, faculty job satisfaction, online faculty satisfaction, job satisfaction factors, training and development, institutional support, and higher education. Other search terms included dissatisfaction, job training, faculty training, online, online learning, age, gender, distance education, and faculty turnover. References from relevant journal

articles were located and used to extend the literature search performed. Searches were limited to full-text and scholarly reviewed articles, articles written in English, as well as to recent publications, generally within the last 5 years.

Anywhere, Anytime Learning

Online education has been summarized by the tagline of anywhere, anytime learning. The combination of education and the Internet has expanded learning opportunities for students anywhere and anytime via distance education. The online classroom has proven to be a popular educational choice for students, in part because this method of education offers convenience and access (Foster, 2010) and distance learning may be used to supplement, or possibly replace, the traditional classroom (Jackowski & Akroyd, 2010).

Online education continues to expand (Moloney et al., 2010) and as a result, there are a growing number of students and faculty involved in online courses. Colleges and universities continue to compete for both face-to-face (F2F) and online student enrollment and associated tuition dollars. Competition in online higher education is causing colleges and universities to focus on high quality, low cost, and high efficiency. To achieve these goals, colleges require outstanding faculty (Chen, 2011).

This introductory section will cover the history as well as a definition of distance education, the recent and expected continued growth of online education, and the need for qualified faculty members to meet expected student growth.

History and definition of distance education.

Correspondence courses first began in Germany, the United States and England in the mid-nineteenth century (Neal, 1999). Over time, technological advancements have

resulted in a number of delivery methods for distance education including tape delay broadcasts, interactive television, live and remote location, and more recently web-based instruction (Coe-Regan & Youn, 2008; Zhao, Alexander, Perreault, Waldman, & Truell, 2009). With the growth of accessibility to the Internet and its use (Ocak, 2011) online education has provided cost-effectiveness, access, and flexibility in how education is delivered (Horvath & Mills, 2011). Addressing online learning, Chubb and Moe (2012) stated “The nation, and the world, are in the early stages of a historic transformation in how students learn, teachers teach, and schools and school systems are organized” (para 2).

Distance education is broadly defined as using technology to provide educational opportunities (Horvath & Mills, 2011). Moreover, when the World Wide Web is used to support learning, then this type of education is referred to as web-based learning or e-learning (Al Salman, 2011). Distance education encompasses any educational instruction in which the instructor and students are separated by time and distance (Lei & Gupta, 2010; Ormrod, 2008). Distance learning today is most often mediated by computers with distinctive interfaces that require learners to work alone during much of the learning process (Lee, 2003). Online education is defined as the use of online technologies in higher education for teaching and learning (Sener, 2010).

Characteristics of distance education include the quasi-permanent separation of teacher and learner; the influence of an educational organization in preparing learning materials and providing student support; the use of technical media; the provision of two-way communication; and the quasi-permanent absence of the learning group so that students are usually taught as individuals rather than in groups (Benson &

Samarawickrema, 2009). In this review, an online teacher will be defined as a faculty member who teaches online; online teaching will be defined as teaching that is conducted mostly online; and F2F teaching will be defined as teaching that is conducted in a physical classroom (Baran, Correia, & Thompson, 2011).

Growth in online education.

Demand for higher education continues to increase in the United States. Statistics from the United States Department of Education indicate a 101% increase in the number of students enrolled in college between 1970 (7.3 million) and 2004 (14.7 million) (Shea, 2007). There are a number of structural reasons why higher education in general has increased over time. A college degree is correlated with higher salaries and savings rates, increased personal and professional mobility, more leisure activities, improved quality of life for children, and better consumer decisions (Shea, 2007). As the demand for higher education has increased, so has the demand for online education. Demand from students for online courses has also increased as a result of different policies in K-12 education. Fueled not only by student demand, but statewide initiatives in some areas online distance education continues to grow in high schools and colleges (Gladhart, 2010). Offering K-12 students online instruction will result in more students entering higher education with online learning experience and expectations of furthering their education online (Gladhart, 2010). Online education is increasing in the K-12, higher education, government and military environments, and it is also applied in corporate training (Bonk, Kim, Oh, Teng, & Son, 2007; Moller, Foshay, & Huett, 2008). The preceding reasons help explain, in part, why online education is growing as well.

One major barrier to online course growth is individual institutions asking whether online courses should be offered. Generally, schools have recently moved from asking if they should offer online courses to asking how to best meet the needs of online learners (Gladhart, 2010). As a result of this change, distance education (DE) programs have expanded in the past few years (Sussan & Kassira, 2009). As an increasing number of colleges and universities across the nation vie for students in the growing online environment, educational institutions are recognizing the strategic advantages of distance education that serves student needs (Mayadas, Bourne, & Basich, 2009).

Online courses are growing at a more rapid pace than traditional methods of higher education. The National Center for Education Statistics (NCES) (2008) reported the number of undergraduates who took one or more courses via distance education increased from 16% in 2003–2004 to 20% in 2007–2008. The Instructional Technology Council (2009) survey reported community colleges experienced an 11.3% increase in distance education enrollments above campus enrollments (Smith, 2010). According to Allen and Seaman (2011) online enrollments grew 10% from 2010 to 2011. The online classroom has proven to be popular in part because this method of education offers convenience and access (Foster, 2010).

There are a number of advantages associated with taking online courses. Students can access educational opportunities without having to leave their home. This reduces obstacles to education and can result in an increase the overall educational level of citizens (Bergstrom, 2010). Other reasons explain why online education is growing at this particular point and time in history. Three groups of students find online classes particularly attractive: those who physically find it difficult to attend college (Badge,

Dawson, Cann, & Scott, 2008), individuals who are working, and parents who want to, or have to, spend more time at home with their children (Lyons, 2004). Online programs can be a solution to students' problematic issues in accessing higher education such as time, travel, and scheduling (Li & Irby, 2008). Online students have recognized the flexibility and benefits of staying home while getting a good education (Li & Irby, 2008). In a study of 332 students, Gaytan and McEwen (2007) asked student participants to state the reasons for having enrolled in an online course. Responses included distance from campus (37%), working full time (26%), irregular work schedule (14%), preference for online learning (8%), and the online course was only way the course was delivered (4%). Other reasons that have caused growth in online education include the economic downturn and rising gasoline prices (Mayadas, Bourne, & Basich, 2009). The result of the flexibility offered by DE is increased demand for higher education.

A number of broad factors have influenced students and faculty to choose DE. Students who choose DE are not limited to the few universities near the area, and they have more freedom to choose where they really want to study (Li & Irby, 2008). Li and Irby found another benefit of online learning is that students can obtain a broader perspective on various topics because they are able to interact with students from all around the globe as online programs attract students all over the world who desire to pursue a degree in higher education. Student perceptions would definitely be enriched through this experience, and even teachers can enjoy the flexibility of teaching at home instead of going to campus. Faculty members have also reported spending fewer hours photocopying class handouts for students (Li & Irby, 2008). Online education reduces the

barriers to student goals of higher education for the variety of reasons listed above, and benefit faculty members as well.

As the Internet has merged with education, the result has been an overall increase of nontraditional learning opportunities. Online education has already experienced a time of expansion, but online instruction in higher education is ready to take the next step in its growth (Sener, 2010) and this method of education will be valued as long as students need to balance work, family, and school demands (Gaytan & McEwen, 2007). The authors of the Sloan Consortium report (Allen & Seaman, 2009) also predict the growth of online courses will continue. Specifically, there is additional room for growth in the online education market as educational institutions with high priorities in research and publication have not yet widely accepted online education (Sener, 2010). Figure 1 shows the growth in the number of online students.

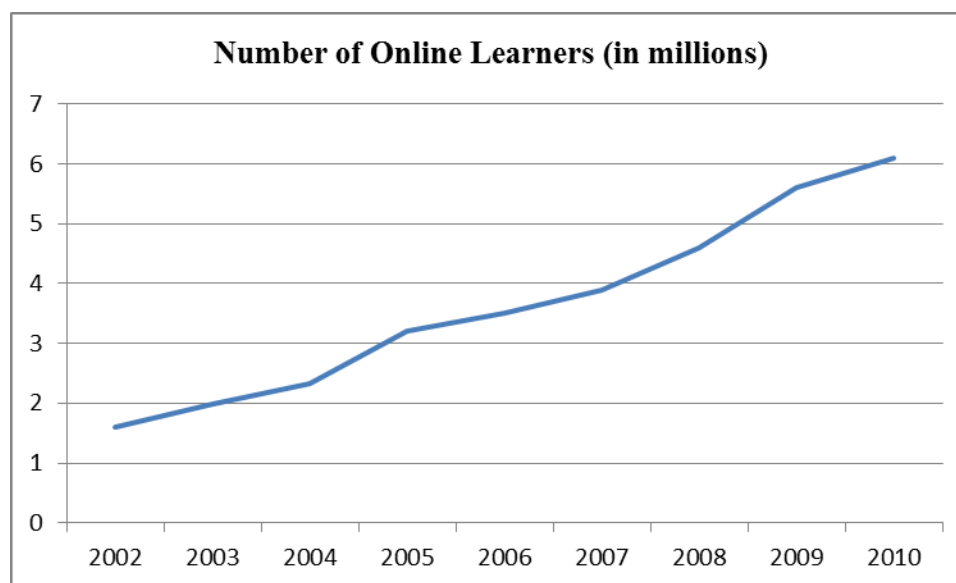


Figure 1. The Increasing Number of Students Taking Online Courses

As students increasingly demand distance education, colleges and universities have responded by offering more courses and hiring more faculty members (Allen &

Seaman, 2010; Baghdadi, 2011; Buckenmeyer, Hixon, Barczyk, & Feldman, 2011; Schubert-Irastorza & Fabry, 2011). While the demand for more DE continues to rise and greater numbers of online faculty members are needed, analyzing faculty motivations to teach DE courses becomes more crucial (Cook, Ley, Crawford, & Warner, 2009). Faculty members are the key to successful implementation and outcomes of distance education (Jackowski & Akroyd, 2010). To sustain such growth, it has become necessary to employ a pool of competent faculty who can engage effectively in the learning process.

Need for qualified faculty members to meet demand.

As the number of courses offered online has increased, concerns about the quality of online course delivery and instructor development have been raised as well (Roman, Kelsey, & Lin, 2010). For online courses to be a successful method of online instruction, courses must be constructed based on principles of best practice and taught by highly qualified teachers (Baghdadi, 2011). It is important to note that designing, developing, and teaching online courses requires faculty development (Gautreau, 2011). A study of social-work coursework offered through DE confirmed the need for professionally trained staff to manage and deliver those courses (Horvath, & Mills, 2011). As institutions increase the number of online course offerings, more faculty will need to learn to teach via DE (Gautreau, 2011). Finally, while quality faculty members are needed to match student demand, online faculty members are crucial for the success of the institution (Batts, Pagliari, Mallett, & Mcfadden, 2010).

Teaching Online is Not Like Face to Face

Teaching face-to-face (F2F) has many similarities but also many differences compared to teaching online. Bawane and Spector (2009) argued that the competencies

necessary to teach online are not dramatically different from those needed to teach in a F2F environment; however, a quality online course will vary greatly from a quality F2F course (McClure, 2007). Highlighting this difference, for example, is the use of active learning strategies which when used in an online course have been found to be similar to those that are used in F2F settings; however, applying these strategies in the online setting requires that faculty understand how to facilitate communication, group formation, and collaboration, using Learning Management System (LMS) tools (Baghdadi, 2011; Gautreau, 2011). Faculty need to think differently about teaching and learning as they prepare for the online learning environment (Fish & Wickersham, 2009). An online faculty member needs skills developed in the areas of communication, technology, and pedagogy (Barajas & Gannaway, 2007). Successful online instruction requires new methods of course design, interaction among course participants, and instructor preparation and support (Crawford-Ferre & Wiest, 2012). Designing and developing an effective online course requires a variety of interests and expertise, which may include teachers, designers, technical specialists and administrators (Baghdadi, 2011).

As online education is a new specialty, there is a need for effective faculty support for online education (Baghdadi, 2011), and technical training is required for instructors before the e-learning process can begin (Kilic-Cakmak, Karatas, & Ocak, 2009). Teaching online requires faculty members to understand the LMS tools that facilitate communication, group format structures, and collaboration; however, active learning strategies that are effective in a traditional classroom are similar to those that are used online (Gautreau, 2011). Effectively teaching online involves converting the

benefits of F2F interaction to online activities (Gaytan & McEwen, 2007). As faculty members create and deliver online courses, this new process has led to an adjustment in the roles of online faculty, but also has resulted in new and essential tasks for faculty. Smith (2010) noted there is an entirely new skill set required to accompany the essential tasks of teaching online. As a result of these new tasks, teachers are required to learn new skills and rethink their teaching practices when teaching online.

In a qualitative study of graduate school nursing faculty, three areas of expertise were found which were needed in order to design an effective online course: a technology expert, a content expert, and a web-based pedagogy expert (Johnson, 2008). While the content expert skills are transferrable from F2F to online instruction, other types of expertise are needed to teach online. These other types of expertise include the overall instructional design of an entire course to the development of instructional media. Realistically, faculty may not have the expertise and/or the desire to create effective instructional media. One possible solution is to employ media developers and instructional designers who can help faculty to develop and use instructional media for the online course (Green, Alejandro, & Brown, 2009).

Another specific skill online faculty members need to be trained how to serve students by designing content suitable for instructing students with physical and learning disabilities (Badge, et al., 2008; Gladhart, 2010). The Web Accessibility Initiative (2012) defined Web accessibility to mean that individuals with disabilities can use the Web. Faculty members also must learn how to use the LMS for content creation, which often requires the production of learning materials by learning how to use different programs such as Flash, Adobe Presenter and Impatica (Badge et al., 2008) and other assistive

technologies. Other specific kinds of training online faculty may find useful include HTML 5 and web 2.0 tools, and social media. Competencies include proficiency in electronic media tools (Yuping et al., 2010), technology and instructional methods such as course design (Hoyle, 2010), implementation, delivery and copyright issues (Dempsey et al., 2008) as well as how to provide accommodations for students with disabilities (Gladhart, 2010).

In order to teach online successfully, online teachers need to possess a unique set of competencies. A faculty member's ability to use those competencies is related to the kind of resources and support available (Bawane & Spector, 2009). Faculty members who desire to teach a quality online course need training in technology (Crawford-Ferre & Wiest, 2012; Gabriel & Kaufield, 2008) and instructional methods such as course design (Hoyle, 2010) and pedagogy (Johnson, 2008; Marek, 2009). There are a number of specific skills online faculty members need to deliver an online course. Faculty members need to master the distance delivery strategies for online teaching by learning how to increase student interaction, learning how to create online communities, and updating their technological skill set (Al Salman, 2011). Faculty need the knowledge of how to properly implement a course, including delivery and copyright issues (Dempsey et al., 2008), and electronic media tools (Yuping et al., 2010), as many of these skills are applied uniquely in the online learning environment. Online learning, as it increases in popularity and adoption, causes faculty members to acquire new skills because they need new tools and they need to change their presuppositions of teaching and evaluating online courses (Baghdadi, 2011). The online teacher needs to learn and follow best online practices to help ensure a successful outcome of the learning process (Baghdadi, 2011).

Communication differences.

Communicating with students in the online environment is vastly different than communicating F2F with students (Gautreau, 2011) and several studies have focused on aspects of dialogue in the online environment (Benson & Samarawickrema, 2009). In the online environment verbal cues such as facial expressions and eye contact cannot help faculty and students engage in the learning process (Marek, 2009). Due to the lack of F2F contact, communication skills unique to the online environment are imperative, such as the need for quality dialogue (Falloon, 2011). A couple of specific communication skills are imperative for teaching in the online environment. One communication skill faculty ought to acquire to effectively teach online is the ability to facilitate productive discourse in online courses (Baker, 2010). Online faculty members also need to challenge themselves to ask better questions in threaded discussions (Hoyle, 2010). The acquisition of these specific communication skills, when applied in the online learning environment, will lead to more effective online teaching.

Pedagogy differences.

Much like communication methods vary from face-to-face (F2F) to online, pedagogy also varies between the two teaching methodologies. In the past, the focus of faculty support was more on technical rather than pedagogical issues (Orr et al., 2009), but due to recent advances in learning management systems, faculty members no longer need advanced technical knowledge to teach online. Regardless, teaching online requires a sound pedagogy to provide a safe environment for learning, engaging students, and stimulating critical thinking (Bair & Bair, 2011; Clark-Ibanez & Scott, 2008; Johnson, 2008). More extensive pedagogical support is needed to guide the faculty through the

pedagogical challenges of online course design (Bair & Bair, 2011; LeBaron, & McFadden, 2008; Marek, 2009; Orr et al., 2009; Roman, Kelsey, & Lin, 2010). Based on their experiences and research, Bair and Bair (2011) recommend faculty development in online pedagogy. Given the growth of online education and the rate of adoption of online instructional techniques, faculty must become familiar with effective methods of online teaching (Crawford-Ferre & Wiest, 2012).

In summary, it is easy to see that effective online teaching is a complex practice (Kupczynski, Mundy, & Jones, 2011). Administrators have found themselves with the task of supporting faculty members to teach online by providing instructors with appropriate support and resources that will allow them to develop, design and facilitate student-centered online learning (Dixson, 2010).

Role differences.

The role of the instructor and student has changed with the new delivery method offered by online courses. This perception that online teaching requires new skills has also led researchers to study the roles that online instructors take in online education environments (Guasch, Alvarez, & Espasa, 2010). Specifically, students' and instructors' roles require refinement in e-learning environments due to the differences from F2F learning in the student and instructor expectations, attitudes, and practices (Kilic-Cakmak, Karatas, & Ocak, 2009). The core of online instruction reflects a student-teacher relationship in which the teacher guides students with formative feedback (Bergström & Granberg, 2007; Bergström, 2010). In order for students to succeed in online learning environments, faculty may be required to function in disparate roles such as: advisor/counselor pedagogical, social, professional, evaluator, administrator,

technologist, and researcher (Baran, Correia & Thompson, 2011). The dynamics presented in DE have begun to change the role of educators, and some faculty members have struggled to balance their new roles (Ocak, 2011).

Resistance to Online Teaching

This section will highlight some of the significant barriers and resistance to technology-mediated instruction by faculty members (Shea, Pinkett & Li, 2005). Teaching online is not like teaching F2F and teaching online requires different skills than teaching in the classroom (Journell, 2010). A review of the literature identified some specific elements of teaching online which have been found to be dissatisfying for faculty members and which cause some faculty members to resist teaching online. Some dissatisfying factors are lack of compensation (Bozeman & Gaughan, 2011; Chen, 2011), that online instruction takes more time (Dempsey et al., 2008) and the perception that teaching online is more work (Hiltz, Shea & Kim, 2010; Jackson, Jones, & Rodriguez, 2010). Using a focus group design, Hiltz et al. (2010) found other sources of dissatisfaction for faculty members stem from limitations of the online system and the perception that online learning is not necessarily a good fit for all students. Other obstacles noted by faculty included unfamiliarity with the technology and the appropriateness of the content for online delivery (Dempsey et al., 2008). Faculty at universities cited a lack of recognition for online instruction in tenure and promotion decisions (Johnson, Wisniewski, Kuhlemeyer, Isaacs, & Krzykowski, 2012).

Resistance to teaching online may come from new faculty who may tend to feel anxious and uncertain because the online environment differs from a F2F environment (Wang, Chen & Levy, 2010). Most faculty members who are new to online teaching have

little preparation for this specific delivery mode (Fish & Wickersham, 2009; Gabriel & Kaufield, 2008). Faculty who develop and teach online courses may find themselves facing a variety of new challenges (Hixon et al., 2011; Hoffman & Dudjak, 2012) particularly during the design, teaching, and revising stages (Crews, Wilkinson, Hemby, McCannon, & Wiedmaier, 2008).

Other reasons faculty resist teaching online stem from demographic and motivation factors that are important to faculty (Gautreau, 2011). Similarly, Tabata and Johnsrud (2008) suggested that much of the literature concerning faculty participation in online education revolves around institutional and pedagogical issues, as well as work load concerns (Tabata & Johnsrud, 2008). Faculty members also have reservations about e-learning from professional, pedagogical, and sociological points of view. Finally, faculty members have practical questions such as how status, compensation, work-load, and educational philosophy (Barajas & Gannaway, 2007) will be addressed by administrators.

Time.

When considering faculty resistance to online teaching, it is absolutely necessary to acknowledge the significant amount of time required of online teachers (Kerr, 2010). There is no question that using technology for distance education requires more faculty time than traditional methods of instruction (Jackowski & Akroyd, 2010). Numerous studies have found time to be a faculty resistance factor (Haber & Mills, 2008; Johnson, 2008; Lee et al., 2010; Wickersham & McElhany, 2010) and a review of the literature found time is frequently cited as a barrier to online teaching (Shea, 2007).

Time is a barrier for faculty who teach online for a variety of reasons. One study confirmed faculty need to take time to learn new technology (Lei & Gupta, 2010; Shea, 2007). Another research study noted as a result of the time it takes to learn how to teach online, faculty are temporarily removed from the security of what they know, which is teaching (Lei & Gupta, 2010). However, other researchers (Andersen & Avery, 2008) have reported no difference in the amount of time required to prepare for F2F or online classes. In a qualitative study of graduate school nursing faculty, participants agreed that the up-front development of a web-based course was very time consuming (Johnson, 2008). This study was confirmed by Dempsey, Fisher, Wright, and Anderton (2008) who noted the biggest obstacle across the faculty was the time to develop online courses.

Time spent on training and course development is not the only place faculty experience time pressure. In a qualitative study, several participants indicated the time spent while teaching web based courses increased significantly (Johnson, 2008). Other studies found faculty need to put more time and energy into an online course to deal with various instructional, technical, and course administration problems that arise (Dempsey et al., 2008; Gabriel & Kaufield, 2008). In a study of faculty actions which influence online student satisfaction, researchers noted online instructors must be prepared to invest more time in daily activities of the online class than they traditionally would invest in F2F classes (Jackson, Jones & Rodriguez, 2010). Faculty may decline teaching online if they feel the time it takes to learn the technology seems to be too great, and if the anticipated additional hours that need to be spent on preparation and teaching seem too long (Tabata & Johnsrud, 2008).

Technology skills.

Another barrier limiting the use of a Learning Management System (LMS) at universities is that faculty members often feel they do not possess the time or ability to learn to build online instructional content (Yueh & Hsu, 2008). In a qualitative study of graduate school nursing faculty, Johnson (2008) cited lack of technological skills as a significant barrier to teaching online courses (Johnson, 2008). One example of technological issues as a barrier to teaching online course is embedding or using online videos, which may result in faculty resistance (Sherer & Shea, 2011). This finding was supported by faculty members who noted they are not technology experts and should not be required to become technology experts to engage in online teaching (Orr et al., 2009).

Additional frustrations for faculty members stem from technology difficulties and a lack of infrastructure, such as inadequate hardware and software, and slow Internet connections (Johnson et al., 2012; Shea, 2007). Some faculty members have concerns about the resources available to develop quality courses (Johnson et al., 2012). Perceptions of technological competence have been found to be both an inhibitor and motivator regarding the use of technology in teaching. Faculty members who do not feel competent are less likely to use instructional technology whereas faculty who feel competent in the use of technology are more likely to participate in distance education (Jackowski & Akroyd, 2010; Lackey, 2011).

