STUDENT PERCEPTION OF ONLINE INSTRUCTORS AT A FLORIDA PUBLIC

UNIVERSITY

by

William Willett Ballard

A Dissertation Submitted to the Faculty of

The College of Education

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Florida Atlantic University
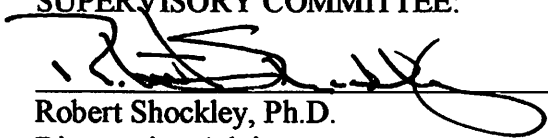
Boca Raton, FL

May 2018

STUDENT PERCEPTION OF ONLINE INSTRUCTORS AT A FLORIDA PUBLIC
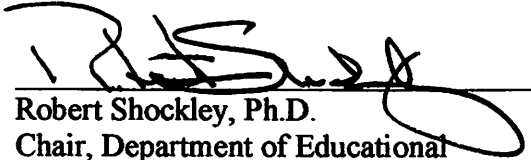
UNIVERSITY

by

William Willett Ballard

This dissertation was prepared under the direction of the candidate's dissertation advisor, Dr. Robert Shockley, Department of Educational Leadership and Research Methodology, and has been approved by the members of his supervisory committee. It was submitted to faculty of the College of Education and was accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

SUPERVISORY COMMITTEE:

_____
Robert Shockley, Ph.D.
Dissertation Advisor

_____
Michael A. DeDonno, Ph.D.

_____
Daniel Reyes-Guerra, Ph.D.

_____
Robert Shockley, Ph.D.
Chair, Department of Educational
Leadership and Research Methodology

_____
Valerie J. Bristor, Ph.D.
Dean, College of Education

_____
Deborah L. Floyd, Ed.D.
Dean, Graduate College

April 5, 2018
_____
Date

iii

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation and gratitude to my dissertation committee members for their support and guidance. A special thanks to Dr. Robert E. Shockley for his enduring advice, motivation, and patience throughout my doctoral program. I would also like to extend special thanks to Dr. Michael A. DeDonno for his time and expertise in assisting me in my data analysis for this study and Dr. Daniel Reyes-Guerra for his direction and support. Additionally, I would like to express my appreciation to Kathleen Dubois, Evan Jaffe, and Teeranai Ovathanasin for their support and assistance throughout this study.

Thank you to Anupa, my wife, for her counsel and support through the good times and the bad times of my academic journey, especially when things seemed to be unbearable. Thank you to Arya, my daughter, who taught me how to take one day at a time, repeatedly stating: "Don't be sad daddy, be happy." Finally, thank you to Dorothy, my mother, who always kept things positive even when there seemed to be no hope.

ACT 17, GRE 810…

"Jesus looked at them and said, "With man this is impossible, but with God all things are possible"" (Matthew, 19:26).

ABSTRACT

Author: William Willett Ballard

Title: Student Perception of Online Instructors at a Florida Public
                    University

Institution: Florida Atlantic University

Dissertation Advisor: Dr. Robert Shockley

Degree: Doctor of Philosophy

Year: 2018

The purpose of this study was to determine differences in online student perception of the quality of instruction between online instructors who did and did not complete faculty training for online instruction. There has been very little research identifying the factors influencing online students perception on quality of instruction, specifically at Florida public institutions. This research is important in establishing if public universities should require some level of training before an instructor can teach online. Experiencing poor quality of instruction can negatively impact an online student academically, which can, in turn, be detrimental to a university's student retention and graduation rates.

This study adds to the current body of research regarding improvement of the quality of instruction in online courses based on the online students perception of faculty and the completion of faculty training for online instruction. The results of this study

demonstrated no significant difference overall in student perception of quality of instruction between online instructors who did and did not complete faculty training as measured in courses with five or more student respondents. Additional results revealed that multiple academic colleges demonstrated a significant difference in student perception of quality of instruction. This study also discovered a slight negative effect of online faculty training on other areas of student satisfaction that did not include quality of instruction. Recommendations for future research are provided, including those for the improvement of online faculty training, university policy, and faculty and student preparation for online teaching and learning, respectively.