The struggle associated with mastering the technical skills required to use a LMS may be a challenge for faculty (Shea, 2007). In a study of 730 faculty staff and students in the University of Wisconsin System which confirmed this situation, faculty noted course management systems are more difficult to learn than expected (Bradford,

Porciello, Balkon, & Backus, 2007). Despite the benefits of incorporating a LMS, many faculty members still choose not to adopt this technology as a teaching tool (Gautreau, 2011). Knowing how to use the institution's course management system is not sufficient to teach in the online environment (Crawford-Ferre & Wiest, 2012). Teaching online requires faculty members to acquire a new set of knowledge and skills, as well as professional growth (Gautreau, 2011). Previous research has identified some of the skills faculty members required to teach successfully online.

Institutional support.

Faculty may refrain from participating in an online program if they feel that institutional support is not useful or adequate (Tabata & Johnsrud, 2008). Defining adequate institutional support is complex; however, in the online context support can be viewed as training faculty members how to effectively use available technology to teach online (Lee & Busch, 2005). In the absence of formal programs, faculty members informally look to fellow faculty and technical staff as a source of expertise and assistance with the creation and design of online courses (Dempsey et al., 2008). Ultimately, online faculty are concerned about inadequate institutional support and training to teach online (Haber & Mills, 2008; Shea, 2007), and a lack of adequate institutional support and policies for teaching online was found to increase faculty resistance (Hiltz et al., 2010).

The preceding section highlighted high frequency factors found in a review of the literature concerning faculty resistance to teaching online. A number of smaller themes arose as well including concerns about an increased workload (Shea, 2007) and a lack of compensation for that workload (Johnson et al., 2012; Shea, 2007). Jackowski and

Akroyd (2010) noted further research must be conducted to determine further factors of faculty resistance. In spite of forces which create faculty resistance to teaching online, there are forces which may lead faculty to embrace online teaching. The next section will review factors that predispose online faculty to be successful in the online teaching environment.

Overcoming Faculty Resistance To Teaching Online

In a study of Herzberg's two-factor theory of motivation in selected colleges of the Iowa Community College Online Consortium (ICCOC), Gullickson (2011) noted adopters of online teaching may lack confidence in the use of technology, and offered these recommendations for practice. Gullickson (2011) suggested education in the best online teaching techniques and technology training to provide to faculty members with the skills needed to teach online. A review of the literature suggests experience and training can reduce faculty resistance.

Experience matters.

Instructors with relatively little online teaching experience were concerned with the unfamiliarity with effective online pedagogy, lack of opportunity to experiment with the technologies of online teaching, and lack of opportunity to observe online teaching before engaging in it (Shea, 2007). Researchers, in a study by State University of West Georgia (2002), concluded experience using the online course management system leads to faculty acceptance of this methodology. Marek (2009) also noted faculty members, through experiences in online teaching, acquire the skills to feel confident. Simply giving a faculty member an opportunity to experiment with online technologies may reduce

faculty resistance and increase adoption. Another option that may reduce faculty resistance to teaching online is training.

Training.

One factor of particular interest in the online teaching environment is the need for training (Orr et al., 2009). Faculty will resist teaching online if they lack the appropriate training (Crawford-Ferre & Wiest, 2012), and training has been shown to increase the confidence faculty have in the use of technology (Jackowski & Akroyd, 2010). In a study of online nursing faculty, the researchers found teaching online effectively is a skill that can be learned (Lee et al., 2010)

Given the reported reluctance of faculty to teach in this modality and the lack of training and support for faculty teaching online, it is clear that more research is necessary regarding how to develop effective online instruction which would include how to prepare and support online instructors (Crawford-Ferre & Wiest, 2012). Georgina and Olson (2008) reported that faculty members clearly look to the university to provide adequate training on any new technologies being adopted. Finally, the use of technology has been reported to be directly related to technical support and training (Jackowski & Akroyd, 2010). Administrators ought to provide the necessary learning opportunities for faculty members.

Distance education administrators need to evaluate their distance education programs to assure their faculty members are being properly trained to teach online (Pagliari et al., 2009). To develop and sustain online programs, organizations should thoroughly address the needs of online instructors and employ different methods to support online instructors to overcome faculty resistance to online teaching (Roman et al.,

2010). While a number of issues may prevent faculty from beginning to teach online, many of these obstacles can be removed when proper training is provided. Barriers to teaching online can be overcome through various ways such as by providing reward programs, promotion, and incentives as well as institutional support and training workshops (Tabata & Johnsrud, 2008).

The Importance of Institutional Support when Teaching Online

The process of creating and delivering online courses has led to new and essential tasks that faculty must complete, and an entirely new set of skills is required to accomplish those tasks (Smith, 2010). As a result of these conditions, researchers have questioned whether faculty members who transition to online teaching have the competencies to meet these challenges (Schneckenberg, 2010). Based on these findings, schools are advised to create a plan for training their faculty to help instructors gain proficiency in the use of a variety of online competencies.

Faculty should not make the shift from traditional teaching to the electronic mode of educating students alone. Administration must share in this responsibility and allocate appropriate resources to supporting faculty and students. Instructors who use technology in DE classrooms possess specific needs, ranging from administrative and technological support functions. Providing effective support for instructors during course design, and continued through the course presentation, may increase the quality of the education experience for the students (Appana, 2008). To that end, a variety of regular training opportunities must be made available to help faculty develop the instructional design and technical skills necessary to create a quality online course for students (Fish & Wickersham, 2009).

Institutional support for faculty.

Institutional support can be offered to faculty members in a variety of different ways. Institutional support for online faculty is often defined broadly in terms of technology support, professional development (Ocak, 2011), administrative support (Major, 2010) and the creation of a supportive environment (Crews et al., 2008). Technology support can be offered by universities by providing access to appropriate technologies to integrate various programs into their teaching (Buckenmeyer et al., 2011; Perreault et al., 2008). Technology support includes personal computer and Internet support. By offering appropriate training and professional development opportunities, instructors can acquire technical competence through a blend of online and F2F support (Brooks, 2010; Marek, 2009). Professional development in this case can also include funding travel and release time, as well as formal and informal training (Marek, 2009). One study found nursing faculty with preparatory experiences utilizing instructional designer support and/or colleague support had significantly higher online teaching efficacy scores (Robinia & Anderson, 2010). Online instructors may also benefit from administrative support in the form of teaching assistants or reduced teaching loads (Major, 2010). Administrative support may include library services as well as office and secretarial support. Finally, the role of the institution is to create a supportive and encouraging environment for online learning that is crucial to faculty involvement (Crews et al., 2008). Each institution needs to examine support structures for online teaching (Marek, 2009), and due to the technical nature of the task of teaching online, faculty members should be able to receive support while developing online courses (Chen, 2011; Perreault et al., 2008).

Training is one form of support.

One of the primary types of support that can be offered to the online instructor is proper training (Al Salman, 2011; Marek, 2009). Faculty members who teach online require formal training in hardware, software, and distance course design (Jackowski & Akroyd, 2010). Schifter's 2000 study, a survey of full-time faculty and administrators of a Research 1 state-related university, was completed to ascertain how faculty and administrators view faculty participation in distance education. Schifter (2000) noted the best way to prepare faculty to be more comfortable with technology is by providing opportunities to learn (Schifter, 2000). Furthermore, Wickersham and McElhany (2010) concluded infrastructure accomplishes little if the university does not provide an environment that prepares and supports its faculty to design and develop quality online courses. In some locations, technical training is required for instructors before teaching online (Kilic-Cakmak et al., 2009). Training is one form of support administration can provide that may reduce faculty resistance. Ultimately, faculty members need to learn how to use and integrate the technology into their courses (Keengwe, Kidd, & Kyei-Blankson, 2009).

Importance and Benefit of Training

Training has been defined as the process people follow to acquire capabilities to perform jobs (Mathis & Jackson, 2008). Training involves providing employees with the basic knowledge and skills they need to perform their duties to the company's standards (Costen & Salazar, 2011; Nanda, 2009), and the significance and value of training has long been recognized (Karim, Huda & Khan, 2012). Training is used widely by organizations so employees will become more competent and effective in their jobs

(Dooley et al., 2007; Piccio & van Ours, 2012). Researchers generally agree that continuing education and training play an important role in increasing workers' flexibility and adaptability (Hung & Wong, 2007), and training has been identified as vital for all organizations (Enkuzena, 2011).

The benefits of training have been found across industries and across continents. Addressing audit accounting, researchers found professional training to be a cost-effective way to upgrade professional competence (Yahn-Shir, Bao-Guang, & Chia-Chi, 2008). Researchers in Malaysia found training impacted employees at work in the following ways: time savings, increase in work quality, increased networking, cost reduction, and increased productivity (Noor & Dola, 2012). An example of the positive effects of training can be observed in a study of training received by flight attendants. Using random assignment, the attendants who received problem-solving skills training reported more problem solving skills, more problem-solving self-efficacy, greater positive affect, higher job satisfaction, and higher life satisfaction than the control group (Ayres & Malouff, 2007). In a study of supermarket employees in Bangladesh, the researchers concluded employee training programs can help increase productivity and quality of work life (Karim et al., 2012). Training employees may come with a caveat as shown by a British study which determined that training appears to affect the financial performance and productivity of an organization only when training covers a large share of the workforce (Jones, Jones, Latreille, & Sloane, 2009). Furthermore, organizations that invest more in training have been found to have a significantly higher level of organizational performance including its ability to attract and retain employees (Harel & Tzafrir, 1999).

Some studies suggest that workers' higher productivity after training is not related to the transfer of knowledge or skills to the work environment but a result of an improvement of worker loyalty to the firm (de Grip & Sauermann, 2012). Opportunities for on the job training also provide employees with opportunities to refresh and update their skills, which may be a factor in job satisfaction. Training and development programs offered by the Human Resource department in the lodging industry have been shown to have a direct influence on employee skills impacting both productivity and competency levels, and may impact employee job satisfaction (Costen & Salazar, 2011). In another study, training was shown to be a significant predictor of work satisfaction, and training was also shown to be the most influential predictor of continuance commitment (Taormina, 1999).

Online faculty training.

In a study examining strategies administrators use to train online faculty, the researchers found there is a gap between the need for online training and the actual training that is taking place (Batts et al., 2010). In a study of professional development for online teachers, Rice and Dawley (2009) found 62% of teachers had no training in how to teach online before teaching online, few had formal academic training in the online teaching, and most faculty members learned on the job. Faculty members were rarely provided with extra funding, recognition, or release time. However, in a different study, technical training was required for instructors before teaching online (Kilic-Cakmak et al., 2009). Many institutions have faculty development centers that can provide this type of training (Green et al., 2009).

Faculty need to be enthusiastic, interested and skilled to develop excellent online courses (Magnussen, 2008). Literature suggests faculty may not be as confident or comfortable with their technical skills to design and manage the course as they need to be to make the transition to the online environment (Baran et al., 2011; Lackey, 2011). Other researchers noted that online teachers may often feel unprepared for the challenges of teaching online, and also feel they lack the tools or pedagogical skills necessary to be effective (Lackey, 2011; Major, 2010). One option for adequately preparing faculty members to teach online is through training. Terantino and Agbehonou (2012) noted an important component in online education is a well-trained and supported online faculty.

Technology is changing the face of education and faculty who teach online have much to learn. The initially steep learning curve may complicate a faculty member's work life until they are adequately trained (Appana, 2008). A principal issue has been training faculty to design and deliver online courses (Terantino & Agbehonou, 2012). Faculty who are new to online instruction should not be expected to intuitively know how to design and deliver online courses and that these faculty members will require a significant amount of training before doing so (Rovai, Ponton, Derrick, & Davis, 2006).

In addition to initial faculty training to teach online, there is a need for faculty to continue to maintain and upgrade their knowledge and skills for teaching online (Pagliari et al., 2009). Institutions must be committed to providing continuous faculty training and support (Appana, 2008) through professional development opportunities that expose instructors to new software and other technologies (Fish & Wickersham, 2009). Faculty development that includes initial training and ongoing support to help ensure a positive experience for all involved in online learning programs is imperative (Terantino &

Agbehonou, 2012). Training topics may include designing course content, using instructional tools, engaging online learners, providing feedback to students, and assessing online learning (Perreault et al., 2008).

Specifically addressing community colleges, Batts et al. (2010) noted the need to review training offered for online instruction, including the delivery of course content, its appropriateness, and faculty attendance. Administrators need to assess the latest technologies and develop web-based training modules which train faculty in brief, informative formats in small and manageable modules to address critical areas. Administrators also need to provide support, resources, and training to faculty members who teach online (Pagliari et al., 2009). Research suggests campus administrators still do not understand the level of time and commitment teaching online requires of a faculty member, therefore hindering the level of support and resources allocated to such training efforts (Lackey, 2011).

The rapid growth of online course offerings, combined with technological advances, require continuous training and support to meet the demands of e-learning (Al-Salman, 2011). A review of training literature suggests there are numerous benefits of training for all kinds of employees. The focus of the literature review will now shift from training online faculty members to job satisfaction and job satisfaction factors. A review of the literature will uncover what is known about the relationship of training to job satisfaction, and the effects of job satisfaction on student achievement. As many studies on job satisfaction have been performed in a variety of settings, job satisfaction will be analyzed before considering faculty and online faculty job satisfaction.

Job Satisfaction

Job satisfaction is important for employees regardless of their work setting (Isaac & Boyer, 2007). Individuals who are satisfied have also been found to work at the upper limits of their capacity, so job satisfaction is beneficial for an organization, in fact, workers' job satisfaction has been determined to be necessary for the survival and success of firms (de Grip, Sieben, & Stevens, 2009). In terms of organizational performance, employee satisfaction is as important as customer satisfaction (Chen, 2011).

Job satisfaction is experienced in an intensely personal way. Lower levels of job satisfaction have been shown to be related to overall health (Schat & Frone, 2011) and higher staff turnover (de Grip et al., 2009). For example, one study of sports reporters found low job satisfaction levels resulted in increased reported levels of stress, sabotage, frustration, anger, interpersonal aggression, theft, hostility and complaints, absenteeism, and intention to quit the job (Reinardy, 2007). High job satisfaction is often related to increased collegiality (Trower, 2009) as well as employee engagement and organizational commitment (Mathis & Jackson, 2008). As job satisfaction is experienced individually, but has an effect on the broader organization (de Grip et al., 2009) this topic is worth researching. The discussion of the importance of job satisfaction will begin with a definition of job satisfaction.

Definition of job satisfaction.

A broad definition of satisfaction has been defined as the fulfillment of needs and wants (Knoop, 1994). Chih, Liu, and Lee (2008) defined satisfaction as being felt or experienced when the results exceed or are equal to expectations, it is typically felt or experienced when a wish or need is fulfilled. This study will focus specifically on

satisfaction experienced on the job. To this end, Hagedorn (2000) concluded “[a]lthough no appropriate metric capable of precisely categorizing or gauging levels of job satisfaction exists, any worker can attest that its presence can be felt and its consequences observed” (p. 9).

The reasons for investigating job satisfaction are clear but defining job satisfaction is difficult and complex (Hagedorn, 2000). Hagedorn (2000) noted job satisfaction is the result of many extrinsic and intrinsic aspects including personal experiences, demographic factors, and the job itself. Life circumstances and personal priorities can also affect job satisfaction. Job satisfaction reveals temporary feelings toward the job (Wang & O’Reilly, 2010).

Job satisfaction also includes the collection of beliefs and feelings an individual has about their current job (George & Jones, 2008). An individual’s level of job satisfaction can range from extreme dissatisfaction to extreme satisfaction. Job satisfaction is also defined as a “pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences; this state is achieved by satisfying certain requirements of the individual regarding his/her job” (Andresen, Domsch, & Cascorbi, 2007, p. 718). For the purposes of this study, which will evaluate overall job satisfaction at work, the definition of job satisfaction as a positive emotional state resulting from evaluating one’s job experiences, will be used (Mathis & Jackson, 2008).

Job satisfaction background.

Job satisfaction concerns organizational leaders because it affects important organizational outcomes such as productivity and individual performance, reduced employee absenteeism and improved retention (Singh & Ashish, 2011). Job

dissatisfaction often predicts turnover intentions (de Moura, Abrams, Retter, Gunnarsdottir, & Ando, 2009) and dissatisfaction can also have a negative impact on the attrition and turnover intentions of faculty (Xu, 2008). The benefits of job satisfaction can also include organizational commitment, engagement (Mathis & Jackson, 2008), professionalism, and increased collegiality (Trower, 2009).

In his seminal work on job satisfaction, Herzberg (1973) identified two scales of job satisfaction: motivators (satisfiers) and hygiene factors (dissatisfiers). Herzberg (1973) identified a list of motivators which include achievement, recognition, the work itself, responsibility and advancement. Summarizing the theory, Herzberg (1973) noted satisfaction and dissatisfaction are not opposite ends of the same scale, and that factors which dissatisfy an individual in his or her work may be different from factors which satisfy an individual in his or her work. The satisfier continuum indicates these satisfiers are placed on a continuum which has “no job satisfaction” on one end, and “job satisfaction” on the other end. The list of hygiene factors include: company policy, supervision, salary, interpersonal relations with the supervisor, and working conditions. The hygiene scale shows “no job dissatisfaction” on one end, and “job dissatisfaction” on the other.

While Herzberg’s (1973) study focused primarily on the work situation, job satisfaction is also influenced by factors outside of the work environment. In a ground breaking theory of job satisfaction using factor analysis Kalleberg (1977) found job satisfaction factors could be either intrinsic (referring to the work itself) or extrinsic (representing facets of the job external to the task itself). Part of the complexity of analyzing job satisfaction is that job satisfaction is part of each person’s personal, social,

and professional life (Huysman, 2008). Additionally, job satisfaction, motivation, and commitment have been found to vary between individuals and within individuals (Rhodes, Nevill, & Allen, 2004). Each job has specific characteristics that may affect research outcomes (de Grip et al., 2009). As job satisfaction is nuanced and individualistic, this paper will now consider factors of job satisfaction.

Job satisfaction factors.

There are many factors that have been shown to exert influence on an individual's job satisfaction. This section will cover recent research concerning job satisfaction in a variety of occupational settings. Following sections will consider factors which have been shown to specifically influence job satisfaction for F2F faculty members and online faculty members. A complete model of job satisfaction antecedents will not be specified here. However, a literature review to give the reader a taste of the many factors that may affect job satisfaction is offered.

While it is difficult to determine all the elements that affect an individual's job satisfaction, a number of broad themes emerge from the literature. Job satisfaction can be ascribed to the two broad factors of environment and personal factors (Spector, 1997). School administrators need to understand the key factors involved in faculty satisfaction, and identifying specific leadership actions that predict employee satisfaction can benefit their institutions level of morale, satisfaction, and retention (Webb, 2009). The following section will narrow the broad study of job satisfaction to faculty job satisfaction.

Faculty job satisfaction.

Faculty job satisfaction is hard to describe and predict (Bolliger & Wasselink, 2009), and is also affected by a wide variety of factors (Hagedoorn, 2000). When

analyzing faculty job satisfaction compared to job satisfaction among other workers, unique themes and trends emerge. In some ways faculty job satisfaction resembles other workers. Like other workers, faculty members tend to be satisfied if they are respected by their co-workers and if they feel they receive fair pay (Bozeman & Gaughan, 2011). However, faculty job satisfaction is unique in certain ways, specifically as it relates to the tenure process which includes a unique set of requirements and challenges compared to other occupations (Bozeman & Gaughan, 2011).

Compared with other professional fields, higher education enjoys an overall high level of faculty satisfaction (Gappa, Austin, & Trice, 2007; Lin, Pearce & Wang, 2009). In one study, nearly three out of four faculty members (74.8%) reported high overall job satisfaction (Hurtado & DeAngelo, 2009). The National Study of Postsecondary Faculty (NSOPF) (2004) shows high degrees of overall job satisfaction for faculty (87.5%), regardless of appointment, career stage, institution, gender, or ethnic background (Gappa, Austin, & Trice, 2007). According to Pearson and Seiler (1983) "this area has not received attention because a high level of job satisfaction generally has been presumed to exist in a university setting" (p. 36). In a study which utilized a mixed methodology of focus groups and surveys, individual faculty job satisfaction was found likely to vary over time (Rhodes et al., 2004). In comparison with the wide number of studies into job satisfaction in other fields, inquiries into faculty job satisfaction have been relatively overlooked (Chen, 2011). Previous research has indicated a wide variety of factors that influence faculty satisfaction. It is important to continue to learn more about faculty satisfaction because it affects faculty motivation (Bolliger & Wasselink, 2009).

Broad factors that induce feelings of faculty job satisfaction include personal

factors outside of work such as work-life balance (Morganson, Major, & Bauer, 2009) and school location (Eddy, 2010). Personal demographic factors influence faculty member job satisfaction as well. These factors include gender (Bolin, 2007) and national origin (Lin et al., 2009). Other examples of personal characteristics which influence faculty job satisfaction are: flexibility (Hiltz et al., 2010); autonomy (Kim, Twombly, & Wolf-Wendel, 2008); ethnic background (Trower, 2009); stress (Russell, 2010); type of professor, which is defined as organized, and a positive attitude (Fillion, Limayem, Laferriere, & Mantha, 2009); and pedagogical challenges such as learning new technology to deliver course content (Hiltz et al., 2010). Additional factors affecting faculty job satisfaction include work preference, appropriate recognition, and status (Hoyt, Howell & Eggett, 2007), the opportunity to educate students (Absher, 2009), as well as the number of published journal articles, tenure track, faculty rank, and full time or adjunct status (Lin & Irby, 2008).

Some factors of faculty job satisfaction are under the control of school administrators. If administrators provide adequate and equitable access to resources, senior faculty members' job satisfaction has been shown to increase (Russell, 2010). While university administration cannot be expected to control personal intrinsic factors that may lead to job satisfaction, they can focus on the facets of a position that can be influenced, such as for training and development (Stewart, Goodson, & Mertschin, 2010). Only after gaining an understanding of the many factors of job satisfaction can faculty be effectively motivated and increase their enthusiasm for their work (Bolin, 2007). The following will include an analysis of select factors that have been shown to influence an employee's assessment of his or her job satisfaction level.

The impact of specific factors on job satisfaction.

The factors of age, gender and overall job satisfaction will be explored relative to training experienced. The two groups of age and gender were chosen for further analysis in the online environment because of the number of studies which have included these factors in relation to job satisfaction. The factors of gender and specifically age have also yielded mixed relationships to job satisfaction across various studies, and will be analyzed as these factors are relatively static factors compared to extrinsic factors.

Demographic factors such as gender (Bolin, 2007; Johnson, 2010; Sabharwal & Corley, 2009; Spivey, Chrisholm-Burns, Murphy, Rice, & Morelli, 2009; Zhang, Verstegen, & Kim, 2008) and age (Bolin, 2007; Lin et al., 2009; Zhang et al., 2008) are regularly confirmed as being related to job satisfaction. These studies have shown not all faculty groups experience job satisfaction similarly.

Gender.