STUDENT PERCEPTION OF ONLINE INSTRUCTORS AT A FLORIDA PUBLIC

UNIVERSITY

TABLES

FIGURES

I. INTRODUCTION

With the dramatic increase in online learning over the past decade mainly to accommodate students' needs, the need to reevaluate the quality of instruction provided in online courses has become apparent. Are online instructors who mostly originated from the traditional classroom prepared to teach online? If we assume that context matters, then it would be reasonable to note that the instructional methods and practices used to teach online would need to be different compared to the traditional classroom, based on the instructor's learning environment. Considering that most university instructors experiences are in teaching face-to-face, should some type of training be required to teach online? For instance, an instructor may be an expert in his or her content area, but struggle to deliver his or her content online using a learning management system.

Today, most institutions provide optional training and support for online instructors, however no training to teach online is mandated by the leading accreditation agencies. Should some type of faculty training be required before an instructor can teach online? To best answer these questions, we should, ultimately, examine the customer, the students who are taking these courses online. Based on student perception of quality of instruction, would instructors teaching online be rated differently based on whether or not they completed faculty training for online instruction? Would one variable (faculty training) positively or negatively influence student perception?

Background

Given the rapid expansion of online instruction questions need to be answered, especially if potential factors exist that could affect a student's ability to learn online. Further, who are these online instructors teaching our students? With the rapid increase in online course offerings at the university level, there has been a reduction in traditional course offerings comprised mainly of face-to-face, on-campus courses. This change has brought about a need for online instructors, usually comprised of instructors who lack online instruction experience or training.

According to Palloff and Pratt (2011) excellent instructors possess a set of key characteristics, regardless of their teaching environment. An argument can be made that great teachers are great teachers in any situation and that faculty training is not needed to guarantee the quality of online instruction. Yet, it's important to note that an online instructors would have to accomplish each of these key characteristics "through the use of technology and, in many cases, without ever meeting his or her students in person" (Palloff & Pratt, 2011, p. 14), which might be difficult without some form of training. The majority of accrediting agencies do not factor in course delivery (i.e., instructional method) regarding institutional faculty qualifications, therefore, it begs the question; should public universities provide training to assist online instructors when such training is not mandated by the universities accrediting agencies? If training were provided, would it improve the quality of online instruction? If so, faculty training for online instructors may need to be mandated. If not, faculty training might remain optional.

Statement of the Problem

As online learning continues to increase nationwide amongst the majority of

institutions there may be a need to reassess the evaluation process that permits instructors to teach online. Currently, accreditation bodies, such as SACSCOC, mandate institutions to maintain a minimum standard when credentialing their faculty to ensure that competent faculty members are employed. This standard places a large emphasis on an instructor's coursework and completion of degrees, yet little to none on his or her ability to teach in an online environment. Universities validate their online instructors' content knowledge, but may lack in justifying their ability to teach their content, especially online. If we assume that context matters, it may be important to mandate some type of faculty training to ensure that instructors can effectively teach their content online.

The majority of accrediting agencies credentialing guidelines identify faculty degrees and semester hours in teaching within one's discipline; however, little significance is placed on the course delivery or instructional method (e.g., online, face-to-face, hybrid). This may be problematic, specifically in online learning since additional variables exist separate from content knowledge. The inability to facilitate an online course properly, regardless of degree(s) and semester hours in teaching discipline would unlikely maximize a student's opportunity to learn. This, in response, could negatively influence student perception of how they rate quality of instruction.

What would happen if we isolated and individually assessed an instructor's degree(s) and coursework (semester of hours) and the context in which he or she taught in (e.g., online, face-to-face, hybrid)? For instance, would an instructor teaching two of the same courses during the same semester, but in different contexts (e.g., online and face-to-face) produce consistent or inconsistent outcomes in student perception of quality of instruction? Would identical courses based on content show similar results regardless

of how the course was taught (e.g., online, face-to-face, hybrid) or would the variable of context make a difference? If the assumption is that context does not simply affect what online instructors do, but it constrains and enables what online instructors can do and how they can do it (Pisapia, 2009), then it may be reasonable to justify that online instructors should be evaluated on their instructional method and institutions should provide some type of required training. In many cases, teaching online, like teaching in any content area, is a new concept that needs to be learned. This would make us believe that with appropriate training, online instructors would not only be an expert in their subject area, but also proficient in their instructional delivery method, which together are key components in facilitating quality instruction.