Examinations of the relationship between gender and job satisfaction have resulted in consistent findings. In a study of faculty satisfaction across gender and discipline, researchers found with few exceptions, male faculty members in all disciplines have generally higher levels of job satisfaction than female faculty members (Sabharwal & Corley, 2009). In a study which was limited in scope to tenured and tenure-track faculty at research universities, the researchers found men to be notably more satisfied than women (Bozeman & Gaughan, 2011). The 2007-08 Higher Education Research Institute (HERI) faculty study found women were less satisfied than men in the autonomy of their positions, scholarly pursuits and teaching loads (Hurtado & DeAngelo, 2009).

Absher (2009) also found female faculty members to be less satisfied with certain work and career factors than men.

Age.

As the Baby Boomer generation (persons born between the years of 1945 and 1964) of faculty members begin to retire and are replaced by younger faculty members (Feistritzer, Griffin, & Linnajarvi, 2011), understanding age and job satisfaction differences for online faculty members increases in importance. Prior research has found age to positively correlate with overall teacher job satisfaction (Bolin, 2007). A review of the literature reveals a faculty member's job satisfaction tends to increase with their age and tenure (Amalia, & Nikolaos, 2009; Bolin, 2007; Schroder, 2008; Tillman & Tillman, 2008). However, little is known about the effect of age on the satisfaction experienced by the online faculty member.

In spite of job satisfaction tending to increase with age, older adults have been found to be less confident than younger adults in learning how to use computer based technology (Marquie, Jourdan-Boddaert, & Huet, 2002). As a result, inquiries into the relationship between age and technology use have been performed (Wood, Lanuza, Baci, MacKenzie & Nosko, 2010). A qualitative study performed by Orr, Williams, & Pennington (2009) found while all faculty desired to provide a quality online learning experience, veteran instructors were looking for input and suggestions as to how they could improve their courses even more. This finding is contradicted by an earlier study that found age to significantly and negatively influence an individual's initial attitude toward technology adoption (Morris & Venkatesh, 2000). Morris and Venkatesh (2000) also found the initial resistance of older workers toward technology was unaffected by

variables such as education, occupation and income levels, but diminished after a period of three months of new technology use. The researchers did note the findings could be due to cohort effects rather than being age related.

Importance of faculty job satisfaction.

The effects of high faculty job satisfaction are felt in different ways in an academic institution. Faculty members with high levels of job satisfaction have proven to be a predictor of student achievement (Willis & Varner, 2010). Additionally, job satisfaction levels affect the quality of faculty work, which may ultimately affect student persistence and retention (McLawhon & Cutright, 2011). Knowles (1970) noted that the teacher is the most important variable in the classroom for student achievement. According to the National Commission on Teaching and America's Future (1996), student achievement was more positively affected by the quality of teaching than by any other school-related factor, perhaps as much as their home and family environment. Faculty members play a vital role encouraging student motivation and learning (Ocak, 2011). Similarly, Chen (2011) noted the satisfaction of university faculty members with their current work environment can promote improved teaching quality. Course-related faculty interaction had also been shown to significantly and positively predict student degree aspiration, gains in critical thinking and communication, and overall college satisfaction (Kim & Sax, 2009). The influence of faculty job satisfaction extends to student achievement.

Faculty engagement has been demonstrated to affect a student's ability to complete an online course (McClure, 2007), and desirable student behavior is closely linked to the motivation levels of the teacher (Kocabas, 2009). Faculty motivation, and

the degree to which faculty are engaged, has been found to be a contributing factor for student success (Stewart et al., 2010), and even affect a student's ability to complete an online course (McClure, 2007). The research has clarified the role of online faculty members in student success. As faculty job dissatisfaction can adversely affect student performance levels, it is important for school administrators to understand each factor that contributes to job satisfaction.

Many studies take a logical next step with job satisfaction and analyze its effect on retention and turnover. The twin issues of turnover and retention of qualified employees affect nearly every organization. Turnover and turnover intentions are influenced by a wide variety of factors related to the work environment that may increase job satisfaction and improve faculty retention (Spivey et al., 2009).

Faculty turnover is also costly (Green et al., 2009). Generally speaking, an organization's investment in selection, training, and promotion is lost if employees leave and turnover is something most organizations try to avoid (de Moura et al., 2008). This is also true for institutions of higher education. Promoting high levels of job satisfaction is critical to reducing faculty turnover (Spivey et al., 2009), which is costly to colleges and universities (Green et al., 2009). Faculty turnover is costly in multiple ways. Faculty turnover is costly in terms of faculty training, course adaptation and redevelopment, and increased staff support (Green et al., 2009). This finding demonstrates the interrelated issues of faculty satisfaction, training, retention, and persistence. Another reason it is necessary to understand the factors that influence employee job satisfaction is research has linked employee job satisfaction to organizational commitment (Costen & Salazar, 2011). Researchers of one study asserted that job satisfaction and staff retention are

linked (Chung et al., 2010). Much of the research on faculty satisfaction points to correlations between satisfaction and intent to leave as the primary concern (McLawhon & Cutright, 2011). Job satisfaction is an important topic to study when considering the expense of retaining or replacing faculty (Webb, 2009). Administrators should seek to increase job satisfaction in an attempt to reduce costly faculty turnover as school budgets shrink (Balsley, 2011; Pagliari et al., 2009).

A satisfactory work environment is a logical way to retain faculty (Johnson, 2010) and may reduce faculty members' intention to leave (Dardar, Jusoh, & Md Rasli, 2011; de Moura et al., 2008). Faculty members have been found to be attracted and retained in an environment where they are likely to find job satisfaction (Chen, 2011). The following sections explore factors that lead to job satisfaction for faculty members who teach online, as well as review factors that lead to dissatisfaction.

Online faculty job satisfaction.

This section will narrow the focus of job satisfaction to online faculty satisfaction. Defining job satisfaction for online faculty is also complex. In spite of the volumes of studies of job satisfaction, only recently have a significant amount of studies involving faculty and institutions of higher learning and, more specifically, college faculty involved with online education been seen (Bair & Bair, 2011). There is relatively little information available about faculty members who teach online compared to student experiences in online courses (Kearsley, 2010; Schulte, 2010).

Defining online faculty job satisfaction.

Online faculty satisfaction has been defined by the American Distance Education Consortium (ADEC) (n.d.) as the perception that teaching online is effective and

professionally beneficial (para. 10). For the purpose of this study, online faculty job satisfaction is defined as a faculty member feeling positive and confident about how they teach in the online environment. This definition limits online faculty satisfaction to the work itself. Huysman (2008) cautioned against this narrow of a definition by listing a number of factors outside of the job which affect a person's job satisfaction, such as family relationships. In spite of this concern, the purpose of this study is focused on the satisfaction online faculty have with the job itself.

Factors that affect online faculty job satisfaction.

Job satisfaction for online faculty members is tremendously important. Faculty satisfaction with teaching online was found to be the primary determining factor for faculty who desired to teach online (Tallent-Runnels et. al, 2006). Researchers have also found a positive relationship between satisfaction and perceived quality of online courses (Rodriguez, Oom, & Montanez, 2008).

The work environment of an online faculty member is different from a faculty member who teaches face-to-face (F2F). A natural consequence of this difference is that job satisfaction for online faculty members stems from a unique set of factors that vary by faculty member. Online instruction and assessment must be balanced with the necessities of technology, delivery, pedagogy, learning styles, and learning outcomes (Gayton & McEwen, 2007). Other differences in the work environment include the use of computer programs such as Flash, Adobe Presenter and Impatica (Badge et al., 2008) and other technologies when teaching. The work situation for online faculty members may vary greatly from F2F faculty members. In a similar manner, faculty members who teach online may teach, create content, and answer student questions anywhere there is Internet

access to students located nearly anywhere in the world. As a result of these unique working conditions, online faculty members may experience increased personal job satisfaction because they were able to accommodate family responsibilities through a flexible schedule (Hiltz et al., 2010; Hoyt et al., 2007; Ng & Feldman, 2008).

Beyond working conditions, online faculty satisfaction has been found to be specifically influenced by a number of student characteristics. Factors which specifically affect online faculty satisfaction positively include the ability to reach more students (Hiltz et al., 2010; Kyei-Blankson, 2009), increased satisfaction from educating a diverse student population (Bolliger & Wasilik, 2009), the opportunity to engage new populations of students (Hiltz et al., 2010), and the perceived high quality of online students (Hoyt, et al., 2007). Another factor that positively affects online faculty includes the use of a highly interactive learning environment (Bolliger & Wasilik, 2009).

Unique factors which may lead to dissatisfaction with the online work environment include the need to be continuously responsive to meet students' expectations (Hiltz et al., 2010; Ng & Feldman, 2008), the professional isolation that occurs from not working near coworkers and increased family-work conflicts for some faculty members (Ng, 2008; Ng & Feldman, 2008). Some faculty reported a lack of technical expertise and support (Haber & Mills, 2008) could lower job satisfaction as well.

A finding unique to the online environment was revealed in a qualitative study that indicated online faculty satisfaction arose in part from the challenges and fulfillment of learning new technologies and also applying the technology creatively to teaching (Hiltz et al., 2010). Rosser (2005) found the mastery and creative application of new

technologies to be a personal and intrinsic factor of job satisfaction felt by online faculty members. The success of online courses depends on the structure offered by schools and universities, as well as the faculty and adjunct instructors who teach these courses (Cook, Lee, Crawford & Warner, 2009).

Training and Job Satisfaction

Job satisfaction has been recognized as an important factor and a matter of serious concern to many organizations (Dardar et al., 2011). Studying faculty satisfaction is important because the social and intellectual structures of higher education are changing over time (Sabharwal & Corley, 2009) as faculty members retire and technology use increases. Studying faculty satisfaction is also important because Willis and Varner (2010), in a review of the literature, found student achievement to be clearly linked to faculty satisfaction. Faculty satisfaction in the online context also needs to be continuously assessed to assure quality educational experiences for faculty and students (Bozeman & Gaughan, 2011).

Research has also confirmed that training has a positive impact on employees' job satisfaction (Sahinidis & Bouris, 2008). A company's training programs are an indicator of the organization's willingness to invest in the employee, and the organization's level of commitment to the employee. This organizational commitment could inspire increased employee loyalty and effort (Owens, 2006). Prior research has indicated the need to train faculty members to teach online more effectively (Lee & Busch, 2005). In order to develop and sustain successful online programs, institutions should address the needs of online instructors in a systematic and comprehensive manner and employ different mechanisms to support instructors when teaching online (Roman, Kelsey, & Lin, 2010).

This research suggests the need to confirm the relationship between training programs and job satisfaction and turnover (Dardar et al., 2011) for faculty members who teach online.

However, despite strong ties between training and job satisfaction in non-education related literature, little research has been done linking training to faculty satisfaction in the online environment. The focus of community college practitioners remains centered on teaching and training, which has resulted in very little research examining distance education within the community college (Jackson et al., 2010). Studies that have analyzed job satisfaction of online faculty members (Bolin, 2007; Gullickson, 2011) have not investigated whether the level of job satisfaction reported was related to training the faculty members received (Orr et al., 2009).

In many organizations, training is among the mechanisms of enhancing employees' job satisfaction (Dardar et al., 2011). Feelings of competence, which can result from participating in training programs of customer service employees, have been shown to increase job satisfaction (Hartline & Ferrell, 1996). In a discussion of how to prepare F2F faculty to teach, training was shown to be significantly and positively connected with job satisfaction (Jones, 2008). Training opportunities provide employees with the knowledge, skills, and abilities to perform their job to the company's standard, which subsequently enhances the employees' confidence in their abilities and satisfaction with their jobs (Costen & Salazar, 2011). There is a need for more research to be conducted in this area in order to gather more information concerning training faculty members to teach online. Components of faculty satisfaction need to be investigated as online education becomes more prevalent and dynamic forces such as adoption rates,

learner expectations, levels of support, and other conditions continue to change. Data collected, such as current available training at institutions, could prove to be important in promoting student success by training faculty to be successful online instructors (Pagliari et al., 2009).

Conducting additional research specific to distance learning training is recommended (Perreault et al., 2008). The results of a study to determine whether community college faculty members participate in training opportunities found a need for further development of training for faculty who teach online courses (Batts et al., 2010). More research is needed on how to prepare and support online instructors (Crawford-Ferre & Wiest, 2012; Pagliari et al., 2009).

Summary

The melding of the Internet and education has created a new kind of knowledge worker, the online faculty member. This new method of teaching has some similarities with teaching F2F, but also many notable differences. As a result of these differences, some faculty members have resisted online teaching, citing inhibitors such as lack of time, lack of skills, and lack of training. The online format requires a unique set of work related skills for quality faculty members. A review of the literature identified training as a way for faculty members to acquire the skills needed to offer a quality online course. Lack of adequate training for faculty is considered one of the greatest barriers to teachers becoming involved in distance education practices (Schneckenberg, 2010).

Job satisfaction has been found to be important to employees across continents and industries. Faculty members who report high levels of job satisfaction have proven to be a predictor of student achievement (Willis & Varner, 2010). As a result of this linkage

between job satisfaction and student achievement, faculty members have an important role in any classroom, and creating opportunities for faculty to be satisfied in their work is a meaningful task for leaders of higher education (Marston & Brunetti, 2009).

Ultimately, faculty satisfaction has been shown to affect student achievement. While there are many factors that affect faculty satisfaction, there is a relative gap in the literature concerning the effects of training, and a specific gap on the relationship between training and job satisfaction in the online teaching environment. This study addresses that gap through a quantitative methodology whereby the relationship between training and job satisfaction is explored.

In review, due to the influence of the faculty member on student achievement, if faculty members are not properly trained to teach online, student learning may suffer. There is still much to learn about the direct connection between training, faculty job satisfaction, and student success. The literature review highlights the need to examine the relationship between training and job satisfaction in the online teaching environment.

Chapter 3: Research Method

As research has found the benefits of faculty job satisfaction to be improved retention and student achievement, and, as the ICCOC is using the online course modules as a means to train and support online faculty, the specific problem was the ICCOC does not know whether the expensive online course modules result in increased job satisfaction for online faculty members. The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC.

The questions that guided this study were:

1. What relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?
2. What relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute© training modules completed, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

The hypotheses that were used in conjunction with the research questions were:

- H1₀. There is no relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H1_a. There is significant relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2₀. There is no relationship between training, defined as the number of Pearson eTraining Institute© training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2_a. There is significant relationship between training, defined as the number of Pearson eTraining Institute© training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

This chapter will include an overview of the methodology of the study as well as the study design that was used. A description of the study population and sample will be discussed. The instrument, data collection, processing and analyses will be described. Finally, study assumptions, limitations and delimitations, as well as the precautions which were taken to ensure confidentiality and privacy, is addressed.

Research Methods and Design(s)

In order to obtain a deeper understanding of the relationship between training and job satisfaction for online faculty members, a quantitative method and correlational study design using regression analysis for both research questions was conducted. As the goal of this study was to examine the relationship between the variables of training and job satisfaction, quantitative analysis is a better fit than other research alternatives. One

strength of quantitative analysis is the ability to measure attitudes (Vogt, 2007) such as job satisfaction. This research study did not focus on a deeper meaning of a specific condition, which is the strength of a qualitative design, and the limitations of time and expense did not justify the use of a mixed-method design for this study (Creswell, 2009).

This research design did have inherent limitations. Using a correlational design lacks random assignment to a control group and prevents the investigator from determining causality as the variables under investigation may affect each other (Vogt, 2005). An experimental method could not be used in this study as some faculty members have already participated in online training modules and the researcher did not wish to prevent faculty members from participating in training if they desired to. However, the use of regression analysis to answer the research questions allowed for the ability to make predictions without presuming causality (Vogt, 2007). Further limitations of the study approach will be addressed later in this section.

Survey methodology was used for this study and this approach is widely-used to gather objective data about the participants such as age and gender. Surveys are also useful to find out respondents attitudes, values, and beliefs (Vogt, 2007). The use of survey methodology was appropriate for this study because the variable of job satisfaction is attitudinal in nature and can be easily ascertained through a self-reported survey. One advantage of survey use in this study is the ability to quickly and easily appraise the attitudes of a large number of participants who are widely dispersed (Vogt, 2007). The survey method was chosen due to the geographic dispersion of the ICCOC faculty who are located across Iowa and nationally as well. Survey research is also easy to construct, accurate, efficient, and inexpensive (Fowler, 2009).

The use of *t*-tests could have worked for Research Question 1 (training as a yes/no dichotomous variable), however, regression analysis has a greater ability to examine the relationship between training and job satisfaction based on one or more variables such as age or gender, which have been identified as important covariates in a review of the literature (Vogt, 2005). Research Question 2 (training amount as a continuous variable) could have been analyzed based on correlation but the use of regression analysis again allowed for the specific variables of age and gender to be controlled as part of the analysis. Due to the nature of the study, the use of regression analysis best analyzed the relationship between training and job satisfaction by controlling for variables highlighted in the literature review.

This study did not try to measure the effectiveness of one training method over another; rather the study investigated the relationship of online module completion training and online faculty satisfaction. Possible objections to this research plan may have included that this study is not an experimental study. An experimental approach would not have worked well in this case as an experimental method would have required offering training opportunities to one group while withholding training opportunities from the other group, and some individuals had already completed one or more training modules. The author was simply investigating the relationship between training and job satisfaction and as a result a control group or randomized sample was not feasible in this study. The purpose of this study was to determine if there was a relationship between training and job satisfaction, not to determine if the training that takes place is effective, in which case an experimental approach would have worked well.

The most appropriate methodological approach for this research study was a quantitative method and correlational study design that used regression analysis. This method was utilized because of the benefits of survey research such as the ability to collect data from respondents who are at a distance from the researcher. Other options considered were focus groups or faculty interviews; however, because of the limitations of time and resources, and because a strength of surveys is the ability to gather attitudinal data, survey research was determined to be the best method.

Population

This research study was conducted with Iowa Community College Online Consortium (ICCOC) online faculty members. Instructors who teach for this consortium primarily reside in Iowa but are dispersed nationally. Permission was sought and granted from the Director of the ICCOC, Mark White, to survey a population estimated at approximately 504 faculty members who taught for the ICCOC during the 2011-2012 academic year. After the removal of duplicate email addresses, the actual number of faculty emails which were sent was 497. An additional 5 email addresses were undeliverable, leaving a final population of 492 possible respondents. Some faculty members who were surveyed had not taken a single online training module, while some faculty members had taken as many as six online training modules.

The study population includes members of both genders, various age groups, and includes a mix of full-time and adjunct instructors, with varying levels of teaching experience and educational attainment. Generally, faculty members who teach for institutions of higher education such as the ICCOC are highly educated due to the requirements of the job and the nature of the position.

Sample

Using an email list of 492 ICCOC faculty members used with permission (Appendix A) and provided by the Director of the ICCOC, a blind copy email was sent to each faculty member who taught online during the 2011-2012 academic year which introduced the proposed study and included a link to the online survey. Faculty members were able to voluntarily participate in the survey, which formed a convenience sample. Participant responses were anonymous, and no incentives were provided to ensure anonymity of the respondents.

An initial power analysis using the G*Power[®] 3.1 software program (Freeman et al., 2007) using an alpha of .05 and a small effect size of 0.10 (Cohen, 1988) indicated a sample size of 81 participants needed to achieve a power of 0.802. For this study, an estimated power of 0.80 required a response rate of 16.1%. A total of 148 complete responses were received by the researcher, yielding a 30.1% response rate. The number of predictors chosen for the initial power analysis was three.

No data was collected prior to IRB approval. While participants are generally difficult to recruit via an online survey, a recent survey sent to a portion of this study population produced a response rate of 54% (Gullickson, 2011). Over a period of three weeks three email invitations were sent to faculty members requesting study participation. More specific details regarding initial and subsequent email invitations to participate in the online survey are covered in the data collection section. The full text of the email invitations is included in Appendixes B-D.

Materials/Instruments

This study utilized the Index of Job Satisfaction (IJS) created by Brayfield and Rothe (1951) to operationalize the variable of overall job satisfaction. The 18-item instrument was constructed to yield an overall job satisfaction score rather than satisfaction with specific aspects of the job. The score for each item has a range of 1 (strongly agree) to 5 (strongly disagree) with total instrument scores ranging from 18 to 90 with the undecided or neutral point at 54. One half of the items are reverse scored. The reliability coefficient computed for the original sample was .77, which was corrected by the Spearman-Brown formula to $\alpha = .87$ (Brayfield & Rothe, 1951, p. 310). Instruments for basic research should have reliability coefficient scores of 0.80 or higher (Nunnally & Bernstein, 1994). The validity of the instrument was addressed through the face validity of the questions. Validity was also originally established for this attitudinal scale through the use of 77 adult judges who analyzed each item for construct validity for each survey item. Finally, validity was addressed through an outside criterion. The index was administered to students in a Personnel Psychology course, and enrollment in this class was considered to be an expression of their interest in personnel work. The assumption was made that persons in the course who were employed in personnel work should be more satisfied with that work than those who were not employed in the area of personnel. The difference between the two groups was significant at the 1% level offering a high level of validity (Brayfield & Rothe, 1951, p. 311). Scores on the Index of Job Satisfaction were highly correlated with another job satisfaction instrument, the Hoppock Blank (1935), as stated by Brayfield and Rothe (1951). The long form IJS is a proven instrument with high reliability of 0.87, and 18 Likert style questions will not cause a

hardship for the respondent. The full survey, including the Index of Job Satisfaction by Brayfield and Rothe, can be found in Appendix E.

To operationalize the variable of training, the survey contained two questions that related to training. The first question asked a faculty member to indicate whether he or she had taken a training module (yes/no) offered by the Pearson eTraining Institute. This item was used in the data analysis process to determine whether there was a relationship between training and job satisfaction for survey participants. The second question asked each faculty member to indicate the number of Pearson eTraining Institute® training modules he or she had completed. As guided by the literature review, the survey collected the additional demographic data of age and gender as well.

The entire survey contained 22 items. The items were accumulated in an online data collector managed by SurveyMonkey® at the following direct link: <https://www.surveymonkey.com/s/NFMCS3C>. This methodology is ideal for this study because this approach is convenient and the data can be collected quickly. The operationalization of the study variables directly addressed the research questions in a reliable and valid manner. ICCOC faculty members who chose to participate in this study did so voluntarily by completing an online survey of 22 questions. The entire survey is available for review in Appendix E.

Operational Definition of Variables

There were three variables of particular importance to this study, the variables of training, measured two different ways, and job satisfaction.

Training as a Dichotomous Variable. Respondents self-reported whether they have or have not (yes/no) completed any online training modules offered by Pearson

eTraining Institute resulting in a dichotomous variable (1=yes, 2=no).

Training as a Continuous Variable. Each respondent was asked to report the number of online training courses he or she has completed. Pearson eTraining Institute offers six courses faculty may have taken. This 6-point continuous variable is a ratio scale that ranges from 1-6 courses.

Job Satisfaction. The variable of job satisfaction was operationalized through the Index of Job Satisfaction (IJS) created by Brayfield and Rothe (1951). This 18-question survey operationalized the variable of job satisfaction in a reliable and valid way. The IJS uses a five-point Likert scale with interval variables ranging from 1 = *strongly disagree* to 5 = *strongly agree*. One half of the items are reverse scored. The range of possible scores is 18 to 90 with the neutral point at 54 (Brayfield & Rothe, 1951).