Typically, the university's accreditation body dictates how institutions determine "acceptable qualifications of its faculty…using faculty credentials," (SACSCOC, 2006, p. 1). For most institutions, being accredited is significant for enrollment, quality assurance, "reputation and essential for access to federal student financial aid and to federal grants" (Powers, 2015, para. 3). The essential need of an institution to be associated with and recognized by a regional accrediting association has led many universities to administer the minimum requirements set by the accreditation in defining faculty qualifications, which may be problematic if faculty training influences quality of instruction. An instructor's lack of expertise in course delivery may affect an instructor's ability to teach online, which could influence student perception of quality of instruction. Since student achievement should be the primary focus of any institution of which student perception can be linked, it is important to identify if faculty training for online instruction would influence the quality of instruction as measured by student perception.

Focus statement. This study focused on online instructors working at a public university in Florida and the perception of students between instructors who did and did not complete faculty training during two consecutive academic years (2011–2013). By using the Instructor Evaluation Form (pseudonym for actual instructor survey employed by the study university), this study aimed to determine differences in student perception of the quality of instruction of online instructors. With current research emphasizing the importance of "quality over quantity" and the dramatic increase in online courses (only 13.5% of institutions do not offer online offerings) (Allen & Seaman, 2013), it has become imperative to conduct further research to assist all parties (students, instructors, and universities) in fostering quality online instruction. Determining if faculty training influences student perception of quality of instruction could lead to a return on investment for institutions. It could assist institutions when hiring and assigning instructors to teach online, as well as decide how to provide training, support, and assistance to online faculty. Since student perception can be linked to student satisfaction and achievement, it would be favorable for universities to take the proper steps to prepare and support their online faculty.

Purpose of the Study

The purpose of this study was to determine differences in online student perception of quality of instruction of online instructors who did and did not complete faculty training. The study used responses to the Instructor Evaluation Form during two academic years (six semesters) to determine if a significant difference exists about the perceived quality of instruction of online instructors dependent on the variable of faculty training.

It is important to note that at the select research site, faculty training provided by the university to assist online instructors was presented to faculty in most cases as optional; it was not required for employment and/or to teach online. For the purpose of this study, data were limited to one Florida public university, which is classified by the Carnegie Foundation as a large 4-year (or above) university with high research activity and an enrollment in excess of 25,000 students (approximately 80% undergraduate, 15% graduate, and 5% unclassified enrollment) that is primarily nonresidential (The Trustees of Indiana University, 2017). Based on this criteria one Florida institution was assigned a pseudonym for this study: Sunflower University. This study contributes to the current, yet limited, research on online learning as it relates to the possible impact faculty training can have on student perception of quality of online instruction.

Significance of the Study

This study is significant for a variety of reasons, one arguably being the increase in the number of faculty switching from traditional methods of teaching (e.g., face-to-face to online). In observing the increase of online instructors from a recent study (Allen, Seaman, Poulin, & Straut, 2016), it is evident that "only 29.1% of academic leaders' report that their faculty accept the value and legitimacy of online education." Thus, there seems to be a disconnect between the lack of research in online learning, specifically in faculty training, for online instructors. There has been very little research in the assessment of student perception pertaining to the possible patterns that may exist between a university's training for online instructors and the perception of online students as related to teaching effectiveness. Today, the majority of institutions rely heavily on an instructor's coursework (credit hours) and level of experience during the credentialing

process, while little importance is placed on an instructor's course delivery and/or instructional method. The ability and/or experience of an instructor to teach online is not required by the majority of accreditation agencies, which leads many universities to provide optional training and support for online instructors. This training cost institutions large investments in funding, consequently research on the effectiveness of this training is needed.

Today, the perception of students is even more important for a university trying to stabilize student enrollment, student retention, and graduation rates. Although, college enrollment has increased 24% from 2002, tuition and fees have also increased significantly, by 1,120%, since 1978 (Jamrisko & Kolet, 2012). Based on a report from the National Center for Education Statistics (2016) approximately one in four college students registers for at least one online course during any given term. The need to increase accessibility and convenience for students overall has brought about competition amongst institutions to modify traditional course offerings (face-to-face) and offer more alternative methods, primarily online courses, to meet the needs of students. Similar to any other business, institutions need customers (students) to stay open. The perception of students, either positive or negative, can have a dramatic effect on an institution's reputation, school spirit, funding, public view, and overall enrollment.

Although student population is a key factor in running a university, it should be noted that student perception may also impact student performance and retention. Alexander Astin (1993) stated that:

Given the considerable investment of time and energy that most students make in attending college, their perceptions of the value of that experience should be

7

given substantial weight. Indeed, it is difficult to argue that students' perception

can be legitimately subordinated to any other educational outcome. (p. 273)

It makes sense, therefore, that institutions would try to maximize any opportunity to

improve and sustain the perception of their students in all areas of student services,

support, and academics, since evidence suggests that a connection can be made between

student perception, student satisfaction, and student achievement (Bean & Bradley, 1986;

Pike, 1991) as well as student enrollment and retention (Schreiner, 2009).

Today, a large percentage of college students (25.8%) take some type of online

course, of which 12.5% are enrolled only in distance education courses (National Center

for Education Statistics, 2016). This validates the need to reassess online learning as it

pertains to the process and procedures involved in facilitating an online course, which

includes faculty preparation (e.g., training) and experience in teaching online. Although

so many elements play into student perception of quality of instruction, not to mention

external factors "beyond an institution's control [such as] student's financial means, the

family situation, personal difficulties, [and] work demands" (Schreiner, 2009, p. 6), it is

important not to undervalue the variables that online faculty and universities as a whole

have in control of in preparing, planning, developing, and teaching online courses,

especially when considering the dramatic increase in online learning nationwide.

Conceptual Framework

The conceptual framework for this study originates with Herzberg, Mausner, and

Snyderman's (1967) two-factor theory, also known as Herzberg's motivation hygiene

theory, which focuses on the study of job satisfaction. This theory has been used to

assess both online instructors and students' motivation to teach and learn (work)

respectively. Though the initial purpose of this theory is used to evaluate specific factors in the workplace, the researcher positions it in this study by considering students as employees of a sort who take on many job-related tasks during their academic careers. Similarly, students can also be considered customers based on the "student teacher relationship…[because] without students, there would be no need for colleges" (Fontaine, 2014, p. 106). Two-factor theory is based upon two factors that impact job satisfaction, motivators and hygiene factors. Herzberg et al. (1967) examined why individuals exhibit different levels of job satisfaction based on two isolated sets of job characteristics:

1. Those required to motivate and increase performance (e.g., recognition for achievement, opportunity for advancement, and job interest).

2. Those required to avoid dissatisfaction (e.g., working conditions, status, and salary), however do not result in positive satisfaction and/or higher motivation.

As employed in this study, students and instructors can identify with several of these characteristics in their respective academic roles. In many cases, online instructors and students are provided with hygiene factors, such as effective course design and faculty support, however this may not guarantee job satisfaction and/or positive student perception of quality of instruction. Implementing Herzberg et al.'s (1967) two-factor theory for this study assisted in answering the research question, the findings of which are shared in Chapter 4.

Research Question

This study sought to answer the following research question: Are there significant differences in online student perception of online instructors who did and who did not complete faculty training as measured by responses to the Instructor Evaluation Form

question that asked students to rate the quality of instruction of their instructor?

Study Sample

The sample for the study was comprised of faculty and students employed by and enrolled at one public university in the State of Florida. At the end of each semester (fall, spring, and summer) Sunflower University facilitates a campus-wide assessment, the Instructor Evaluation Form, distributed to each student in each course with the goal of evaluating the quality of instruction based on student perception. The university strongly encourages all students to complete the Instructor Evaluation Form at the end of each semester, however individual responses are completely voluntarily. During the 2011–2013 academic years, Instructor Evaluation Form responses from online students in their first-year through graduate school were analyzed in relation to whether or not their online faculty completed faculty training for online instruction. The sample was derived from a population of 435 online instructors; 169 who completed faculty training and 266 who did not complete faculty training and 51,028 students who took online course(s) during the period of study.