Data Collection, Processing, and Analysis

The research questions were answered through the following process of data collection, processing, and analysis. A number of steps were accomplished before data was collected. Permission to survey faculty members was obtained from the Director of the Iowa Community College Online Consortium (ICCOC) (Appendix A). The study was approved by Northcentral University's Institutional Review Board before data collection began. Faculty email lists were requested from the ICCOC Director for the purpose of inviting faculty members who taught online for the ICCOC during the academic year of 2011-2012 to participate in this study. A confidential web-based survey was developed to provide convenience and complete anonymity for participants. The faculty members were notified of the survey, and privacy rights protected, through email and the use of the blind copy feature. Faculty members were sent an email that explained the purpose of the

study, the procedure for completion, and included a unique survey link to the online data collector hosted by SurveyMonkey® (<http://www.surveymonkey.com/>). The survey link brought each participant to a web page whereby the issue of informed consent was handled. Participants were able to agree to the participation requirements, were notified of the research purpose and right to withdraw before proceeding to complete the survey.

The survey included demographic questions as well as questions from the Index of Job Satisfaction (IJS) (Appendix E), was posted at SurveyMonkey®. See Appendix F for permission to use the IJS. The use of an online data collector allowed data to be quickly gathered from participants who were dispersed geographically. Also, the data collection was simplified through the online survey and automatically stored in a file for later analysis. The SurveyMonkey® product was also chosen because it uses a secure socket-layer (SSL) encryption package to generate and protect the unique survey link during transmission. Additionally, the investigator has used SurveyMonkey® in the past and this product has proven to be easy to use and is relatively inexpensive.

An online research design was chosen because of the efficiency of distributing the survey to all ICCOC faculty members. One general concern for this methodology is the response rate of faculty members to an online survey. A recent analysis of part of this population generated an encouraging response rate of 54% (Gullickson, 2011). In an attempt to ensure the necessary response rate of 81 participants is reached, recruiting emails were sent out at different times while the survey was open. The initial email invitation was sent out the day the survey opened. A reminder e-mail was sent out 7 days after the survey opened and a final reminder email was sent 7 days before the survey closed. The survey was open for a total of three weeks. After the survey end date, the

survey closed and ICCOC faculty members who attempted to follow the link were not able to participate in the survey.

After the survey was open for two weeks and there had been an email invitation and three survey reminders, there were a total of 140 survey responses. At this juncture, 50 participants (35.973%) had completed one or more online course modules, while 89 participants (64.03%) did not complete one or more course modules. According to ICCOC records, 198 faculty members (39.8% of the population) had completed at least one training module indicating that adequate variance in the independent variables is possible (T. Goodman, administrative assistant at Eastern Iowa Community College, personal communication, October 26, 2012). In an attempt to recruit more respondents who had completed one or more modules, the final email request asked specifically for responses from participants who had completed one or more online course modules (Appendix D). The survey was closed after three weeks and 148 usable results.

After the survey window closed, data was processed after being exported from SurveyMonkey® into both the Microsoft Excel and SPSS programs and stored on a local password protected computer accessible to only the researcher. Using the export feature available in SurveyMonkey® eliminated the step of data entry for the investigator. The data was checked for accuracy to make sure there were no errors in the data collection process, and verified that all the questions were answered, as well as whether all the answers were complete. The survey yielded 164 total anonymous responses with no identifying information. The data was cleaned before analysis, which included adjusting for reverse scored items. After data cleaning, which included eliminating 16 incomplete surveys, there were 148 total useable responses.

The number of survey invitations, completed surveys, and survey response rate was calculated and documented as shown in Table 1.

Table 1
Survey Response Data

Number of Survey Invitations	492	
Number of Surveys Started	164	33.3%
Number of Usable Surveys	148	30.1%

Descriptive statistics were used to describe the demographics of the sample including age and gender. Statistical software calculated the mean, mode, median, standard deviation, and range of scores. Descriptive statistics are presented in Chapter 4 and in Appendixes I, J, and K. Inferential statistics were used to investigate the research questions as well. Further statistical analysis using regression helped determine if there was a relationship between training and job satisfaction, controlling for the variables of age and gender. Inferential statistics for this study are also reported in Chapter 4.

Regression analysis was used to answer both research questions. Research Question 1 used regression analysis to examine training as a dichotomous variable as a predictor variable while controlling the variables of age and gender as predictors of satisfaction (Triola, 2010). The ICCOC offers six unique training modules to faculty who teach online, and it is the number of completed modules which was the emphasis of Research Question 2. The second research question examined training as a continuous variable while controlling for age and gender as predictors of satisfaction.

The demographic questions of age and gender were asked as part of this study and were used to confirm and extend previous research as highlighted in the literature review. The use of regression analysis helped to control for these variables. One characteristic of

using regression is that if the regression equation fits the data well, it can be used for prediction (Triola, 2010). Regression analysis is helpful when trying to predict or explain the dependent variable with the independent variable. If there are other independent variables of interest, regression can be used to analyze these variables as well, whereas analysis of variance will not work (Cohen, 1968). This analysis is the most important advantage of using regression (Cohen, 1968) and thus the reason for its use in this study. In the present study, regression analysis helped control for the effect of the age and gender variables on overall job satisfaction.

Assumptions

The methodology of this study hinged on certain assumptions and specific limitations and delimitations. As the survey invitation was sent to faculty members email accounts, one assumption was that this survey was completed by faculty members. Another important assumption in this quantitative study was that the faculty members accurately recalled and self-reported the online training opportunities they have experienced in the past. It seems reasonable to assume faculty members will be able to recall online training courses individual faculty members have received. Another assumption was that faculty members were able to accurately self-report attitudes toward only the job satisfaction they experience while teaching online, and reported this information honestly. The survey intentionally did not ask faculty members to report pay, which may cause some faculty members to underreport satisfaction in the hopes of securing a raise. The survey also stressed the confidentiality of the survey in the consent form, which allowed faculty members to report feelings of job satisfaction freely.

An adequate response rate, suggested by an initial power analysis to be 81 participants, is also assumed. The population estimated for this study was estimated to be approximately 497 faculty members, requiring a response rate of 16.1%. Accounting for inactive email addresses, the study population was 492. Encouraging results from a previous study based on this population yielded a response rate of 54% (Gullickson, 2011). Steps to increase participation included the use of reminder emails and a lengthy survey window. The survey generated 148 usable responses, a response rate of 30.1%.

Limitations

The use of a correlational design creates specific limitations for making causal statements about two variables that may influence each other. Like most statistics, misinterpreting correlations can produce false results (Black, 1999). One limitation of this study is that only ICCOC faculty members were surveyed, and this study did not focus on faculty members who taught online for a wide number of institutions. In this case it is common practice to confine the findings only to the population of ICCOC faculty that was sampled and the results may not be generalizable to a broader population of faculty who teach online or to other types of organizations (Vogt, 2007). A limitation of the current proposed study is the use of a convenience sample of ICCOC faculty members, which again will limit the generalizability of the results.

A potential limitation of this study was a small sample size (Black, 1999), however, this limitation did not occur in this study. Steps that were used to reduce this possibility were included in the data collection section. Clear email and survey instructions were used as well as targeted emails in an attempt to increase survey response rates.

A fourth limitation with the correlational design is participants were not randomly assigned to groups while the researcher manipulated one variable to determine the effects on another variable. It is advantageous whenever possible to have adequate variability in the data (Hays, 1994). The variables were represented somewhat unequally as more women who responded ($n=98$) than men ($n=50$) and fewer participants completed one or more modules ($n=55$) than those who did not complete a single course module ($n=93$). Data should have reasonable range of possible scores as a restricted range may be possible due to sampling error (Black, 1999). While many participants were expected to have completed 0, 1 or 2 training modules, it is possible a relatively small number of faculty members have taken three or more training modules. Another limitation of this study is the respondents' ratings of job satisfaction were captured at only a specific point in time. This is not a longitudinal study with job satisfaction data collected over a period of time, for example before and after the completion of training modules. As this study was not a longitudinal study, the investigator was not able to measure individually whether job satisfaction changes over time as a result of participating in training activities.

Using a correlational design can result in being unable to determine causality as well as difficulties in understanding if unknown variables affect the relationship (Black, 1999). It is sometimes difficult to determine which variable causes the other, and for some variables, the causal pattern may operate in both directions (Vogt, 2007). For example, faculty members who report experiencing less training may also report lower job satisfaction but perhaps the relationship operates the other direction. Meaning, if a faculty member has low job satisfaction, perhaps he or she will be less likely to pursue

training opportunities. The use of regression analysis helped determine the strength of the relationship between variables and allows for predictions to be made on the basis of that relationship (Black, 1999).

A fifth problem, the extraneous variables problem, is a surprisingly strong limitation for the proposed study. An unknown third variable may influence the outcome of this study. One use of regression analysis is to determine the importance of the independent variable (Vogt, 2007). Prior research outlined in the literature review shows job satisfaction has a host of contributing factors that may exert influence on the study results. While it was not possible to control for all the covariates which may relate to job satisfaction, the variables of age and gender were controlled in this analysis. The effect of the variables of age and gender were the primary reason regression was used rather than *t*-tests or correlation. The use of regression analysis allowed for the demographic variables of age and gender to be analyzed, as well as offer a degree of control for these issues (Vogt, 2007). These variables were included in the demographic section of the survey.

The IJS is an 18-item instrument, which is relatively lengthy, to determine job satisfaction. Some researchers have used as few as three items (Hung & Wong, 2007) while other researchers have used one item to ascertain overall job satisfaction (de Grip et al., 2009). The 22-item survey, and the time commitment to complete the survey, did not seem to present a hardship for participants as 148 of 164 respondents completed every question of the survey. The researcher asked faculty members to self-report the number of online course modules the participant experienced. Respondents may have been unable to recall or accurately report the number of training opportunities participated in.

Similarly, faculty respondents may have been unwilling or unable to isolate feelings of job satisfaction for only teaching online, for example if the respondent performs administrative tasks or F2F teaching. This study reminded faculty members as part of the online survey to answer job satisfaction questions from the mental context of teaching online for the ICCOC.

Finally, the researcher decided to analyze the effect of training on overall job satisfaction, not specific aspects of job satisfaction which may be impactful in the online environment. Work related factors such as autonomy (Seifert & Unbach, 2008) and achievement (Gautreau, 2011) may also affect overall job satisfaction. This study focused only on the effect of training on overall job satisfaction.

Delimitations

Delimitations are established by researchers to demarcate boundaries in a study (Creswell, 2009). The largest delimitations for this study include the fact that one institution (the ICCOC) and one academic year (2011-2012) was researched for this study. Other, delimiting factors for this study included a limited sample size due to the online nature of the study, and the limited time period which the study was open. The method of data collection may limit respondents, not because online faculty are unfamiliar with online tools, but rather due to the time online course teaching and development requires (Johnson, 2008).

Ethical Assurances

The author sought Northcentral University Institutional Review Board (IRB) approval, and no data was collected before IRB approval (Appendix H). Permission was sought and granted (Appendix A) from the Director of the ICCOC, Mark White, to

survey faculty members who taught for the ICCOC during the 2011-2012 academic year. General ethical standards that applied to this study included the risks of confidentiality and privacy, as well as loss of time (Belmont Report, 1979). In an attempt to minimize these risks, participants were informed about the purpose of the study, the risks as well as the benefits, and each participant had the freedom to remove themselves from the study at any time through language in both the email invitation to participate and a consent form which was posted as the first page of the online survey (Appendix G). Cozby (2009) noted informed study participants may decide to withdraw from the research study. To reduce the possibility of subjects withdrawing, the benefits of the research study were presented to participants both as part of the email invitation and on the first screen of the survey before participants consent to take the survey. Participants were advised that they could withdraw from the study at any time without consequences. Participants were also advised that survey completion was completely voluntary and anonymity was assured. One issue, the difficulty of confirming the adult status of online participants, did not have a ready solution. The author sent the survey link to participants primarily through employee email accounts in an attempt to reduce that specific risk.

A risk of any study, including the current study, is ensuring individual privacy. The Internet company SurveyMonkey® was used to collect data with no personal identifiers, including names or identifying information, requested to ensure the anonymity of participants. After the data was downloaded from SurveyMonkey®, the data was stored on a laptop with access protected by a password. No data was shared beyond the investigator, and all data will be retained for a total of 5 years then destroyed. Aggregated data and an executive summary have been made available to all participants

who desire the information. The researcher has also given prospective respondents adequate information to make the decision to take part in a study, including study details. Overall, there is minimal risk with an online survey (Belmont Report, 1979).

Summary

Using a quantitative, correlational study, the relationship between training and job satisfaction was investigated using self-reported surveys. As part of the study, 497 online faculty members from the ICCOC were invited to participate in a one-time online survey. Care was taken to obtain IRB permission before any data was collected using an online survey. A consent form was used as part of the survey where respondents were able to elect to participate in the survey after the benefits and drawbacks of participation were explained. The survey included the Index of Job Satisfaction (Brayfield & Rothe, 1951) and data were collected by SurveyMonkey® (<http://www.surveymonkey.com/>). The survey data was downloaded into SPSS at the conclusion of the survey window and was analyzed using regression analysis. Regression analysis allowed the variables of training and overall job satisfaction to be examined, while controlling for the factors of age and gender which were emphasized in a review of the literature.

Ultimately, this research study sought to examine the relationship between training and job satisfaction, while controlling for age and gender, for online faculty members. Limitations of this study included: a number of unknown covariates, the fact that this research is not a longitudinal study, and using this study design the researcher was unable to determine causality.

Chapter 4: Findings

The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC. The chapter begins by revisiting the research questions and is followed closely by research findings. This chapter is organized into three sections beginning with study results, evaluation of findings compared to the literature review, and concludes with a summary of key points.

The following research questions and hypotheses used to guide this study were:

Q1. What relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute® training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

H1₀. There is no relationship between training, defined as yes/no completion of any Pearson eTeaching Institute training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H1_a. There is significant relationship between training, defined as yes/no completion of any Pearson eTeaching Institute training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

Q2. What relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute® training modules completed, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

H2₀. There is no relationship between training, defined as the number of Pearson eTraining Institute training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2_a. There is significant relationship between training, defined as the number of Pearson eTraining Institute training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

Results

After the Institutional Review Board at Northcentral University authorized the current study, three email invitations sent out over a period of three weeks with a link to the online instrument. The email invitations were distributed by blind copy to 497 of faculty. Of the 497 e-mails, 5 were undeliverable, leaving a population of 492 faculty members. Of the 492 faculty members, 164 responded providing a response rate of 33.3%. An a priori power analysis estimated 81 responses would achieve a power of 0.80. An online survey hosted by SurveyMonkey® (<http://www.surveymonkey.com/>) collected participant results for analysis.

The responses were then entered into the Statistical Program for Social Sciences (SPSS) v21 and analyzed. There were a total of 16 incomplete questionnaires. These questionnaires were generated when a respondent followed a link to the survey but did not answer all of the questions. Three respondents answered the first question only, two respondents answered approximately half of the survey, and ten respondents missed one or more of the questions. As an initial power analysis indicated the need for 81 respondents, the surveys with missing data were excluded in the analysis. While 164 surveys were started, only 148 participants completed the survey, which resulted in a

final response rate of 30.1%. This exceeded the required sample size of 81 faculty members as determined by the previously performed G*Power a priori analysis. Nine items of the IJS were reverse scored; these items were transformed before descriptive statistics were calculated.

The use of regression analysis assumes a linear relationship between variables (Triola, 2008). The variables under consideration for this study were a mix of categorical, ordinal, and interval. The variables of training, defined as a yes/no variable, and gender were categorical variables in this study. The variable of age was treated as an ordinal variable as age ranges were used and grouped primarily by decade. The variable of training, defined as the number of course modules each faculty member completed, was considered an interval variable. These were the first four questions asked in the survey (Appendix E).

A scatterplot analysis of each type of variable was performed in SPSS to visually check the response data for linearity and outliers. A visual analysis revealed no unexpected outliers for the variables of training, age or gender. The scatterplots are available for review in Appendix I.

Initially, descriptive statistics were computed for all study variables. Participants were a mix of male and female, while more women who responded ($n=98$) than men ($n=50$). In this study sample, fewer participants completed one or more modules ($n=55$) than those who did not complete a single course module ($n=93$). Respondents tended to vary by age group as well as gender as shown in Table 2.

Table 2
Faculty Demographic Information

Measure	Number (N)	Percentage (%)
Gender		
Male	50	33.8%
Female	98	62.8%
Age		
< 30	3	2.0%
31-39	25	16.9%
40-49	35	23.6%
50-59	39	26.4%
> 60	45	31.1%
Course Module Completion		
Completed no modules	93	62.8%
Completed 1 or more modules	55	37.2%

The number of respondents who had not completed a Pearson course module (n= 93) outpaced the respondents who had completed a course (n= 55). The following Tables 3 and 4 summarize course module completion by age and gender. Additional data is presented in Appendix J regarding overall job satisfaction and the variables of age and course module completion, and gender and course module completion.

Table 3
Course Module Completion by Age

		Age					Total
		<30	31-39	40-49	50-59	>60	
0 online modules completed	n	3	17	24	25	24	93
	%	3.2%	18.3%	25.8%	26.9%	25.8%	
1 or more online modules completed	n	0	8	11	14	22	54
	%	0.0%	14.8%	20.4%	25.9%	40.7%	

Table 4
Course Module Completion by Gender

		Gender		Total
		Male	Female	
0 online modules completed	n	33	60	93
	%	35.5%	64.5%	
1 or more online module completed	n	17	38	55
	%	30.1%	69.1%	

This study used the Index of Job Satisfaction (IJS) by Brayfield and Rothe (1951) to calculate an overall job satisfaction score for each respondent. The Likert scoring weights for each item of the Index of Job Satisfaction (IJS) ranged from 1 (strongly agree) to 5 (strongly disagree) with half of the instrument reverse scored. The range of possible total scores was 18 to 90. The undecided or neutral point was at 54 (Brayfield & Rothe, 1951). The overall job satisfaction scores for this sample was 33 to 86, with a range of 53. The mean overall job satisfaction score was 69.88, the median was 71. The standard deviation of this sample was 9.16. The results create a left skewed data curve with two potential outliers of job satisfaction scores of 33 and 34. The next lowest job satisfaction score was 44. According to Osborne (2008) an outlier may be a data point

that is three standard deviations away from the mean. The researcher chose to leave both data points for analysis because there were two data points, and because of the assumption that respondents were being truthful and honest when completing the job satisfaction instrument. A histogram of the responses is included in Appendix K. The descriptive statistics for the overall job satisfaction reported by this sample are summarized in Table 5.

Table 5
Descriptive Statistics for Overall Job Satisfaction

Mean	69.88
Median	71.00
Standard Deviation	9.16
Range	53
Minimum	33.00
Maximum	86.00

Job satisfaction was stratified by age, gender, and whether a faculty member received training or not. Those results are presented in Table 6. A couple of notable features can be detected through observation. Men exhibited higher attitudes of job satisfaction in their work at the ICCOC (mean = 70.74) than women (mean = 69.43). Overall job satisfaction scores increased with training (Yes training = 70.93; No training = 69.27) and job satisfaction scores tended to increase with age (<30 = 71.33; 31-39 = 65.64; 40-49 = 70.46; 50-59 = 70.26; >60 = 72.87).

Table 6
Select Job Satisfaction Scores by Demographic

Population Mean	69.88
Mean Male Job Satisfaction Score	71.74
Mean Female Job Satisfaction Score	69.43
Faculty Who Reported Training Module Completion	70.93
Faculty Who Did Not Report Training Module Completion	69.27
Mean Job Satisfaction Score by Age	
<30	71.33
30-39	65.64
40-49	70.46
50-59	70.26
>60	72.87

Research Question 1 asked, using regression to account for age and gender, what relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute® training modules, and job satisfaction reported among faculty members who teach online for the ICCOC? The first research question was answered through the use of regression analysis. The results of this analysis are presented in Table 7. The relationship of particular interest in Research Question 1 is the study of the relationship between the variables of Yes/No Training and Overall Job Satisfaction. The level of significance that was used for this study was set at an alpha level of .05 ($\alpha = .05$) and the p value for this variable was $.463 > .05$. Based on the p value, there is no evidence to support a relationship between training as a Yes/No variable and Overall Job Satisfaction, resulting in a failure to reject the null hypothesis. This study also controlled for the effect of Gender and Age when analyzing the relationship of training as a Yes/No variable and Overall Job Satisfaction. The p value for Gender in this study was $.557 > .05$ which does not provide enough evidence to support a relationship between Gender and Overall Job Satisfaction. The p value for Age in this study was $.023 < .05$ which does

provide evidence of a relationship between Age and Overall Job Satisfaction. R^2 is an estimate of the total variance in the dependent variable which is explained or predicted by all the independent variables (Vogt, 2007). The R^2 for the variables of Yes/No training, Gender and Age for Research Question 1 was .048.

Table 7

Predictions of Overall Job Satisfaction by Yes/No Training

Variable	B	SE	β	p
Intercept	63.544	4.939		.000
Gender	.932	1.583	-.048	.557
Yes/No Training	1.147	1.558	-.061	.463
Age	1.522	.664	.190	.023

Note. n=148. $R^2 = .048$ (Adjusted $R^2 = .028$)

Based on Table 7, the resulting linear equation for this model is as follows:

Overall Job Satisfaction = 63.544 + 0.932*(Gender) + 1.147 (Training) + 1.522 (Age Range). The regression equation allows researchers to see the effect on one variable when the other variable changes by some specific amount (Triola, 2008). The regression equation helps to predict overall job satisfaction when the other variables are known.

In conclusion, there is not enough evidence to support a relationship between Yes/No training and Overall Job Satisfaction for Research Question 1. There is also not enough evidence to support a relationship between Gender and Overall Job Satisfaction in this sample. There is enough evidence to conclude there is a relationship between Age and Overall Job Satisfaction among faculty members who teach online for the ICCOC.

Research Question 2 asked, using regression to account for Age and Gender, what relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute® training modules completed, and job satisfaction reported among faculty

members who teach online for the ICCOC? The results of Research Question 2 are presented in Table 8. Of particular interest in this study is the relationship between Increased Training and Overall Job Satisfaction. The level of significance that was used for this study was set at an alpha level of .05 ($\alpha = .05$) and the p value for this variable was $.330 > .05$. Based on the p value, there is no evidence to support a relationship between Increased Training as a continuous variable and Overall Job Satisfaction, resulting in a failure to reject the null hypothesis.

This study also controlled for the effect of Gender and Age when analyzing the relationship of Increased Training as a continuous variable and Overall Job Satisfaction. The p value for Gender in this study was $.542 > .05$ which does not provide enough evidence to support a relationship between Gender and Overall Job Satisfaction. The p value for Age in this study was $.028 < .05$ which does provide evidence of a relationship between Age and Overall Job Satisfaction. R^2 is an estimate of the total variance in the dependent variable which is explained or predicted by all the independent variables (Vogt, 2007). The R^2 for the variables of Increased Training, Gender and Age for Research Question 2 was .050.

The use of regression allows the researcher to identify the unique contribution of each predictor variable to the dependent variable (Vogt, 2007). Based on Table 8, the resulting linear equation for this model is as follows: Overall Job Satisfaction = $63.675 + .968*(\text{Gender}) + .760 (\text{Increased Training}) + 1.477 (\text{Age Range})$. The regression equation allows researchers to see the effect on one variable when the other variable changes by some specific amount (Triola, 2008). Adding each variable of gender, increased training and age will help to predict overall job satisfaction.

Table 8
Predictions of Overall Job Satisfaction by Increased Training

Variable	B	SE	β	p
Intercept	63.675	2.514		.000
Gender	.968	1.581	-.050	.542
Increased Training	.760	.778	.081	.330
Age	1.477	.667	.185	.028

Note. n=148. $R^2 = .050$ (Adjusted $R^2 = .031$)

In conclusion, there is not enough evidence to support a relationship between increased training and overall job satisfaction for Research Question 2. There is also not enough evidence to support a relationship between gender and job satisfaction in this sample. There is enough evidence to conclude there is a relationship between age and job satisfaction among faculty members who teach online for the ICCOC.

In summary, the null hypothesis for Research Question 1 cannot be rejected. The result is that the alternative hypothesis cannot be supported by the data from this sample of ICCOC online faculty members. The same holds true for Research Question 2. The null hypothesis for Research Question 2 cannot be rejected and the alternative hypothesis cannot be supported.

Evaluation of Findings

The study findings are briefly reported and evaluated in this section. Special attention is directed at the findings of this study compared to previous research uncovered in the literature review. The findings of this study were rather incremental in nature, as explained below.

Job satisfaction is a topic that has been studied repeatedly over time in different occupations (Spector, 1997). The context of this study centered on the further

investigation of overall job satisfaction for faculty members who teach online. The use of the Index of Job Satisfaction (IJS) was used to determine the overall job satisfaction level of online faculty members. The midpoint of the IJS is 54 and in this study, the mean overall job satisfaction score of this sample of ICCOC faculty members was significantly higher at 69.89. This study confirms previous research (Gappa, Austin, & Trice, 2007; Hurtado & DeAngelo, 2009; Lin, Pearce & Wang, 2009; Pearson & Seiler, 1983) that faculty members are relatively satisfied in they work that they do.

Research Question 1. What relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute® training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

The p value of the variable yes/no training ($p=.463 > .05$) indicated there was insufficient evidence to indicate a relationship between training as a yes/no variable as a predictor of overall job satisfaction, controlling for age and gender, as reported in Table 6. In this study, there was also not enough evidence ($p=.557 > .05$) to confirm a relationship between gender and overall job satisfaction in the sample, controlling for age and training. However, there was evidence of a statistically linear relationship between age ($p=.023 < .05$) and overall job satisfaction, controlling for training and gender. In conclusion, the answer to Research Question 1 is that there was not enough evidence to show a linear relationship between training, defined as a yes/no completion of any Pearson eTeaching Institute® training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender. This study has offered additional information in the direction supporting the theory that

training increases overall job satisfaction for online faculty members, but the effect was not significant in this study.

An evaluation of the findings of Research Question 1 reveals the following. The presence of training, in the form of completing a single online course module, was not found to increase job satisfaction in a statistically significant way in this study. This finding was somewhat unexpected. The literature review had indicated that as training increased, job satisfaction increased as well (Dardar et al., 2011; Hartline & Ferrell, 1996; Jones, 2008; Sahinidis & Bouris, 2008). A potential explanation for this finding is the variety of training options offered to faculty members through the ICCOC such as face-to-face training, spring conferences, workshops, and other training options. As the ICCOC offers different ongoing training opportunities, the presence of those alternatives may partially account for overall high job satisfaction scores. As the ICCOC offers many different types of training, the online training modules do not independently contribute significantly to overall job satisfaction of ICCOC faculty members. Various studies have issued a call to administrators to develop web based training modules for faculty training (Pagliari, Batts, & McFadden, 2009; Kanuka, Jugdev, Heller, & West, 2008).

A review of the literature predicted job satisfaction to increase as age increased (Amalia, & Nikolaos, 2009; Bolin, 2007; Lin et al., 2009; Schroder, 2008; Tillman & Tillman, 2008; Zhang et al., 2008) and this was confirmed in this study as well. A review of the literature also predicted job satisfaction to show a statistically significant difference based on gender (Absher, 2009; Bolin, 2007; Bozeman & Gaughan, 2011; Hurtado & DeAngelo, 2009; Johnson, 2010; Sabharwal & Corley, 2009; Spivey, Chrisholm-Burns,

Murphy, Rice, &Morelli, 2009; Zhang, Verstegen, & Kim, 2008), but that was not the case in this study.

Research Question 2. What relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute® training modules completed, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender? Insufficient evidence was found to indicate a relationship between additional training ($p=.330 > .05$) and overall job satisfaction, controlling for age and gender. There was also not statistically significant evidence to confirm a relationship between gender ($p=.542 > .05$) and overall job satisfaction in this sample, controlling for age and training. However, there was evidence of a statistically significant relationship between age ($p=.028 < .05$) and overall job satisfaction, controlling for training and gender.

Based on the literature review (Ayres & Malouff, 2007; Costen & Salazar, 2011; Taormina, 1999), there was an anticipated positive relationship between increased training and increased job satisfaction. The results of this study have offered additional information in the direction that supporting additional training increases overall job satisfaction for online faculty members, but the effect is not significant in this study. While not significant in this study, men exhibited higher attitudes of job satisfaction in their work at the ICCOC (mean = 70.74) than women (mean = 69.43) confirming findings from other studies highlighted in the literature review (Absher, 2009; Bolin, 2007; Bozeman & Gaughan, 2011; Hurtado & DeAngelo, 2009; Johnson, 2010; Sabharwal & Corley, 2009; Spivey, Chrisholm-Burns, Murphy, Rice, &Morelli, 2009; Zhang, Verstegen, & Kim, 2008). The finding in this study that feelings of overall job

satisfaction increased with age confirms other studies covered in the literature review (Amalia & Nikolaos, 2009; Bolin, 2007; Lin et al., 2009; Schroder, 2008; Tillman & Tillman, 2008; Zhang et al., 2008).

An evaluation of the findings of Research Question 2 reveals the following. The presence of training, in the form of completing additional online course modules, was not found to increase job satisfaction in a statistically significant way in this study. This finding was also somewhat unexpected based on a review of the literature. The literature review had indicated that as training increased, job satisfaction increased as well (Dardar et al., 2011; Hartline & Ferrell, 1996; Jones, 2008; Sahinidis & Bouris, 2008). A potential explanation for this finding is the variety of training options offered to faculty members through the ICCOC such as face-to-face training, spring conferences, workshops, and other training options. As the ICCOC offers different ongoing training opportunities, the presence of those alternatives may partially account for generally high overall job satisfaction scores. As the ICCOC offers many different types of training, the online training modules may not independently contribute significantly to overall job satisfaction of ICCOC faculty members.

Summary

The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC, while controlling for age and gender. A review of the literature indicated age and gender were two variables strongly linked to job satisfaction. Regression analysis was the

appropriate model to control for the variables of age and gender while analyzing the relationship between training and overall job satisfaction.

This study found that neither completing a single course module nor completing one or more course modules was a significant factor when predicting overall job satisfaction at $p < .05$ level, controlling for age and gender. The analysis of each training variable did offer support in the direction of training possibly affecting overall job satisfaction; however, the support was not statistically significant. In this study, the effect of gender is likewise not significant at $p < .05$ level. However, the results of this study did support previous research and found the variable of age to be a statistically significant variable for both Research Question 1 ($p = .023 < .05$) and Research Question 2 ($p = .028 < .05$).

Chapter 5: Implications, Recommendations, and Conclusions

Online educational opportunities for students and faculty continue to grow globally (Lynch & James, 2012), in the United States (Allen & Seaman, 2011; Moloney et al., 2010), and specifically at the Iowa Community College Online Consortium (ICCOC). Faculty members need to be trained to deliver quality coursework online, and the ICCOC trains online faculty through various methods such as: F2F training at each campus, a Spring Conference, Fall Workshop, and faculty mentor colleagues, as well as through six online course modules currently negotiated into the Pearson Learning Studio© contract. As research has found the benefits of faculty job satisfaction to be improved retention and student achievement (De Paola, 2009; Huysman, 2008; Willis & Varner, 2010), and, as the ICCOC is using the online course modules as a means to train and support online faculty, the specific problem is the ICCOC does not know whether the expensive online course modules result in increased job satisfaction for online faculty members. The purpose of this quantitative, correlational study was to examine whether the presence and amount of training received through the online course modules predicted the level of job satisfaction reported by online faculty members who work for the ICCOC, while controlling for the variables of age and gender.

The relationship between training and overall job satisfaction was analyzed with a quantitative method and correlational study design using regression analysis for both research questions. A one-time online survey was sent to all ICCOC faculty members who taught online for the ICCOC during the 2011-2012 academic year to collect data on training received and overall job satisfaction. The study population was comprised of approximately 497 faculty members who were invited to participate in the survey.

Regression analysis was used to identify the degree of relationship, if any, between a) training (yes/no) and job satisfaction and b) training (how much) and job satisfaction for online faculty members. The use of regression in this study allowed for the control of variables including age and gender which are known to be related to faculty satisfaction. As the goal of this study was to examine the relationship between the variables of training and job satisfaction, quantitative analysis is a better fit than other research alternatives.

This research design did have inherent limitations. A correlational design lacks random assignment to a control group and prevents the investigator from determining causality as the variables under investigation may affect each other (Vogt, 2005). However, the use of regression analysis to answer the research questions allowed for the ability to make predictions without presuming causality (Vogt, 2007). A second limitation of this study is that only ICCOC faculty members were surveyed, and study findings should be confined to ICCOC faculty population and the results may not be generalizable to other faculty who teach online at other institutions. A third limitation with the correlational design is participants were not randomly assigned to groups while the researcher manipulated one variable to determine the effects on another variable. The respondents were grouped according to whether they had previously taken an online course module or not. Another limitation of this study is the respondents' ratings of job satisfaction were captured only at a specific point in time. This is not a longitudinal study with job satisfaction data collected over a period of time, for example before and after the completion of training modules.

Another problem was related to the extraneous variables in the study and was a surprisingly strong limitation for this study. The literature review showed job satisfaction has a host of contributing factors that may exert influence on the study results. While it was not possible to control for all the covariates which may relate to job satisfaction, the variables of age and gender were controlled in this analysis through the use of regression analysis.

The ethical dimensions of this study were minimal. The author sought Northcentral University Institutional Review Board (IRB) approval, and no data were collected before IRB approval. General ethical standards that applied to this study included the risks of confidentiality and privacy, as well as loss of time (Belmont Report, 1979). In an attempt to minimize these risks, participants were informed about the purpose of the study, the risks as well as the benefits, and each participant had the freedom to remove themselves from the study at any time through language in both the email invitation to participate and a consent form which was posted as the first page of the online survey (Appendix G). Participants were advised that survey completion was completely voluntary and anonymity was assured. In an attempt to reduce the specific risk of confirming the adult status of online participants, the survey link was emailed to participants primarily through an employee email account.

A risk of the current study was ensuring individual privacy. The Internet company SurveyMonkey® was used to collect data. No names or identifying information was requested to ensure the anonymity of participants. After the data was downloaded from SurveyMonkey®, the data was stored on a laptop with access protected by a password. Overall, there is minimal risk with an online survey (Belmont Report, 1979).

The remainder of the chapter will discuss the implications of the study findings. Each research question will be examined, followed by summarized findings and conclusions. Recommendations for practice and future research will be discussed and finally conclusions of the study will be presented.

Implications

Before analyzing each research question, specific limitations that may pertain to each research question will be considered. Following the limitations of the study, each of the research questions and hypotheses which guided this study are presented followed by a discussion of implications for each question with regards to the problem, purpose and significance of the study. Finally, the findings will be compared with the literature review covered in Chapter 2.

One limitation of this study was that only ICCOC faculty members were surveyed, and this study did not focus on faculty members who taught online for a wide number of institutions. In this case it is common practice to confine the findings only to the population of ICCOC faculty that was sampled and the results may not be generalizable to a broader population of faculty who teach online or to other types of organizations (Vogt, 2007). A further limitation of the current proposed study was the use of a convenience sample of ICCOC faculty members, which again limited the generalizability of the results beyond this population. The timing of the survey was critical in the author's eyes. The author felt the survey could not be offered at the beginning or the end of an online course due to the additional time required for course preparation at the beginning of the semester and grading at the end of the semester for most faculty members. The survey was administered primarily during the summer month

of July. While the response rate for this population was adequate, the response rate may have been hindered somewhat because the email requests were sent in the summer when ICCOC faculty members may not have office hours.

This study assumed respondents followed the instructions presented, attempted to answer each question without bias, and considered only their feeling of job satisfaction in relation to teaching online. However, as some respondents teach online and face-to-face (F2F) simultaneously, there is potential for skewed responses.

This study did not include the other training options available to ICCOC faculty members such as F2F training sessions via trainers, conferences, and workshops. The purpose of this research study was simply to evaluate the effect of one training program option, whether the completion of a single Pearson® online training module affected overall job satisfaction reported. Additionally, a review of the literature indicated there were many other variables which contributed to the job satisfaction of an online faculty member such as student characteristics (Bolliger & Wasilik, 2009; Hiltz et al., 2010; Hoyt et al., 2007; Kyei-Blankson, 2009), a highly interactive learning environment (Bolliger & Wasilik, 2009), and the mastery and creative application of new technologies (Rosser, 2005) which were beyond the scope of this study.

Two additional limitations are worth noting. First, the results of this study may be time sensitive due to the changing nature of online instruction. Finally, the ICCOC is generally restricted to small schools and rural settings. A variance in job satisfaction may occur with larger institutions in urban locations.

The study findings will be analyzed for Research Question 1 in the context of the problem statement and purpose of the study. Findings for Research Question 2 will be

analyzed as well. Finally, the findings will be analyzed and related to the literature review and the significance of the study will be discussed.

Research Question 1. The following is a restatement of Research Question 1 and its associated null and alternative hypotheses:

Q1. What relationship, if any, exists between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

H1₀. There is no relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H1_a. There is significant relationship between training, defined as yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

The p value of the variable yes/no training ($p=.463 > .05$) indicated there was insufficient evidence to indicate a relationship between training as a yes/no variable as a predictor of overall job satisfaction, controlling for age and gender. The purpose of this research question was to examine whether the presence of training received through the online course modules predicted the level of job satisfaction reported by ICCOC online faculty members, while controlling for the variables of age and gender. The answer to Research Question 1 is that training as a yes/no variable in this study does not predict the overall job satisfaction level of faculty members who teach for the ICCOC. The specific

problem which guided Research Question 1 is the ICCOC did not know whether the Pearson© online course modules increased job satisfaction for online faculty members. The answer, based on the p values calculated by an analysis of the data, is that the online course modules do not contribute to ICCOC faculty satisfaction in a statistically significant way.

The results of Research Question 1 do not support earlier findings that there was a positive relationship between training and job satisfaction. A review of the literature predicted there would be an increase in overall job satisfaction as training levels increased (Dardar et al., 2011; Hartline & Ferrell, 1996; Jones, 2008; Sahinidis & Bouris, 2008). This study has offered additional information in the direction supporting the theory that training increases overall job satisfaction for online faculty members, but the effect was not significant in this study. Using R^2 values, the percent of the variation in the dependent variable that is related to the independent variable can be determined. The R^2 for Research Question 1 was .048, meaning that the three variables combined explain 4.8% of the variance in job satisfaction. The effect of the presence of training alone on overall job satisfaction was .8% ($R^2 = .008$).

The study is rather conclusive that among this sample the online course modules available through Pearson® do not effect overall job satisfaction as the p value (.463) is rather distant from .05 and R^2 for Research Question 1 ($R^2 = .008$) offers an extremely low level of prediction. For this reason it is not advisable for ICCOC leaders to offer an online course module for the sole reason of attempting to increase faculty satisfaction, as there is not statistical evidence to indicate the completion of a single online course module affects overall job satisfaction in a statistically significant way. The results of this

study are inconclusive as to whether training in general increases job satisfaction for online faculty members who teach for the ICCOC as other forms of training offered by the ICCOC were not investigated as part of this study. In conclusion, the answer to Research Question 1 is that there is not enough evidence to show a relationship between training, defined as a yes/no completion of any Pearson eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

Research Question 2. The following is a restatement of Research Question 2 and its associated null and alternative hypotheses:

Q2. What relationship, if any, exists between training, defined as the number of Pearson eTeaching Institute© training modules completed, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender?

H2₀. There is no relationship between training, defined as the number of Pearson eTeaching Institute© training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

H2_a. There is significant relationship between training, defined as the number of Pearson eTeaching Institute© training modules completed, and the job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender.

There is insufficient evidence provided through this study to indicate a relationship between additional training ($p=.330 > .05$) and overall job satisfaction, controlling for age and gender for Research Question 2. The answer to Research Question 2 is that there is not enough evidence to show a linear relationship between increased

training, defined as completion of one or more Pearson® eTeaching Institute© training modules, and job satisfaction reported among faculty members who teach online for the ICCOC, controlling for age and gender. The specific problem which guided this research question is the ICCOC administrators did not know whether the completion of additional Pearson® online course modules increased job satisfaction for online faculty members. The purpose of this research question was to examine whether the amount of training received through the online course modules predicted the level of job satisfaction reported by ICCOC online faculty members, while controlling for the variables of age and gender. Faculty who reported completing additional online course modules did not report statistically significant higher job satisfaction scores compared to faculty who had completed just one module. The results of this study do not support earlier findings that there was a positive relationship between training and job satisfaction. A review of the literature predicted there would be an increase in overall job satisfaction as training levels increased (Dardar et al., 2011; Hartline & Ferrell, 1996; Jones, 2008; Sahinidis & Bouris, 2008).

The results of Research Question 2 have offered additional information to support the theory that training increased overall job satisfaction for online faculty members, but the effect was not significant in this study. The R^2 for this Research Question 2 was .050, meaning the three variables of increased training, age, and gender, combined explain 5.0% of the variance in job satisfaction. The effect of the amount of training alone on overall job satisfaction was 1.3% ($R^2 = .013$).

The study is conclusive for this sample that completing additional online course modules available through Pearson® did not affect overall job satisfaction as the p value

(.330) was distant from .05 and R^2 for Research Question 2 ($R^2 = .013$) offered a rather low level of prediction. The results of this study are inconclusive as far as whether training in general increases job satisfaction for online faculty members who teach for the ICCOC as other forms of training offered by the ICCOC were not measured as part of this study. This study was also unable to support an exploratory study which concluded that online instructors should be provided with training which is delivered online (Kanuka, Jugdev, Heller, & West, 2008).

Literature review.

In a discussion of how to prepare F2F faculty to teach, training was shown to be significantly and positively connected with job satisfaction (Jones, 2008). Another study of online training showed specific distance learning training is recommended (Perreault et al., 2008). The results of a study to determine whether community college faculty members participated in training opportunities found a need for further development of training for faculty who teach online courses (Batts et al., 2010). These findings indicated the need for training for faculty members, and specifically online faculty members. Studies that have analyzed job satisfaction of online faculty members (Bolin, 2007; Gullickson, 2011) have not investigated whether the level of job satisfaction reported was related to training the faculty members received (Orr et al., 2009). This study sought to further explore training for online faculty members. This study also made a valuable contribution to existing knowledge by extending what is known about the relationship between training and job satisfaction in the online teaching and learning environment.

In order to develop and sustain successful online programs, institutions are encouraged to address the needs of online instructors in a systematic manner and employ

different mechanisms to support instructors when teaching online (Roman, Kelsey, & Lin, 2010). Other recommendations for online faculty members include regular training opportunities (Al Salman, 2011; Fish & Wickersham, 2009; Jackowski & Akroyd, 2010; Marek, 2009). The ICCOC has a systematic process of training online faculty members through F2F, conferences and workshops, faculty mentor colleagues, and online course modules. The present study does not refute the findings by Roman, Kelsey and Lin (2010), but evidence is not present to support a relationship between online course module completion and increased job satisfaction.

A review of the literature predicted there would be high overall job satisfaction levels reported by faculty members. Compared with other professional fields, higher education enjoys an overall high level of faculty satisfaction (Gappa, Austin, & Trice, 2007; Lin, Pearce & Wang, 2009). In one study, nearly three out of four faculty members (74.8%) reported high overall job satisfaction (Hurtado & DeAngelo, 2009). The National Study of Postsecondary Faculty (NSOPF) (2004) showed high degrees of overall job satisfaction for faculty (87.5%), regardless of appointment, career stage, institution, gender, or ethnic background (Gappa, Austin, & Trice, 2007). The results of this study support previous research findings. The faculty in this study had a mean overall job satisfaction score of 69.88 on a possible range of 18-90 where neutral was 54.

Furthermore, the literature found overall job satisfaction to be related to age (Amalia, & Nikolaos, 2009; Bolin, 2007; Lin et al., 2009; Schroder, 2008; Tillman & Tillman, 2008; Zhang et al., 2008) and gender (Absher, 2009; Bolin, 2007; Bozeman & Gaughan, 2011; Hurtado & DeAngelo, 2009; Johnson, 2010; Sabharwal & Corley, 2009; Spivey, Chrisholm-Burns, Murphy, Rice, & Morelli, 2009; Zhang, Verstegen, & Kim,

2008). This study was able to extend research for the relationship between increased age and increased job satisfaction, but was unable to extend research for a relationship between gender and job satisfaction scores.

Study significance.

In spite of the work by Chen (2011) who noted the satisfaction of university faculty members with their current work environment can promote improved teaching quality, inquiries into faculty job satisfaction have been limited specifically to faculty satisfaction for online courses (Bair & Bair, 2011; Kearsley, 2010; Schulte, 2010). Faculty satisfaction also needs to be continuously assessed to assure quality educational experiences for faculty and students in the online context (Bozeman & Gaughan, 2011). This was a significant study because it helped leaders and administrators clearly understand the relationship between the online Pearson© training modules and job satisfaction for faculty members who teach online.

Specifically, the findings from this study provided Iowa Community Online Consortium (ICCOC) leaders with information that is useful for decision making about whether or not the Pearson© training modules should be offered to ICCOC faculty members. The findings of this study show overall job satisfaction was not improved with the completion of one or more course modules.

As faculty members with high levels of job satisfaction have proven to be a predictor of student achievement (Willis & Varner, 2010), this study is significant as previous research has identified job satisfaction levels affect the quality of faculty work, which may ultimately affect student persistence and retention (McLawhon & Cutright, 2011). One study found faculty who reported a lack of technical expertise and support

(Haber & Mills, 2008) could lower job satisfaction as well. Other researchers have also found a positive relationship between faculty satisfaction and perceived quality of online courses (Rodriguez, Oom, & Montanez, 2008).

Other findings.

In Research Question 1, there was also not enough evidence ($p=.557 > .05$) to confirm a relationship between gender and overall job satisfaction in this sample, controlling for age and training received or no training received. Likewise, the results of Research Question 2 cannot confirm a statistically significant relationship between gender ($p=.542 > .05$) and overall job satisfaction, controlling for age and increased training in the form of additional course modules completed.