To guarantee confidentiality and anonymity for the university and for all participants in the study, the following steps were implemented. No personal identifiers were collected, identified, or circulated for online faculty in the study. Online faculty were grouped together and their data were based solely on whether or not they completed faculty training for online instruction. No steps were needed to ensure confidentiality for student participants since Sunflower University's Instructor Evaluation Form is anonymous and does not link responses to students.

Limitations

In this study, several limitations were identified. The study was limited to one question on the Instructor Evaluation Form to determine differences in online student perception of quality of instruction of online instructors who did or did not complete faculty training. The study did not discriminate against or group instructors based on status (e.g., adjunct, tenure, visiting, full-time, etc.). Instructors who were not full-time, tenure-track or tenured faculty may have been trained and held accountable to a lesser degree than others based on their status. Other variables could have played a part in how students perceived their online instructors and the quality of instruction they received in their online course. For instance, the study did not evaluate if or how many online courses that a student may have taken prior to the study. The level of expertise on the students' side was not evaluated. The data collected for the study were done so as optional, students were not mandated to take the survey. No other assessments in addition to the Instructor Evaluation Form were used to evaluate online instructors and/or students perception of quality of instruction. The study focused primarily on one set of data containing Instructor Evaluation Form scores for online instructors; with student respondents of five or more, which could be considered a low response rate. The accuracy of each student response may be questionable considering the extended length of the survey (24 questions). In 2015, the Instructor Evaluation Form dramatically decreased from 24 questions to six questions.

During the time of the study (2011–2013) Instructor Evaluation Form was available to students based on their course delivery, either face-to-face or online. Faculty who taught face-to-face physically handed out Instructor Evaluation Forms to students,

which may have impacted response rates, since online students had to login to their

learning management system, select, complete, and then submit the Instructor Evaluation

Form online. Both methods for completing and submitting the Instructor Evaluation

Form, face-to-face or online, were completely anonymous and voluntarily.

Delimitations

Completion of the study was restricted to online faculty and students at a four-

year public institution in Florida with an enrollment in excess of 25,000 students who

taught or took online courses, respectively, at the selected institution. The Instructor

Evaluation Form used to evaluate student perception of quality of online instruction was

created by and used specifically for the identified university. Although most public

universities use some type of assessment to evaluate student perception of teaching to

help to measure quality of instruction, there is no uniform assessment that all public

universities implement.

Contextual Variables

Two variables were used in this study to evaluate and determine moderating

differences in student perception of public university online quality of instruction: one

demographic variable (academic classification); and one mode of instruction (online

learning).

Definition of Terms

The following definitions were employed in this study:

Faculty: All instructors (e.g., tenure-track, visiting, adjunct, etc.) who taught online

during the timeframe of the study.

Faculty training: Optional training offered to faculty throughout one academic semester

in four to five sessions at the selected institution. To officially complete the

faculty training instructors needed to attend each session in order. Instructors

were not permitted to enter faculty training in-between sessions (semester). The

same faculty training was offered to instructors each semester during this study.

The following areas were covered during the faculty training:

- Instructional design best practices

- Learning management system resources

- Course design and structure

Instructor Evaluation Form: Offered to students at the end of each semester at the

selected institution to evaluate student perception of quality of instruction. The

completion of the Instructor Evaluation Form is completely anonymous and

voluntarily.

Integrating technology: How to design and facilitate student activities, content,

assessments, and communication in an online environment.

Online: All courses, classified by the selected institution as being "fully online."

Quality of instruction: For the purpose of this study, quality of instruction is defined by

students' responses to the Instructor Evaluation Form question that asked students

to rate the quality of instruction of their instructor.

Chapter Summary

With little research in the area of student perception of quality of online

instruction as related to faculty training, this study brings forth new data that could

potentially improve online learning. Comparing the differences in student perception of

online instructors who did and did not complete faculty training could help in determining the appropriate training needed, if any, to teach online. Student perception can negatively or positively impact student satisfaction and achievement, thus by identifying key factors impacting how online students rate the quality of instruction of online instructors, certain aspects of teaching and learning online may be improved.