In the analysis of Research Question 1, however there was evidence of a statistically significant relationship between age ($p=.023 < .05$) and overall job satisfaction, controlling for training and gender. Similarly, the results of Research Question 2 provide evidence of a statistically significant relationship between age ($p=.028 < .05$) and overall job satisfaction, controlling for training and gender as well. This study was able to support previous findings in the literature review that there is a statistically significant relationship ($p=.023 < .005$) between increased age and feelings of overall job satisfaction controlling for training and gender (Amalia, & Nikolaos, 2009; Bolin, 2007; Lin et al., 2009; Schroder, 2008; Tillman & Tillman, 2008; Zhang et al., 2008).

For the ICCOC participants in this study, faculty members are generally highly satisfied with the work they do teaching online. The range of possible scores for this instrument was 18-90. The range for this sample was 33-86 with a mean of 69.89 and a

median of 71 which shows a fairly high level of job satisfaction for this population. Respondents indicated a high level of job satisfaction whether a Pearson® training module has been completed (mean = 70.93) or not (mean = 69.27). This study supports previous research confirming the generally high level of job satisfaction held by faculty members (Gappa, Austin, & Trice, 2007; Hurtado & DeAngelo, 2009; Lin, Pearce & Wang, 2009; Pearson & Seiler, 1983), that faculty members are relatively satisfied in they work they do.

This study was unable to prove gender makes a significant difference in the job satisfaction experienced by faculty at ICCOC. The findings of this study did support previous research regarding the relationship between increased age and increased job satisfaction.

Recommendations

The emphasis of this study was to broadly determine the effect of training on job satisfaction for online faculty members. Specifically, this study analyzed if there was a relationship between Pearson® online course modules and overall job satisfaction for ICCOC faculty members. The results of this study indicated there was not a statistically significant relationship between training and overall job satisfaction for either research question. Thus, it is this researcher's recommendation to not offer Pearson eTeaching Institute© training modules specifically for the sole reason of increasing job satisfaction.

It is recommended that policy makers and educators continue to explore the reasons and rationale for continuing to include the Pearson eTeaching Institute© as part of the current Pearson Learning Studio© contract. Another recommendation would include an overall review of the training goals, the desired outcomes, and the costs of

training opportunities. As each individual college does not require online course module completion, if applicable, decision makers should also continue to monitor reasons for requiring training module completion. The results of this study show that faculty job satisfaction increases with age, but there is not statistically significant differences according to gender. A final recommendation is that these findings can inform recruitment and hiring decisions of online faculty by the ICCOC.

Areas of further research

As the literature review identified various linkages between training and job satisfaction (Dardar et al., 2011; Hartline & Ferrell, 1996; Jones, 2008; Sahinidis & Bouris, 2008), and as this study only investigated the relationship of one type of training available to ICCOC faculty, it is possible the overall job satisfaction scores collected in this study reflect the impact of other training opportunities available to ICCOC faculty members. For these reasons a potential research question for the future may be, “Which training option offered by the ICCOC most closely predicts job satisfaction for ICCOC faculty members?” The analysis of which training method (F2F, workshop, conferences) predicts job satisfaction for ICCOC faculty members may be beneficial for ICCOC administrators to inform decisions of training and resource allocation. A second area of further research could explore if there is a relationship between training received and student satisfaction or training received and student evaluations.

As is typical in field research, reasonable and practical considerations required the researcher to exclude some potentially interesting variables from the study. This study could be repeated and expanded simply by exploring other contributing factors of job satisfaction in the ICCOC such as: ethnic background (Gappa, Austin, & Trice, 2007;

Trower, 2009), mentoring opportunities and relationship with mentor (Ambrose, Huston & Norman, 2005), and accounting for other available training opportunities. Additionally, further research could explore if there is a relationship between training and student satisfaction or training and student evaluations. These findings could prove to be important in promoting student success by training faculty to be successful online instructors. Future research may also benefit from mixed methodology and a larger sample size in each of these suggestions.

Conclusions

The purpose of this study was to determine if the Pearson® online training modules contributed to overall online faculty job satisfaction at the ICCOC, either by faculty members taking a single module, or by taking more than one module. The regression analysis revealed the effects of the Pearson® online training modules are not strong enough in this study to indicate whether overall job satisfaction was significantly improved by the completion of either a single or multiple training modules. Thus, this study was unable to show training conclusively increases job satisfaction for ICCOC online faculty members. The results presented in this study show there is no relationship between completing a single training module and higher job satisfaction reported by online faculty members, controlling for age and gender. The results presented in this study also show there is no relationship between completing one or more online training modules and higher job satisfaction reported by online faculty members, controlling for age and gender.

The results of this study have supported previous research findings that age is significantly related to job satisfaction (Amalia, & Nikolaos, 2009; Bolin, 2007; Lin et

al., 2009; Schroder, 2008; Tillman & Tillman, 2008; Zhang et al., 2008). This study extended the knowledge concerning age and job satisfaction in the online faculty environment. However, the results of this study have not provided evidence that there is a significant relationship between gender and job satisfaction (Absher, 2009; Bolin, 2007; Bozeman & Gaughan, 2011; Hurtado & DeAngelo, 2009; Johnson, 2010; Sabharwal & Corley, 2009; Spivey, Chrisholm-Burns, Murphy, Rice, & Morelli, 2009; Zhang, Verstegen, & Kim, 2008) for this sample of faculty members from the ICCOC. This study did provide a benchmark of job satisfaction levels ICCOC faculty, and the faculty members who teach for the ICCOC report relatively high job satisfaction scores. This finding informs ICCOC administrators, and distance education leaders at ICCOC member institutions, as well as supports previous research stating faculty members experience relatively high job satisfaction levels (Gappa, Austin, & Trice, 2007; Hurtado & DeAngelo, 2009; Lin, Pearce & Wang, 2009; Pearson & Seiler, 1983).

This research has sought to clarify the relationship between training and online faculty job satisfaction. Through the identification of variables that affect job satisfaction, ICCOC administration can make effective and sound decisions for the benefit of online faculty members. ICCOC leaders may use the results of this study to help determine whether the online course modules should be included in the next Pearson Learning Studio© contract. Additionally, because each college in the consortium has different training requirements, analyzing job satisfaction based on this training option can help university administrators make recommendations to each member college. The findings of this study, related to job satisfaction among ICCOC online faculty members, help to continue the examination of variables that effect online faculty member job satisfaction.

While the results of the study did not support the relationship between training and job satisfaction for online faculty members, there is evidence that more in-depth studies of the relationship between training and job satisfaction, and of training in the ICCOC, may be useful in the future.

References

- Absher, B. M. (2009). Attraction and retention of females and minorities in Christian higher education. *Journal Of Research On Christian Education*, 18(2), 160-189. doi:10.1080/10656210903046416
- Al-Salman, S. M. (2011). Faculty in online learning programs: Competencies and barriers to success. *Journal Of Applied Learning Technology*, 1(4), 6-13.
- Allen, I., Seaman, J., & Sloan, C. (2007). Blending in: The extent and promise of blended Education in the United States, 2007. Needham, MA: Sloan Consortium.
- Allen, I. E., & Seaman, J. (2009). Learning on demand: Online education in the United States, 2009. Needham, MA: Sloan Consortium.
- Allen, I. E., & Seaman, J. (2010). Class differences: Online education in the United States, 2010. Wellesley, MA: Babson Survey Research Group.
- Allen, I. E., & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011*. Wellesley, MA: Babson Survey Research Group.
- Amalia, M., & Nikolaos, A. (2009). Previous employment and job satisfaction conditions: The case of regional administration. *AIP Conference Proceedings*, 1148(1), 927-931. doi:10.1063/1.3225471
- Ambrose, S., Huston, T., & Norman, M. (2005). A qualitative method for assessing faculty satisfaction. *Research in Higher Education*, 46(7), 803-830.
- American Distance Education Consortium (ADEC). (n.d.). *Quality framework for online education*. Lincoln, NE: Author. Retrieved March 5, 2012, from <http://www.adec.edu/earmyu/SLOANC~41.html>
- Andersen, K. M., & Avery, M. D. (2008). Faculty teaching time: A comparison of web-based and face-to-face graduate nursing courses. *International Journal of Nursing Education Scholarship*, 5(1), 1-12.
- Andresen, M., Domsch, M., & Cascorbi, A. (2007). Working unusual hours and its relationship to job satisfaction: A study of European maritime pilots. *Journal of Labor Research*, 28(4), 714-734. doi:10.1007/s12122-007-9010-5
- Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student, the instructor, and the tenured faculty. *International Journal On E-Learning*, 7(1), 5-22.
- Are you ready for the future of online learning? (n.d.). Retrieved from http://www.ecollege.com/Higher_Education.learn

- Ayres, J., & Malouff, J. M. (2007). Problem-solving training to help workers increase positive affect, job satisfaction, and life satisfaction. *European Journal of Work & Organizational Psychology, 16*(3), 279-294. doi:10.1080/13594320701391804
- Badge, J. L., Dawson, E., Cann, A. J., & Scott, J. (2008). Assessing the accessibility of online learning. *Innovations in Education & Teaching International, 45*(2), 103-113. doi:10.1080/14703290801948959
- Baghdadi, Z. D. (2011). Best practices in online education: Online instructors, courses, and administrators. *Turkish Online Journal Of Distance Education (TOJDE), 12*(3), 109-117.
- Bair, D. E., & Bair, M. (2011). Paradoxes of online teaching. *International Journal For The Scholarship Of Teaching & Learning, 5*(2), 1-15.
- Baker, C. (2010). The impact of instructor immediacy and presence for online student affective learning, cognition, and motivation. *Journal Of Educators Online, 7*(1).
- Balsley, J. (2011). 5 tips on how to cope with budget cuts. *Arts & Activities, 150*(4), 10.
- Barajas, M., & Gannaway, G. J. (2007). Implementing e-learning in the traditional higher education institutions. *Higher Education in Europe, 32*(2/3), 111-119. doi:10.1080/03797720701840609
- Baran, E., Correia, A., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421-439. doi:10.1080/01587919.2011.610293
- Batts, D., Pagliari, L., Mallett, W., & McFadden, C. (2010). Training for faculty who teach online. *Community College Enterprise, 16*(2), 21-31.
- Bawane, J., & Spector, J. M. (2009). Prioritization of online instructor roles: Implications for competency-based teacher education programs. *Distance Education, 30*(3), 383-397.
- Belmont Report (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research*. Retrieved March 30, 2013, from hhs.gov/ohrp/humansubjects/guidance/belmont.html
- Benson, R., & Samarawickrema, G. (2009). Addressing the context of e-learning: using transactional distance theory to inform design. *Distance Education, 30*(1), 5-21. doi:10.1080/01587910902845972

- Bergström, P., & Granberg, C. (2007). Process diaries: Formative and summative assessment in on-line courses. In N. Buzzetto-More (Ed.), *Advanced principles of effective online teaching: A handbook for educators developing e-learning*. Santa Rosa, California: Information Science Press.
- Bergstrom, P. (2010). Process-based assessment for professional learning in higher education: Perspectives on the student-teacher relationship. *International Review Of Research In Open And Distance Learning*, 11(2), 33-48.
- Black, T. (1999). *Doing quantitative research in the social sciences*. Thousand Oaks, CA. Sage Publications Ltd.
- Bolin, F. (2007). A study of teacher job satisfaction and factors that influence it. *Chinese Education and Society*, 40(5), 47-64.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, 30(1), 103-116.
- Bonk, C. J., Kim, K., Oh, E., Teng, Y., & Son, S. (2007). The present and future state of blended learning in workplace learning settings in the United States. *Online Submission*, Presented at the Academy of Human Resource Development International Research Conference in the Americas (Indianapolis, IN, Feb 2007). 8, 1-8.
- Bozeman, B., & Goughan, M. (2011). Job satisfaction among university faculty: Individual, work, and institutional determinants. *Journal of Higher Education*, 82(2), 154-186.
- Bradford, P., Porciello, M., Balkon, N., & Backus, D. (2007). The blackboard learning System: The be all and end all in educational instruction? *Journal Of Educational Technology Systems*, 35(3), 301-314.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal Of Applied Psychology*, 35(5), 307-311.
- Brooks, C. F. (2010). Toward 'hybridised' faculty development for the twenty-first century: Blending online communities of practice and face-to-face meetings in instructional and professional support programmes. *Innovations In Education & Teaching International*, 47(3), 261-270. doi:10.1080/14703297.2010.498177
- Buckenmeyer, J., Hixon, E., Barczyk, C. C., & Feldman, L. (2011). Invest in the success of online programs at the university? Mentor professors. *Contemporary Issues In Education Research*, 4(6), 1-6.
- Chen, S. (2011). A performance matrix for strategies to improve satisfaction among faculty members in higher education. *Quality & Quantity*, 45(1), 75-89.

- Chih, J. T., Liu, C. H., & Lee, H. W. (2008). Relationship between trainee attitudes and dimensions of training satisfaction: An empirical study with training institute employees. *International Journal of Management*, 25(4), 756-765.
- Chubb, J., & Moe, T. (2012, May 30). Higher education's online revolution. *Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB10001424052702304019404577416631206583286.html?mod=ITP_opinion
- Chung, K., Song, J., Kim, H., Woolliscroft, J., Quint, E., Lukacs, N., & Gyetko, M. (2010). Predictors of job satisfaction among academic faculty members: Do instructional and clinical staff differ? *Medical Education*, 44(10), 985-995. doi:10.1111/j.1365-2923.2010.03766.x
- Clark-Ibáñez, M., & Scott, L. (2008). Learning to teach online. *Teaching Sociology*, 36(1), 34-41.
- Coe-Regan, J. R., & Youn, E. J. (2008). Past, present, and future trends in teaching clinical skills through web-based learning environments. *Journal Of Social Work Education*, 44(2), 95-115.
- Cohen, J. (1968). Multiple regression as a general data-analytic system. *Psychological Bulletin*, 70(6), 426-443.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Cook, R., Ley, K., Crawford, C., & Warner, A. (2009). Motivators and Inhibitors for University Faculty in Distance and e-learning. *British Journal Of Educational Technology*, 40(1), 149-163. doi:10.1111/j.1467-8535.2008.00845.x
- Costen, W. M., & Salazar, J. (2011). The impact of training and development on employee job satisfaction, loyalty, and intent to stay in the lodging industry. *Journal Of Human Resources In Hospitality & Tourism*, 10(3), 273-284. doi:10.1080/15332845.2011.555734
- Cozby, P. C. (2009). *Methods in behavioral research* (10th ed.). Boston: McGraw Hill Higher Education.
- Crawford-Ferre, H., & Wiest, L. R. (2012). Effective online instruction in higher education. *Quarterly Review Of Distance Education*, 13(1), 11-14.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

- Crews, T. B., Wilkinson, K., Hemby, K., McCannon, M., & Wiedmaier, C. (2008). Workload management strategies for online educators. *Delta Pi Epsilon Journal*, 50(3), 132-149.
- Dardar, A., Jusoh, A., & Md Rasli, A. (2011). Impact of training on job turnover: Evidence from contemporary literature. *Interdisciplinary Journal Of Contemporary Research In Business*, 3(4), 929-940.
- de Grip A., & Sauermann, J., (2012). Review: The effect of training on productivity: The transfer of on-the-job training from the perspective of economics. *Educational Research Review*. 2-9. doi:10.1016/j.edurev.2012.05.005
- de Grip, A., Sieben, I., & Stevens, F. (2009). Are more competent workers more satisfied? *LABOUR: Review Of Labour Economics & Industrial Relations*, 23(4), 589-607. doi:10.1111/j.1467-9914.2009.00463.x
- de Moura, G., Abrams, D., Retter, C., Gunnarsdottir, S., & Ando, K. (2009). Identification as an organizational anchor: How identification and job satisfaction combine to predict turnover intention. *European Journal Of Social Psychology*, 39(4), 540-557.
- De Paola, M. (2009). Does teacher quality affect student performance? Evidence from an Italian university. *Bulletin Of Economic Research*, 61(4), 353-377. doi:10.1111/j.1467-8586.2008.00299.x
- Dempsey, J. V., Fisher, S. F., Wright, D. E., & Anderton, E. K. (2008). Training and support, obstacles, and library impacts on elearning activities. *College Student Journal*, 42(2), 630-636.
- Dixson, M. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of Scholarship of Teaching and Learning*, 10(2), 1-13.
- Dooley, K. E., Lindner, J. R., Telg, R. W., Irani, T., Moore, L., & Lundy, L. (2007). Roadmap to measuring distance education instructional design competencies. *Quarterly Review of Distance Education*, 8(2), 151-159.
- Eddy, P. L. (2010). New faculty issues: Fitting in and figuring it out. *New Directions For Community Colleges*, (152), 15-24.
- Enkuzena, S. (2011). Management training during socio-economical crisis: Tool to increase job satisfaction? A case study of a retail store chain in Latvia. *Management Of Organizations: Systematic Research*, (59), 35-53.

- Falloon, G. (2011). Making the connection: Moore's theory of transactional distance and its relevance to the use of a virtual classroom in postgraduate online teacher education. *Journal Of Research On Technology In Education*, 43(3), 187.
- Feistritzer, E., Griffin, S., & Linnajarvi, A. (2011). Profile of teachers in the U.S. Retrieved from http://www.ncei.com/Profile_Teachers_US_2011.pdf
- Fillion, G., Limayem, M., Laferrière, T., & Mantha, R. (2009). Integrating information and communication technologies into higher education: Investigating onsite and online students' points of view. *Open Learning*, 24(3), 223-240.
- Fish, W. W., & Wickersham, L. E. (2009). Best practices for online instructors: Reminders. *Quarterly Review of Distance Education*, 10(3), 279-284.
- Foster, G. (2010). Teacher effects on student attrition and performance in mass-market tertiary education. *Higher Education: The International Journal Of Higher Education And Educational Planning*, 60(3), 301-319.
- Fowler, F. (2009). *Survey research methods*. Los Angeles, CA: Sage Publications.
- Freeman, D., Pisani, R., & Purves, R. (2007). *Statistics*. New York City, NY: W. W. Norton & Company.
- Gabriel, M. A., & Kaufield, K. J. (2008). Reciprocal mentorship: An effective support for online instructors. *Mentoring and Tutoring: Partnership in Learning*, 16(3), 311-327.
- Gappa, J., Austin, A., and Trice, A. (2007). *Rethinking faculty work: Higher education's strategic imperative*. San Francisco: Jossey-Bass.
- Gautreau, C. (2011). Motivational factors affecting the integration of a learning management system by faculty. *Journal Of Educators Online*, 8(1), 1-25.
- Gaytan, J., & McEwen, B.C. (2007). Effective online instructional and assessment strategies. *American Journal of Distance Education*, 21(3), 117-132.
- George, J.M., & Jones, G.R. (2008). *Understanding and managing organizational behavior* (5th ed.). Upper Saddle River: New Jersey, Pearson Prentice Hall.
- Georgina, D., & Olson, M. (2008). Integration of technology in higher education: A review of faculty self-perceptions. *Internet and Higher Education*, 11(1), 1-8.
- Gladhart, M. A. (2010). Determining faculty needs for delivering accessible electronically delivered instruction in higher education. *Journal Of Postsecondary Education And Disability*, 22(3), 185-196.

- Green, T., Alejandro, J., & Brown, A. H. (2009). The retention of experienced faculty in online distance education programs: Understanding factors that impact their involvement. *International Review Of Research In Open And Distance Learning*, 10(3), 1-15.
- Guasch, T., Alvarex, I., & Espasa, A. (2010). University teacher competencies in a virtual teaching/learning environment: Analysis of a teacher training experience. *Teaching and Teacher Education*, 26(2), 199-206. doi: 10.1016/j.tate.2009.02.018
- Gullickson, L. (2011). *Herzberg's theory of motivation as applied to community college full-time and adjunct online faculty* (Doctoral dissertation, The University of South Dakota).
- Haber, J., & Mills, M. (2008). Perceptions of barriers concerning effective online teaching and policies: Florida community college faculty. *Community College Journal of Research & Practice*, 32(4-6), 266-283.
- Hagedorn, L. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. In L. Hagedorn (Ed.), *What contributes to job satisfaction among faculty and staff*. San Francisco: Jossey-Bass Publishers.
- Harel, G. H., & Tzafrir, S. S. (1999). The effect of human resource management practices on the perceptions of organizational and market performance of the firm. *Human Resource Management*, 38(3), 185-200.
- Hartline, M. D., & Ferrell, O. C. (1996). The management of customer-contact service employees: An empirical investigation. *Journal Of Marketing*, 60(4), 52-70.
- Hays, W. (1994). *Statistics* (5th ed.). New York, NY: Harcourt Brace College Publishers.
- Herzberg, F. (1973). *Work and the nature of man*. New York, NY: The World Publishing Company.
- Hiltz, S., Shea, P., & Kim, E. (2010). Using focus groups to study ALN faculty motivation. *Journal of Asynchronous Learning Networks*, 14(1), 21-38.
- Hixon, E., Barczyk, C., Buckenmeyer, J., & Feldman, L. (2011). Mentoring university faculty to become high quality online educators: A program evaluation. *Online Journal Of Distance Learning Administration*, 14(4).
- Hoffman, R., & Dudjak, L. (2012). From onsite to online: Lessons learned from faculty pioneers. *Journal Of Professional Nursing*, 28, 255-258. doi:10.1016/j.profnurs.2011.11.015

- Horvath, V. E., & Mills, C. S. (2011). The challenges for faculty using interactive television in distance education. *Journal Of Technology In Human Services*, 29(1), 33-48. doi:10.1080/15228835.2011.568678
- Hoyle, J. (2010). The trials and accomplishments of an online adjunct faculty member. *New Directions For Community Colleges*, (150), 37-42.
- Hoyt, J. E., Howell, S. L., & Eggett, D. (2007). Dimensions of part-time faculty job satisfaction: Development and factor analysis of a survey instrument. *Journal of Adult Education*, 36(2), 23-34.
- Hung, H., & Wong, Y. (2007). The relationship between employer endorsement of continuing education and training and work and study performance: A Hong Kong case study. *International Journal of Training & Development*, 11(4), 295-313. doi:10.1111/j.1468-2419.2007.00287.x
- Hurtado, S., & DeAngelo, L. (2009). Keeping senior women at your college. *Academe*, 95(5), 18-20.
- Huysman, J. T. (2008). Rural teacher satisfaction: An analysis of beliefs and attitudes of rural teachers' job satisfaction. *Rural Educator*, 29(2), 31-38.
- IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.
- ICCOC – about us. (n.d.). Retrieved March 5, 2012 from <http://www.iowaconline.org/6.html>
- Irving, P., & Montes, S. D. (2009). Met expectations: The effects of expected and delivered inducements on employee satisfaction. *Journal of Occupational & Organizational Psychology*, 82(2), 431-451.
- Isaac, E., & Boyer, P. G. (2007). Voices of urban and rural community college minority faculty: Satisfaction and opinions. *Community College Journal Of Research & Practice*, 31(5), 359-369. doi:10.1080/10668920600851639
- Jackowski, M. B., & Akroyd, D. (2010). Technology usage among community college faculty. *Community College Journal Of Research & Practice*, 34(8), 624-644. doi:10.1080/10668920701831530
- Jackson, L. C., Jones, S. J., & Rodriguez, R. C. (2010). Faculty actions that result in student satisfaction in online courses. *Journal Of Asynchronous Learning Networks*, 14(4), 78-96.

- Johnson, G. M. (2010). *What is it that satisfies faculty? Rank as a consideration in factors related to job satisfaction*. Paper presented at Association for Institutional Research Forum, Chicago, IL.
- Johnson, T., Wisniewski, M., Kuhlemeyer, G., Isaacs, G., & Krzykowski, J. (2012). Technology adoption in higher education: Overcoming anxiety through faculty bootcamp. *Journal Of Asynchronous Learning Networks*, 16(2), 63-72.
- Johnson A. E. (2008). A nursing faculty's transition to teaching online. *Nursing Education Perspectives*, 29(1), 17-22
- Jones, A. (2008). Preparing new faculty members for their teaching role. *New Directions For Higher Education*, (143), 93-100.
- Jones, M. K., Jones, R. J., Latreille, P. L., & Sloane, P. J. (2009). Training, job satisfaction, and workplace performance in Britain: Evidence from WERS 2004. *LABOUR: Review Of Labour Economics & Industrial Relations*, 23, 139-175. doi:10.1111/j.1467-9914.2008.00434.x
- Journell, W. (2010). Perceptions of e-learning in secondary education: a viable alternative to classroom instruction or a way to bypass engaged learning? *Educational Media International*, 47(1), 69-81.
- Kalleberg, A. L. (1977). Work values and job rewards: A theory of job satisfaction. *American Sociological Review*, 42(1), 124-143.
- Kanuka, H., Jugdev, K., Heller, R., & West, D. (2008). The rise of the teleworker: False promises and responsive solutions. *Higher Education*, 56(2), 149-165.
- Karim, M., Huda, K., & Khan, R. (2012). Significance of training and post training evaluation for employee effectiveness: An empirical study on Sainsbury's Supermarket Ltd, UK. *International Journal Of Business & Management*, 7(18), 141-148. doi:10.5539/ijbm.v7n18p141
- Kearsley, G. (2010). Online teaching: State of the art. *Contemporary Educational Technology*, 1(1), 87-89.
- Keengwe, J., Kidd, T., & Kyei-Blankson, L. (2009). Faculty and technology: Implications for faculty training and technology leadership. *Journal Of Science Education & Technology*, 18(1), 23-28. doi:10.1007/s10956-008-9126-2
- Kerr, S. (2010). High school online: Pedagogy, preferences, and practices of three online teachers. *Journal Of Educational Technology Systems*, 39(3), 221-244. doi:10.2190/ET.39.3.b

- Kilic-Cakmak, E., Karatas, S., & Ocak, M. (2009). An analysis of factors affecting community college students' expectations on e-learning. *Quarterly Review Of Distance Education*, 10(4), 351-361.
- Kim, D., Twombly, S., & Wolf-Wendel, L. (2008). Factors predicting community college faculty satisfaction with instructional autonomy. *Community College Review*, 35(3), 159-180.
- Kim, Y., & Sax, L. (2009). Student–faculty interaction in research universities: Differences by student gender, race, social class, and first-generation status. *Research In Higher Education*, 50(5), 437-459.
- Knoop, R. (1994). Work values and job satisfaction. *Journal Of Psychology: Interdisciplinary And Applied*, 128(6), 683-690.
- Knowles, M. S. (1970). *The modern practice of adult education*. New York: Association Press.
- Kocabaş, İ. (2009). The effects of sources of motivation on teachers' motivation levels. *Education*, 129(4), 724-733.
- Kupczynski, L., Mundy, M., & Jones, D. J. (2011). A study of factors affecting online student success at the graduate level. *Journal Of Instructional Pedagogies*, 5, 1-10.
- Kyei-Blankson, L. (2009). Learning to teach and teaching online: Faculty-faculty interactions in online environments. In I. Gibson et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009*, 947-952. Chesapeake, VA: AACE.
- Lackey, K. (2011). Faculty development: An analysis of current and effective training strategies for preparing faculty to teach online. *Online Journal of Distance Learning Administration*, 14(5).
- LeBaron, J., & McFadden, A. (2008). The brave new world of e-learning: A department's response to mandated change. *Interactive Learning Environments*, 16(2), 143-156. doi:10.1080/10494820701331079
- Lee, J. (2003). Current status of learner support in distance education: Emerging issues and directions for future research. *Asia Pacific Education Review*, 4(1), 181-188.
- Lee, J., & Busch, P. (2005). Factors related to instructors' willingness to participate in distance education. *Journal of Educational Research*, 99(2), 109.

- Lee, D., Paulus, T. M., Loboda, I., Phipps, G., Wyatt, T. H., Myers, C. R., & Mixer, S. J. (2010). A faculty development program for nurse educators learning to teach online. *Techtrends: Linking Research & Practice To Improve Learning*, 54(6), 20-28.
- Lei, S., & Gupta, R. (2010). College distance education courses: Evaluating benefits and costs from institutional, faculty and students' perspectives. *Distance Education*, 130(10), 616-631.
- Li, C., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns and recommendations. *College Student Journal*, 42(2), 449-458.
- Lin, Z., Pearce, R., & Wang, W. (2009). Imported talents: Demographic characteristics, achievement and job satisfaction of foreign born full time faculty in four-year American colleges. *Higher Education: The International Journal of Higher Education and Educational Planning*, 57(6), 703-721.
- Lynch, G., & James, R. (2012). Staying relevant and current with online learning in an increasingly global and competitive environment. *International Journal Of Advanced Corporate Learning*, 5(3), 26-28. doi:10.3991/ijac.v5i3.2171
- Lyons, J. F. (2004). Teaching U.S. history online: Problems and prospects. *History Teacher*, 37(4), 447-456.
- Magnussen, L. (2008). Applying the principles of significant learning in the e-learning environment. *Journal of Nursing Education*, 47(2), 82-86.
- Major, C. (2010). Do virtual professors dream of electric students? College faculty experiences with online distance education. *Teachers College Record*, 112(8), 2154-2208. Retrieved from <http://www.tcrecord.org>
- Marek, K. (2009). Learning to teach online: Creating a culture of support for faculty. *Journal Of Education For Library & Information Science*, 50(4), 275-292.
- Marquie, J. C., Jourdan-Boddaert, L., & Huet, N. (2002). Do older adults underestimate their actual computer knowledge? *Behavior and Information Technology*, 21(4), 273-281.
- Marston, S. H., & Brunetti, G. J. (2009). Job satisfaction of experienced professors at a liberal arts college. *Education*, 130(2), 323-347.
- Mathis, R., & Jackson, J. (2008). *Human resource management*. Mason, OH: South-Western Publishing.

- Mayadas, F. A., Bourne, J., & Bacsich, P. (2009). Online education today. *Science*, 323(5910), 85–89.
- McClure, A. (2007). Distant, not absent. *University Business*, 10(11), 40-44.
- McLawhon, R., & Cutright, M. (2012). Instructor learning styles as indicators of online faculty satisfaction. *Journal Of Educational Technology & Society*, 15(2), 341-353.
- Middle States Commission on Higher Education. (2011). Distance education programs: Interregional guidelines for the evaluation of distance education (online learning). Retrieved from: <http://www.msche.org/publications/Guidelines-for-the-Evaluation-of-Distance-Education-Programs.pdf>
- Mitchell, B., & Geva-May, I. (2009). Attitudes affecting online learning implementation in higher education institutions. *Journal of Distance Education*, 23(1), 71-88.
- Moloney, J. F., Hickey, C. P., Bergin, A. L., Boccia, J., Polley, K., & Riley, J. E. (2010). Characteristics of successful local blended programs in the context of the Sloan-C pillars. *Journal Of Asynchronous Learning Networks*, 14(1), 71-89.
- Moller, L., Foshay, W. R., & Huett, J. (2008). The evolution of distance education: Implications for instructional design on the potential of the web. *Techtrends: Linking Research And Practice To Improve Learning*, 52(3), 70-75.
- Morganson, V. J., Major, D. A., & Bauer, K. N. (2009). Work-life job analysis: Applying a classic tool to address a contemporary issue. *Psychologist-Manager Journal*, 12(4), 252-274. doi:10.1080/10887150903316305
- Morris, M. G., & Venkatesh, V. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel Psychology*, 53(2), 375-403.
- Nanda, V. (2009). An innovative method and tool for role-specific quality-training evaluation. *Total Quality Management & Business Excellence*, 20(10), 1029-1039. doi:10.1080/14783360903247353
- National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future*. Retrieved from: <http://nctaf.org/wp-content/uploads/2012/01/WhatMattersMost.pdf>
- Neal, E. (1999). Distance education. *National Forum*, 79(1), 40.
- Ng, T., & Feldman, D. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93(2), 392-423.

- Noor, M., & Dola, K. (2012). Leveraging training to maximizing employees performance and potential benefits. *Business & Management Review*, 1(11), 19-26.
- Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill Series in Psychology. New York, NY. McGraw-Hill Inc.
- Ocak, M. (2011). Blend or not to blend: A study investigating faculty members' perceptions of blended teaching. *World Journal On Educational Technology*, 2(3), 196-210.
- Ormrod, D. (2008). The culture of commerce in England, 1660-1720. *Economic History Review*, 61(2), 500-501.
- Orr, R., Williams, M. R., & Pennington, K. (2009). Institutional efforts to support faculty in online teaching. *Innovative Higher Education*, 34(4), 257-268.
- Osborne, J. (2008). *Best practices in quantitative methods*. Los Angeles, CA: Sage Publications.
- Owens Jr., P. L. (2006). One more reason not to cut your training budget: The relationship between training and organizational outcomes. *Public Personnel Management*, 35(2), 163-172.
- Pagliari, L., Batts, D., & McFadden, C. (2009). Desired versus actual training for online instructors in community colleges. *Online Journal of Distance Learning Administration*, 12(4). Retrieved from <http://www.westga.edu/-distance/oidla/>
- Pearson, D. A., & Seiler, R. E. (1983). Environmental satisfiers in academe. *Higher Education*, 12(1), 35-47.
- Perreault, H., Waldman, L., Alexander, M., & Zhao, J. (2008). Comparing the distance learning-related course development approach and faculty support and rewards structure at AACSB accredited institutions between 2001 and 2006. *Journal Of Educators Online*, 5(2), 1-15.
- Picchio, M., & van Ours, J. (2012). Retaining through training even for older workers. *Economics Of Education Review*, doi:10.1016/j.econedurev.2012.08.004
- Quality Framework narrative, the 5 pillars (n.d.) Retrieved from http://sloanconsortium.org/Quality_Framework_Narrative_5_pillars
- Reinardy, S. (2007). Satisfaction vs. sacrifice: Sports editors assess the influences of life issues on job satisfaction. *Journalism & Mass Communication Quarterly*, 84(1), 105-121.

- Rhodes, C., Nevill, A., & Allen, J. (2004). Valuing and supporting teachers: A survey of teacher satisfaction, dissatisfaction, morale and retention in an English local education authority. *Research in Education*, 7(1), 67-80.
- Rice, K., & Dawley, L. (2009). The status of professional development for K-12 online teachers: Insights and implications. *Journal Of Technology And Teacher Education*, 17(4), 523-545.
- Robinia, K., & Anderson, M. (2010). Online teaching efficacy of nurse faculty. *Journal Of Professional Nursing*, 26(3), 168-175.
doi:10.1016/j.profnurs.2010.02.006
- Rodriguez, M. C., Ooms, A., & Montanez, M. (2008). Students' perceptions of online learning quality given comfort, motivation, satisfaction, and experience. *Journal of Interactive Online Learning*, 7(2), 105-125.
- Roman, T., Kelsey, K., & Lin, H. (2010). Enhancing online education through instructor skill development in higher education. *Online Journal Of Distance Learning Administration*, 13(4).
- Rosser, V. J. (2005). Measuring the change in faculty perceptions over time: An examination of their worklife and satisfaction. *Research in Higher Education*, 46(1), 81-107.
- Rovai, A. P., Ponton, M. K., Derrick, M., & Davis, J. M. (2006). Student evaluation of teaching in the virtual and traditional classrooms: A comparative analysis. *Internet And Higher Education*, 9(1), 23-35.
- Russell, B. C. (2010). Stress in senior faculty careers. *New Directions For Higher Education*, (151), 61-70. doi:10.1002/he.401
- Sabharwal, M., & Corley, E. A. (2009). Faculty job satisfaction across gender and discipline. *Social Science Journal*, 46(3), 539-556.
doi:10.1016/j.sosci.2009.04.015
- Sahinidis, A. G., & Bouris, J. (2008). Employee perceived training effectiveness relationship to employee attitudes. *Journal of European Industrial Training*, 32(1), 63-76.
- Schat, A. H., & Frone, M. R. (2011). Exposure to psychological aggression at work and job performance: The mediating role of job attitudes and personal health. *Work & Stress*, 25(1), 23-40. doi:10.1080/02678373.2011.563133
- Schifter, C. (2000, March–April). Faculty motivators and inhibitors for participation in distance education. *Educational Technology*, 40(2), 43–46.

- Schneckenberg, D. (2010, November 1). Overcoming barriers for elearning in universities: Portfolio models for ecompetence development of faculty. *British Journal Of Educational Technology* [serial online]. 41(6), 979-991.
- Schroder, R. (2008). Job satisfaction of employees at a Christian university. *Journal of Research on Christian Education*, 17(2), 225-246.
doi:10.1080/10656210802433467
- Schubert-Irastorza, C., & Fabry, D. L. (2011). Improving student satisfaction with online faculty performance. *Journal Of Research In Innovative Teaching*, 4(1), 168-179.
- Schulte, M. (2010). Faculty perceptions of technology distance education transactions: Qualitative outcomes to inform teaching practices. *Journal Of Educators Online*, 7(2), 1-34.
- Seifert, T. A., & Umbach, P. D. (2008). The effects of faculty demographic characteristics and disciplinary context on dimensions of job satisfaction. *Research in Higher Education*, 49(4), 357-381.
- Sener, J. (2010). Why online education will attain full scale. *Journal Of Asynchronous Learning Networks*, 14(4), 3-16.
- Shea, P. (2007). Bridges and barriers to teaching online college courses: A study of experienced online faculty in thirty-six colleges. *Journal Of Asynchronous Learning Networks*, 11(2), 73-128.
- Shea, P., Pickett, A., & Li, C. (2005). Increasing access to higher education: A study of the diffusion of online teaching among 913 college faculty. *International Review Of Research In Open And Distance Learning*, 6(2), 1-18.
- Sherer, P., & Shea, T. (2011). Using online video to support student learning and engagement. *College Teaching*, 59(2), 56-59. doi:10.1080/87567555.2010.511313
- Singh, A., & Ashish, K. (2011). Role of stress and locus of control in job satisfaction among middle managers. *IUP Journal Of Organizational Behavior*, 10(1), 42-56.
- Smith, V. C. (2010). Essential tasks and skills for online community college faculty. *New Directions For Community Colleges*, (150), 43-55.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications.
- Spivey, C. A., Chisholm-Burns, M. A., Murphy, J. E., Rice, L., & Morelli, C. (2009). Assessment of and recommendations to improve pharmacy faculty satisfaction and retention. *American Journal Of Health-System Pharmacy*, 66(1), 54-64.
doi:10.2146/ajhp080142

- State University of West Georgia. (2002). *Faculty attitudes toward distance education at the University of West Georgia*. Retrieved May 24, 2004, from <http://www.westga.edu/~distance/attitudes.html>
- Stewart, B. L., Goodson, C., & Miertschin, S. L. (2010). Off-site faculty: Perspectives on online experiences. *Quarterly Review of Distance Education*, 11(3), 187-191.
- Sumner, J. (2000). Serving the system: A critical history of distance education. *Open Learning*, 15(3), 267-285. doi:10.1080/026805100750036881
- Sussan, A., & Kassira, R. D. (2009). Performance, measurement, and competitiveness in distance learning technology. *Competition Forum*, 7(2), 542-547.
- Tabata, L. & Johnsrud, L. (2008). The impact of faculty attitudes towards technology, distance education, and innovation. *Research in Higher Education*, 49(7), 635-646.
- Tallent-Runnels, M., Thomas, J., Lan, W., Cooper, S., Ahern, T., Shaw, S., Liu, X. (2006). Teaching courses online: A review of the research. *Review Of Educational Research*, 76(1), 93-135.
- Taormina, R. J. (1999). Predicting employee commitment and satisfaction: The relative effects of socialization and demographics. *International Journal of Human Resource Management*, 10(6), 1060-1076.
- Terantino, J. M., & Agbehonou, E. (2012). Comparing faculty perceptions of an online development course: Addressing faculty needs for online teaching. *Online Journal Of Distance Learning Administration*, 15(2), 1-27.
- Tillman, W. R., & Tillman, C. (2008). And you thought it was the apple: A study of job satisfaction among teachers. *Academy Of Educational Leadership Journal*, 12(3), 1-18.
- Triola, M. (2010). *Elementary statistics* (11th ed.). New York, NY: Addison-Wesley.
- Trower, C. A. (2009). Toward a greater understanding of the tenure track for minorities. *Change: The Magazine Of Higher Learning*, 41(5), 38-45.
- Trower, C. A. (2010). A new generation of faculty: Similar core values in a different world. *Peer Review*, 12(3), 27-30.
- U.S. Department of Education Institute of Educational Sciences. (2011). *The Condition of Education*. (NCES Publication No. 2011-033). Retrieved from <http://nces.ed.gov/pubs2011/2011033.pdf>

- Vogt, P. (2005). *Dictionary of statistics and methodology: A nontechnical guide for the social sciences* (3rd ed.). London, England: Sage Publications, Inc.
- Vogt, P. (2007). *Quantitative research methods for professionals*. New York, NY: Pearson Education, Inc.
- Wang, Y., Chen, N., & Levy, M. (2010). Teacher training in a synchronous cyber face-to-face classroom: Characterizing and supporting the online teachers' learning process. *Computer Assisted Language Learning*, 23(4), 277-293. doi:10.1080/09588221.2010.493523
- Wang, Y., & O'Reilly, C. A. (2010). Dispositions, organisational commitment and satisfaction: A longitudinal study of MBA graduates. *Total Quality Management & Business Excellence*, 21(8), 829-847. doi:10.1080/14783363.2010.487667
- Webb, K. S. (2009). Creating satisfied employees in Christian higher education: Research on leadership competencies. *Christian Higher Education*, 8(1), 18-31.
- Wickersham, L. E., & McElhany, J. A. (2010). Bridging the divide: Reconciling administrator and faculty concerns regarding online education. *Quarterly Review of Distance Education*, 11(1), 1-12.
- Willis, M., & Varner, L. W. (2010). Factors that affect teacher morale. *Academic Leadership* (15337812), 8(4), 45.
- Wood, E., Lanuza, C., Baci, I., MacKenzie, M., & Nosko, A. (2010). Instructional styles, attitudes and experiences of seniors in computer workshops. *Educational Gerontology*, 36(10-11), 834-857. doi:10.1080/03601271003723552
- Xu, Y. (2008). Gender disparity in STEM disciplines: A study of faculty attrition and turnover intentions. *Research In Higher Education*, 49(7), 607-624.
- Yahn-Shir, C., Bao-Guang, C., & Chia-Chi, L. (2008). Organization type, professional training, manpower and performance of audit firms. *International Journal of Management*, 25(2), 336-347.
- Yueh, H., & Hsu, S. (2008). Designing a learning management system to support instruction. *Communications Of The ACM*, 51(4), 59-63. doi:10.1145/1330311.1330324
- Yuping, W., Nian-Shing, C., & Levy, M. (2010). Teacher training in a synchronous cyber face-to-face classroom: Characterizing and supporting the online teachers' learning process. *Computer Assisted Language Learning*, 23(4), 277-293.

Zhang, Z., Verstegen, D. A., & Kim, H. (2008). Teacher compensation and school quality: New findings from national and international data. *Educational Considerations*, 35(2), 19-28.

Zhao, J. J., Alexander, M. W., Perreault, H., Waldman, L., & Truell, A. D. (March 01, 2009). Faculty and student use of technologies, user productivity, and user preference in distance education. *Journal of Education for Business*, 84(4), 206-212.

Appendixes

Appendix A: Authorization to Survey

Dissertation Request

Mark White [mwhite@scciova.edu]

Sent: Wednesday, June 19, 2013 1:32 PM

To: Brian Hoekstra

Brian,

I understand that you are attempting to determine if there is a relationship between training and job satisfaction for faculty members of the ICCOC. I know that you will be emailing ICCOC faculty members an email invitation to complete an anonymous online survey. The survey itself will be 22 questions total - 18 questions that relate to job satisfaction, 2 questions that relate to training, and one question each regarding age and gender. You estimate the survey will take 12 minutes to complete.

The ICCOC has already provided you with a list of faculty and email addresses who taught eCourses during the 2011-2012 academic year. I know that you will be inviting faculty to anonymously respond to an online survey, and those responses will be confidential.

I know that you are hoping to gather your data sometime in the next calendar year, possibly as early as this summer, and that you plan on having the online survey available for 3 weeks. The data that is collected will only be used for the work of your dissertation, that you will only be using the responses for your research, and that an executive summary will be made available upon request.

I understand the nature of this study and I grant permission to Brian Hoekstra to proceed.

Best of luck with your research.

mw

Mark White

Director

Iowa Community College Online Consortium

Direct: 402.850.9744

Appendix B: Recruitment Email #1

To: Online Faculty from select ICCOC member institutions
Subject: Dissertation Request - ICCOC Faculty Job Satisfaction Survey

Dear faculty member and ICCOC colleague,

My name is Brian Hoekstra, and I have taught courses online for the ICCOC since 2004 with Northwest Iowa Community College, and was presented the e11 award in 2011. I am working on a Doctor of Education, with a specialization in Global Training and Development. I am closing in on the data collection phase of the dissertation, where my topic will be to analyze the “relationship between training and job satisfaction for faculty members who teach online”.

The clickable link to the survey is below, and you can expect to answer the 22 question survey in approximately 12 minutes. The survey is currently open and will be available until July 12, 2013. The survey will ask demographic questions and questions regarding your thoughts on training and job satisfaction as it relates to the work that you do teaching online for the ICCOC. Please complete the survey to the best of your ability by selecting the most appropriate answer.

Please follow this link (or copy and paste the link into your browser) to complete the survey:

<https://www.surveymonkey.com/s/NFMCS3C>

Realizing job satisfaction to be an intensely personal attitude, individual survey responses will be strictly anonymous, and the data will be stored confidentially. All individual responses will remain confidential and anonymous. The data from this survey will be used by the researcher primarily for a doctoral dissertation, but may also be utilized to provide aggregate reports to interested faculty or ICCOC administrators. However, absolutely no individual survey responses will be released. All participation in this study is voluntary, and I am grateful for your participation.

Thank you for partnering with me to meet these larger goals of discovering the relationship between training and job satisfaction, and thank you for the time you have already given to me out of your busy schedule –

Thank you for your participation and assistance!

Brian Hoekstra
bhoeksta@nwicc.edu

Dr. Leah Wickersham
lwickersham@ncu.edu

Background Information:

My dissertation topic will be to analyze the “relationship between training and job satisfaction for faculty members who teach online”. Specifically, through anonymous survey questions I will ask ICCOC faculty members to self-report whether they have taken the Pearson Learning Studio online coursework, and I will ask them to complete a job satisfaction instrument (the *Index of Job Satisfaction* by Brayfield and Rothe). To see how this study compares with previous studies in the field, I will also ask other demographic information such as age and gender. You can see this survey will yield some rich data!