A study focused on one university in Florida could potentially become a benchmark for other public universities to assess and consider when prioritizing their own faculty training for online instruction. The results from this study could provide insight to other public institutions on the possible need to offer and require appropriate training for online faculty. This study may also assist accreditation bodies such as SACSCOC in reevaluating their faculty credential guidelines, which currently places a large emphasis on an instructor's coursework and completion of degrees. This could also lead to a return on investment for institutions in justifying funding to offer faculty training to maintain and improve quality of instruction overall, which in response, can positively influence student achievement, satisfaction, enrollment, and graduation rates.

II. LITERATURE REVIEW

This literature review provides a historical perspective of online learning from the student and instructor perspective. Herzberg et al.'s (1967) two factor theory, also known as Herzberg's motivation hygiene theory was reflected upon during this study. Theories of employee satisfaction were examined and derived to support the research question on the basis that students were considered employees.

There has been significant research conducted on employee satisfaction; however, little of this research has focused on online student perception of their satisfaction at the university level. This may be the result of the public transparency between employees and students. While it is estimated that 5,000 or more studies have been circulated on employee satisfaction (Cranny, Smith, & Stone, 1992) there is a limited number of studies focused on online student perception of their satisfaction. As online learning continues to develop nationwide, touching all levels of education and content areas, it is vital for all involved parties (students, instructors, and administrators) to be current in practicing 21st century skills.

Determining the "best case scenario" for students, parents, instructors, and administrators when electing to go outside the norm (traditional school setting) is critical to the selection of an effective method of instruction and should not be selected merely on convenience and flexibility. Research using instruments and theories, such as Kolb's (1984) Learning Style Inventory, Felder and Silverman's (1988) Index of Learning Styles, and Gardner's (1983) multiple intelligences, provide sound evidence that students

learn differently based on preference (learning style), ability, and skills. If the ability to learn corresponds to each individual student, then we should assume that a "one-size fits all" approach does not exist and the use of alternative methods to meet the needs of students should be encouraged. At the same time, we should not make the assumption that instructors themselves can teach their content in any context. For instance, an instructor may be an excellent face-to-face teacher, but struggle with other course delivery methods, such as teaching online.

The expertise of an instructor to maximize student achievement resides in "personalizing" instruction to meet the needs of their students (interests, abilities, preference), so learning can take place. As defined by Kolb (1984), "learning is the process whereby knowledge is created through the transformation of experience" (p. 41) and as Gardner's (1983) theory of multiple intelligences supports, each student embraces different skills and abilities. Is it possible for instructors to personalize their content and embrace their students' different skills and abilities if they are unfamiliar with the context (learning environment) that he or she is assigned to teach within? If context matters, which this study assumes it does, than it is possible for an instructor to be rated excellent in one learning environment (e.g., face-to-face) and below average in another learning environment (e.g., online).

This change of learning environment is more apparent when assessing highly rated instructors who transition to low-income schools (e.g., from affluent suburbs to fiscally struggling inner city schools) only to struggle with classroom management, learning disabilities, and lack of parent involvement; all of which have nothing to do with an instructor's content knowledge, but all to do with the context that he or she is placed in

to teach. Teaching as a whole must be reevaluated, prioritizing both an instructor's content knowledge and his or her ability to deliver his or her content in the assigned context (e.g., face-to-face, hybrid, online). Therefore, the examination of alternative teaching methods, such as online learning, must continue to be explored in offering a teaching and learning "approach" that best aligns with each individual's capabilities (Gardner, 1983).

The literature review for this study focused on five main areas of study: the impact of online, which includes both the positive and negative effects and best case scenario for instructors and students; the potential areas that may influence students' perceptions, assumptions, and biases; the student teacher relationship; an assessment on students' perception as a reliable indicator of teaching effectiveness; and faculty training for online instructors.

Online Learning and Its Effects

There are numerous factors that play a part in how effective or ineffective online learning is in producing results. In this section, both positive and negative effects were explored to understand online learning to the fullest extent with regard to maximizing its potential to assist students, faculty, and institutions. In addition, external factors such as public perception, potential biases, and personal assumptions were assessed. Below, both positive and negative effects and best and worst case scenarios are provided as related to online learning.

The positive effects of online learning. Online learning has shown to be just as comparable to face-to-face instruction. A meta-analysis completed by the U.S. Department of Education "found that, on average, students in online learning conditions

performed modestly better than those receiving face-to-face instruction" (Means, Toyama, Murphy, Bakia, & Jones, 2010, p. ix). Online learning is supported by a high percentage of administrators. "A majority of academic leaders (57 percent) already believe that the learning outcomes for online education are equal to or superior to those of face-to-face instruction" (Allen & Seaman, 2003, p. 3).

Online learning can be cost-effective depending on the university. For example, fewer resources may not be needed to teach online. It may also reduce the number of instructors, decreases the overall school budget, and decrease traveling expenses for students (e.g., commuting, gas, automotive care, etc.) (Haynie, 2014).

Course availability and accessibility for students has dramatically increased. Online learning allows students in rural areas and/or any part of the world the opportunity to take courses. Online learning also offers students a variety of ways to learn through instructional methods that include hybrid or mixed online courses (e.g., 50% face-to-face and 50% online, video streaming, and synchronous and asynchronous instruction) to meet the needs of students.

Online learning offers an alternative learning approach for at-risk students and/or students who struggle with issues that may preventing them from attending the traditional classroom setting. Lastly, parent support of online learning for their son or daughter is increasing. In a recent study, parent(s) favored online learning since it offered their students the ability to work at their own pace (Sorensen, 2012). Considering the increase in parent involvement at the college level, (note the phenomenon of the helicopter parent as well as the moniker for commuter students, sometimes called suitcase students; Eagan et al., 2017), parents may in certain ways positively influence students taking online

courses, however this increase in parent involvement may also be due to the rise in tuition costs.

The negative effects of online learning. Online learning that lacks the capability for students to interact with the instructor, their classmates, and support services can have a negative impact on learning (Kanuka & Jugdev, 2006). Students who have "high levels of connectedness are better able to manage their own needs and emotions through cognitive processes" (Lee & Robbins, 1998, p. 338), but not all students come to an online course with this trait. Relatedly, online learning in an undergraduate study exhibited that online students struggled more with time management compared to students who attended traditional courses (Keramidas, 2012). If undergraduate students, who make up the majority of online participants, struggle with online learning, an argument could be made that it is not the inability of instructors to teach online, but the inability of students to handle online learning. That said, the success of online learning still depends a great deal on the instructor. An instructor may be very knowledgeable in his/her content area, but lack the technology skills to facilitate a learning environment that is inviting to all students.

The public perception of online learning is that it is inferior to face-to-face instruction. Data shows that there are misconceptions between the rigor and consistency of online courses (Keramidas, 2012). Online learning may be difficult to implement when teaching specific content areas, particularly those that traditionally require lab work. Lastly, online learning may have a higher rate of academic dishonesty compared to the traditional school setting specifically when precautions such as exam proctoring and plagiarism software are not taken into consideration (Michael & Williams, 2013).

The Right Fit for Instructors and Students

There are multiple variables that take place in successfully taking and/or teaching an online course. These include, but are not limited to, online students who:

- Are intrinsically motivated and have strong organizational and time management skills.

- Support collaboration and the willingness to interact daily online with classmates and the instructor.

- Understand and accept expectations for learning online and take responsibility for meeting his/her learning objectives.

- Have a support group.

- Have a minimum degree of computer and technical skills (e.g., searching the Internet, basic functions of a computer, word processing skills, etc.).

Also critical to a quality online course are online instructors who:

- Are a content expert in their field.

- Can deliver their course content through an online environment.

- Are fluent in operating a learning management system.

- Are capable of establishing and maintaining communication (online presence) with students.

It is important to note that neither qualified online instructors nor qualified online students alone can guarantee a successfully online course. However, much of the responsibility lies with the online instructor in creating and maintaining a learning environment that promotes student learning. Students are a vital piece of the puzzle, yet not all students are cut out for online learning based on their learning style, personal

20

traits, and interests.