I will share the results of the study once all responses have been analyzed by sending a follow up email with a link to a results page for anyone who is interested.

Appendix C: Recruitment Email #2

To: Online Faculty from selected ICCOC member institutions
Subject: 2nd Dissertation Request - ICCOC Faculty Job Satisfaction Survey

Dear faculty member and ICCOC colleague,

This email is a reminder of an opportunity to participate in a job satisfaction survey as part of the requirements for a Doctor of Education. If you have already joined me in this study by participating in this survey, you have my deepest thanks and gratitude for helping me with this project.

My name is Brian Hoekstra, and I have taught courses online for the ICCOC since 2004 with Northwest Iowa Community College. I am working on a Doctor of Education, with a specialization in Global Training and Development. I am closing in on the data collection phase of the dissertation, where my topic will be to analyze the “relationship between training and job satisfaction for faculty members who teach online”.

The clickable link to the survey is below, and you can expect to answer the 22 question survey in approximately 12 minutes. The survey is currently open and will be available until July 12, 2013. The survey will ask demographic questions and questions regarding your thoughts on training and job satisfaction as it relates to the work that you do teaching online for the ICCOC. Please complete the survey to the best of your ability by selecting the most appropriate answer.

Please follow this link (or copy and paste the link into your browser) to complete the survey:

<https://www.surveymonkey.com/s/NFMCS3C>

Realizing job satisfaction to be an intensely personal attitude, individual survey responses will be strictly anonymous, and the data will be stored confidentially. All individual responses will remain strictly confidential and anonymous. The data from this survey will be used by the researcher primarily for a doctoral dissertation, but may also be utilized to provide aggregate reports to interested faculty or ICCOC administrator. However, absolutely no individual survey responses will be released. All participation in this study is voluntary, and I am grateful for your participation.

Thank you for partnering with me to meet these larger goals of discovering the relationship between training and job satisfaction, and thank you for the time you have already given to me out of your busy schedule –

Thank you for your participation and assistance!

Brian Hoekstra
bhoeksta@nwicc.edu

Dr. Leah Wickersham
lwickersham@ncu.edu

Background Information:

My dissertation topic will be to analyze the “relationship between training and job satisfaction for faculty members who teach online”. Specifically, through anonymous survey questions I will ask ICCOC faculty members to self-report whether they have taken the Pearson Learning Studio online coursework, and I will ask them to complete a job satisfaction instrument (the *Index of Job Satisfaction* by Brayfield and Rothe). To see how this study compares with previous studies in the field, I will also ask other demographic information such as age and gender. You can see this survey will yield some rich data!

I will share the results of the study once all responses have been analyzed by sending a follow up email with a link to a results page for anyone who is interested.

Appendix D: Recruitment Email – Final

To: Online Faculty from selected ICCOC member institutions
 Subject: Final Dissertation Survey Request - ICCOC Faculty Job Satisfaction

Dear faculty member and ICCOC colleague,

My name is Brian Hoekstra, and I have taught courses online for the ICCOC since 2004 with Northwest Iowa Community College. I am working on a Doctor of Education, with a specialization in Global Training and Development. I am in the data collection phase of the dissertation, where my topic is the “relationship between training and job satisfaction for faculty members who teach online”.

The clickable link to the survey is below, and you can expect to answer the 22 question survey in approximately 12 minutes. The survey is currently open and will be available until July 12, 2013. The survey will ask demographic questions and questions regarding your thoughts on training and job satisfaction as it relates to the work that you do teaching online for the ICCOC. Please complete the survey to the best of your ability by selecting the most appropriate answer.

This final email request is specifically for those of you who have taken (or are currently taking) one or more of the following courses - your participation will help to have a statistically viable sample:

- EDU 101A – eCertification: Developing Online Courses
- EDU 101B – eCertification: Teaching Online Courses
- EDU 102 – Effectively Managing your Online Course
- EDU 106 – Reviewing and Enriching your Online Course
- EDU 107 - eCertification: Developing the Hybrid Course
- EDU 2.0 – Creative Uses of Web 2.0

Please follow this link (or copy and paste the link into your browser) to complete the survey:

<https://www.surveymonkey.com/s/NFMCS3C>

Realizing job satisfaction to be an intensely personal attitude, individual survey responses will be strictly anonymous, and the data will be stored confidentially. All individual responses will remain strictly confidential and anonymous. The data from this survey will be used by the researcher primarily for a doctoral dissertation, but may also be utilized to provide aggregate reports to interested faculty or ICCOC administrator. However, absolutely no individual survey responses will be released. All participation in this study is voluntary, and I am grateful for your participation.

Thank you for your help!

Brian Hoekstra
bhoeksta@nwwcc.edu

Dr. Leah Wickersham
lwickersham@ncu.edu

Background Information:

My dissertation topic will be to analyze the “relationship between training and job satisfaction for faculty members who teach online”. Specifically, through anonymous survey questions I will ask ICCOC faculty members to self-report whether they have taken the Pearson Learning Studio online coursework, and I will ask them to complete a job satisfaction instrument (the *Index of Job Satisfaction* by Brayfield and Rothe). To see how this study compares with previous studies in the field, I will also ask other demographic information such as age and gender. You can see this survey will yield some rich data!

I will share the results of the study once all responses have been analyzed by sending a follow up email with a link to a results page for anyone who is interested.

Appendix E: Survey Questions

Please complete the following 22 question survey. Please limit your responses to your online teaching position with the community college that is your employer and as a member of the Iowa Community College Consortium (ICCOC).

1. What is your age?

- 1 < 30
- 2 31-39
- 3 40-49
- 4 50-59
- 5 > 60

2. What is your gender?

- 1 Male
- 2 Female

3. Have you taken, or are currently taking, one or more courses from the following list:

- EDU 101A – eCertification: Developing Online Courses
- EDU 101B – eCertification: Teaching Online Courses
- EDU 102 – Effectively Managing your Online Course
- EDU 106 – Reviewing and Enriching your Online Course
- EDU 107 - eCertification: Developing the Hybrid Course
- EDU 2.0 – Creative Uses of Web 2.0

From <https://secure.ecollege.com/etch/index.learn?action=courses>

- 1 Yes
- 2 No

4. Please indicate which course(s) you have taken, or are currently taking, from the following list (please mark all that apply):

- EDU 101A – eCertification: Developing Online Courses
- EDU 101B – eCertification: Teaching Online Courses
- EDU 102 – Effectively Managing your Online Course
- EDU 106 – Reviewing and Enriching your Online Course
- EDU 107 - eCertification: Developing the Hybrid Course
- EDU 2.0 – Creative Uses of Web 2.0

From <https://secure.ecollege.com/etch/index.learn?action=courses>

JOB QUESTIONNAIRE by Brayfield and Rothe (1951)

Some jobs are more interesting and satisfying than others. We want to know how people feel about different jobs. This blank contains eighteen statements about jobs. You are to cross out the phrase below each statement which best describes how you feel about your present job. There are no right or wrong answers. We should like your honest opinion on each one of the statements. Work out the sample item numbered (0).

0. There are some conditions concerning my job that could be improved.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
1. My job is like a hobby to me.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
2. My job is usually interesting enough to keep me from getting bored.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
3. It seems that my friends are more interested in their jobs.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
4. I consider my job rather unpleasant.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
5. I enjoy my work more than my leisure time.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
6. I am often bored with my job.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
7. I feel fairly well satisfied with my present job.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
8. Most of the time I have to force myself to go to work,
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
9. I am satisfied with my job for the time being.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
10. I feel that my job is no more interesting than others I could get.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
11. I definitely dislike my work.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
12. I feel that I am happier in my work than most other people.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
13. Most days I am enthusiastic about my work.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
14. Each day of work seems like it will never end.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
15. I like my job better than the average worker does.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
16. My job is pretty uninteresting.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
17. I find real enjoyment in my work.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE
18. I am disappointed that I ever took this job.
STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

Appendix F: Brayfield-Rothe Job Satisfaction Scale (BRJS) Permission to Use

American Psychological Association (2013) has granted the permission use this instrument under statutes of public domain:

Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307-311.

This material as a whole is now in the public domain. You may reuse it but please include a credit line citing the original source, and indicate that the content is in the public domain. The requester is responsible for obtaining permission for any individual items that were not originally copyrighted by APA.

American Psychological Association (2011). *Permissions page*. Retrieved April 1, 2013, from American Psychological Association Web site
<http://psycnet.apa.org/journals/apl/35/5/>

Appendix G: Informed Consent Form

Training and Job Satisfaction

Purpose. You are invited to participate in a research study being conducted for a dissertation at Northcentral University in Prescott, Arizona. The purpose of this study is to examine the link (if any) between training received and job satisfaction for online faculty members of the Iowa Community College Online Consortium (ICCO). There is no deception in this study.

Participation requirements. You will be asked to complete a total of 22 questions, which include demographic questions as well as items from the Index of Job Satisfaction by Brayfield and Roth (1951). The survey will take approximately 12 minutes to complete.

Research Personnel. The following people are involved in this research project and may be contacted at any time: *Brian Hoekstra* (bhoekstra@nwicc.edu) and chair *Dr. Leah Wickersham* (lwickersham@ncu.edu).

Potential Risk/ Discomfort. Although there are no known risks in this study, some of the information relates specifically to the work you do teaching online for the ICCOC. However, you may withdraw at any time and you may choose not to answer any question that you feel uncomfortable in answering.

Potential Benefit. There are no direct benefits to you of participating in this research. No incentives are offered.

Anonymity/ Confidentiality. The data collected in this study are confidential and anonymous. No personal data are collected. In addition, the survey data are made available only to the researcher associated with this project.

Right to Withdraw. You have the right to withdraw from the study at any time without penalty. You may omit questions on any questionnaires if you do not want to answer them.

We would be happy to answer any question that may arise about the study. Please direct your questions or comments to: Brian Hoekstra - bhoekstra@nwicc.edu

Signatures

I have read the above description of the relationship between training and job satisfaction study and understand the conditions of my participation. Proceeding to complete the survey indicates your agreement to participate in the study.

Please click the button below to continue to the survey.

I agree

Appendix H: Letter of IRB approval

Notes for IRB review

Name: Brian Hoekstra

School of Education

Date: June 21, 2013 (2nd submission)

Dear Brian,

Thank you for your second submission of your IRB application and supporting documents based on the revisions provided to you.

- ✓ All feedback has been addressed in your responses to the IRB application and the supporting documents.

Decision status: Approve

Good luck with data collection. Be sure to keep in close communication with your mentor and dissertation committee. Keep in mind that if there are any changes to the research procedures, you must notify the IRB.

Sincerely,

A handwritten signature in cursive script, reading "Alice Yick", is displayed within a light gray rectangular box.

Alice Yick, Ph.D.

NCU, IRB Chairperson

Appendix I: Scatterplots of Selected Data

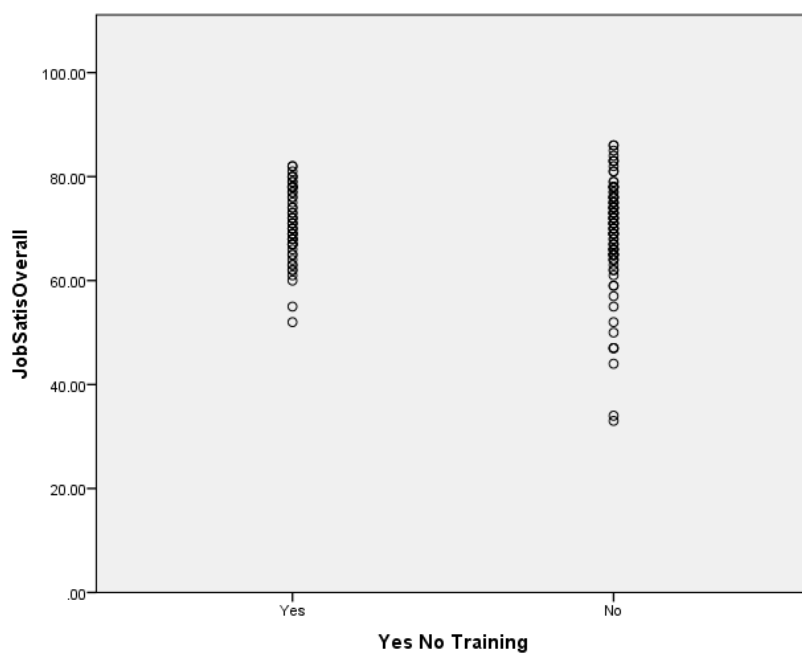


Figure 2. Scatterplot of Yes/No Training and Overall Job Satisfaction Responses

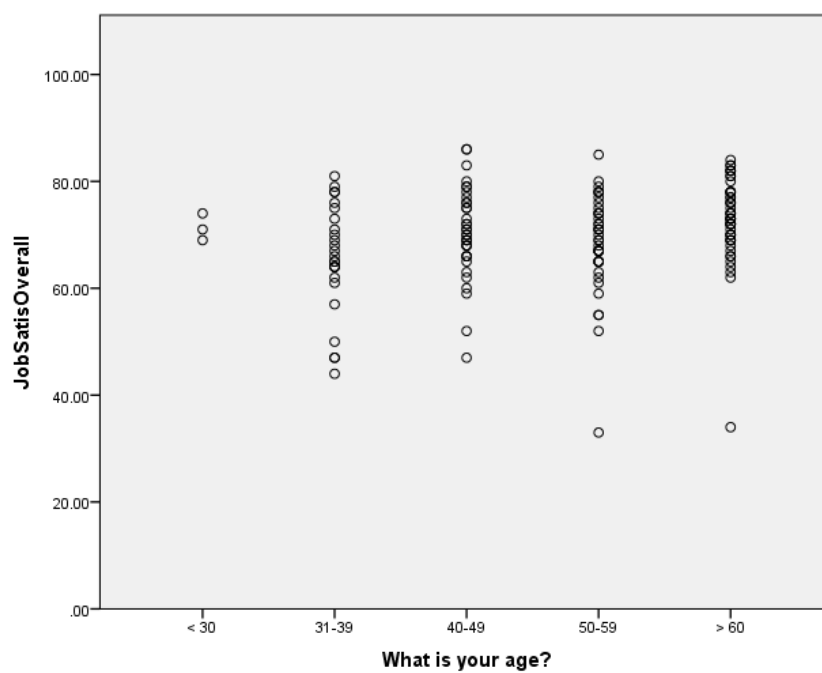


Figure 3. Scatterplot of Age Ranges and Overall Job Satisfaction Responses

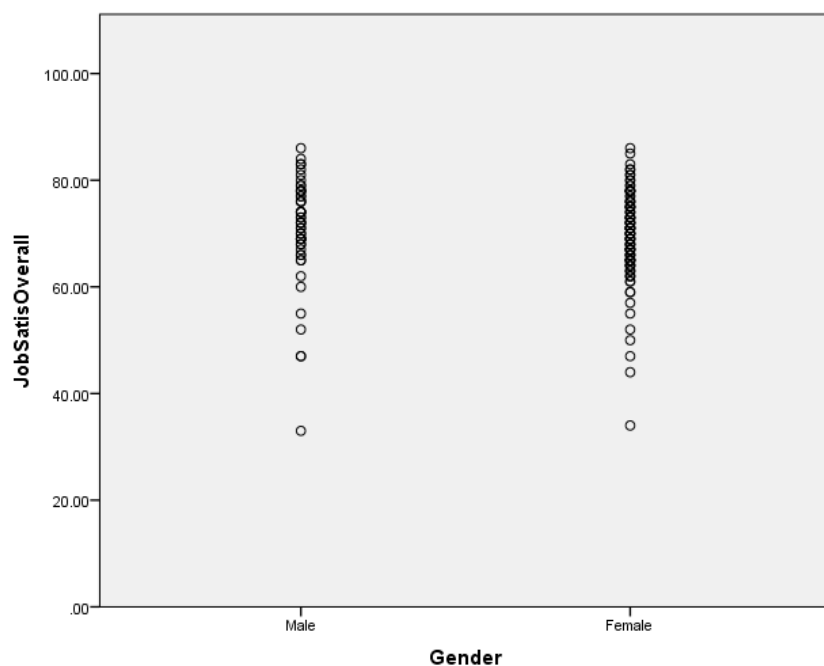


Figure 4. Scatterplot of Gender and Overall Job Satisfaction Responses

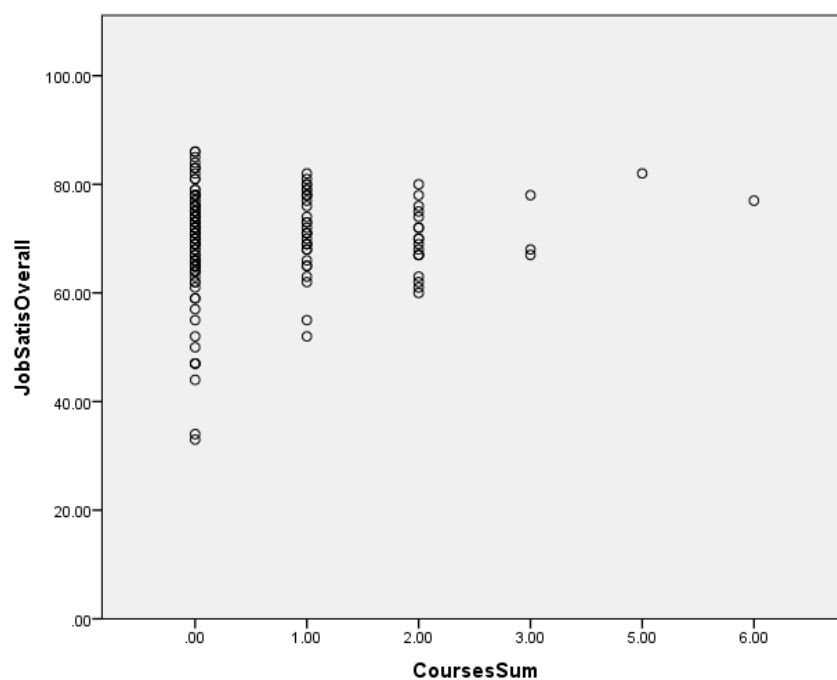


Figure 5. Scatterplot of Online Course Modules Taken and Overall Job Satisfaction

Appendix J: Supplemental Tables

Table 9

Background Information of Faculty Members

Measure	Number (N)	Percentage (%)	Mean OJS (M)
Gender			
Male	50	33.8%	70.74
Female	98	62.8	69.43
Age			
< 30	3	2.0%	71.33
31-39	25	16.9%	65.64
40-49	35	23.6%	70.46
50-59	39	26.4%	70.26
> 60	45	31.1%	72.87
Course Module Completion			
Completed no modules	93	62.8%	69.27
Completed 1 or more modules	55	37.2%	70.93

Note. OJS = Overall Job Satisfaction

Table 10

Pearson Course Modules Completed by Faculty Members

EDU101A	Number	36
	%	65.5%
EDU101B	Number	36
	%	65.5%
EDU102	Number	5
	%	9.1%
EDU106	Number	3
	%	5.5%
EDU107	Number	4
	%	7.3%
EDU 2.0	Number	3
	%	5.5%

Table 11
*Distribution of Course Modules
 Completed by Age*

		Age					Total
		<30	31-39	40-49	50-59	>60	
0 Online Modules Completed	n	3	17	24	25	24	93
	%	3.2%	18.3%	25.8%	26.9%	25.8%	
1 Online Module Completed	n	0	3	8	8	13	32
	%	0.0%	9.4%	25.0%	25.0%	40.6%	
2 Online Modules Completed	n	0	3	3	5	6	17
	%	0.0%	17.6%	17.6%	29.4%	35.3%	
3 Online Modules Completed	n	0	1	0	1	1	3
	%	0.0%	33.3%	0.0%	33.3%	33.3%	
4 Online Modules Completed	n	0	0	0	0	0	0
	%	0.0%	0.0%	0.0%	0.0%	0.0%	
5 Online Modules Completed	n	0	0	0	0	1	1
	%	0.0%	0.0%	0.0%	0.0%	100%	
6 Online Modules Completed	n	0	0	0	0	1	1
	%	0.0%	0.0%	0.0%	0.0%	100%	

Table 12
Distribution of Course Modules Completed by Gender

		Gender		Total
		Male	Female	
0 Online Modules Completed	n	33	60	93
	%	35.5%	64.5%	
1 Online Module Completed	n	9	22	31
	%	29.0%	71.0%	
2 Online Modules Completed	n	7	11	18
	%	38.9%	61.1%	
3 Online Modules Completed	n	1	2	3
	%	33.3%	66.7%	
4 Online Modules Completed	n	0	0	0
	%	0%	0%	
5 Online Modules Completed	n	0	1	1
	%	0%	100%	
6 Online Modules Completed	n	0	1	1
	%	0%	100%	

Appendix K: Histogram of Survey Responses

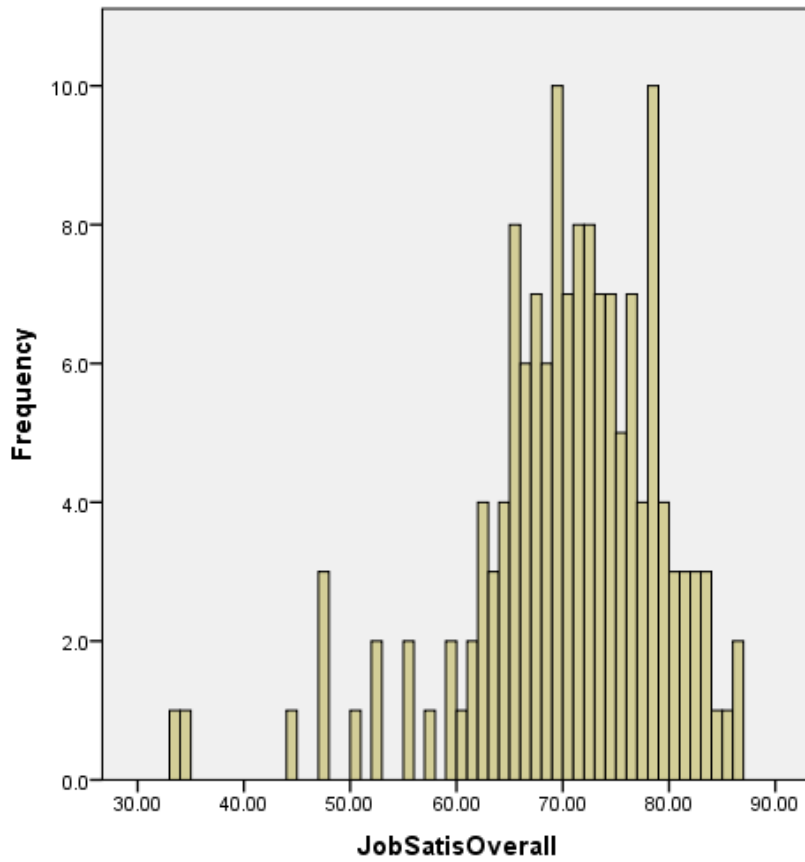


Figure 6. Frequency Histogram of Overall Job Satisfaction Responses