Based on the *2015 Online Report Card - Tracking Online Education in the United States*, close to six million students (more than one in four students) take online courses, making online learning a rising trend for over a decade (Allen et al., 2016). Given this dramatic increase and demand for online courses, many instructors who originally started out teaching in the traditional school setting transitioned into teaching online. This transition (face-to-face to online) has caused many online instructors to struggle to adapt their instructional practices, content resources (e.g., class PowerPoints), and use of technology. Since many institutions offer an assortment of faculty training to teach online, some required, others optional—not to mention the wide range of training provided—some instructors may lack appropriate training to teach online. Even among colleges and departments, faculty training has shown to vary. In a 2013 survey to determine how faculty are prepared to teach online, it was shown that:

> …colleges are providing training in a diversity of ways and are at a variety of different stages in developing and enacting that training. Some colleges provide extensive and careful training, while others provide very little or none at all, relying on outside vendors for training of their faculty. (Freitas & Gold, 2015, para. 6)

The lack of preparation to teach online could lead some instructors to fall back on prior knowledge and former teaching practices, usually face-to-face, which do not support an online environment.

A "Best Case" Scenario for Online Learning

Research supports that online learning as a whole works best when online

programs promote a learning environment that encourages social interaction between instructor, students, and support services through learning communities, discussion boards, and other measures (Moore & Kearsley, 2012). In addition, courses are effective when instructors foster daily interactions with each student, as well as encourage interaction amongst all students through group activities, community chat, and blogs. Instructors are a key element in developing a learning environment while sustaining teacher presence. In an ideal online course, the instructor also implements projects and activities that require students to collaborate and interact. "By using the process of interaction, data, information, and ideas are manipulated and enhanced, and transformed into newly acquired knowledge" (Luckin et al., 2013, p. 282).

Interestingly, research shows that the "best scenario" for online learning is paired with some type of blended face-to-face interaction. An example would be 80% online and 20% with an instructor (Means et al., 2010). The student-teacher interaction can take place by an assortment of means and is not limited to the traditional classroom setting.

Other best practices include:

- Administering a trial period where each student is assessed on coursework, communication, meeting deadlines, and overall production.

- Providing check points to ensure that students are logging on, accessing resources, and participating on a regular basis. A criticism of online programs is overlooking students after they enroll and/or are admitted to the program ("The Trouble With," 2013).

- Using audio, media, and websites to improve students' interest, attention, and course satisfaction (Peacock et al., 2012).

- Mandating that online instructors go through an in-depth training on how to develop, manage, and instruct their content area(s) through a learning management system.

- Putting forth the extra time and effort needed to prepare and teach online, which is estimated to be two to three times more compared to a traditional face-to-face course (Palloff & Pratt, 2007).

Perceptions, Assumptions, and Biases of Online Learning

It is important to note that the best technology alone cannot successfully achieve student learning. As Prensky (2009) noted, "technology alone will not replace intuition, good judgment, problem-solving abilities, and a clear moral compass" (para. 2); however, knowing how to use technology is an advantage. The public perception of technology as it relates to online learning may influence numerous outcomes, such as student enrollment, reputation of degree, and how schools offer online courses. It should be noted that, "not everyone accepts the power of digital enhancements to make us both smarter and wiser," (Prensky, 2009, para. 24); however, Prensky (2009) ensured us that "every enhancement comes with a trade-off…what the unenhanced mind loses by outsourcing mundane tasks will be more than made up for by the wisdom gained" (para. 26).

The perception of technology as it relates to online learning may have a huge effect on students choosing online learning as an option at the university level. Negative perceptions include acceptance from employers, second-rate education, and the association to less rigorous course(s) and/or fake degrees from diploma mills. In a 2009 literature review, "employer perceptions of online degrees" showed that although online

learning was dramatically increasing, with "nearly a decade of research, perceptions still exist in the hiring process that traditional degrees are superior to online degrees, although hybrids are gaining acceptability" (Columbaro & Monaghan, 2009, para. 19). This perception, although in contradiction to supported research, could negatively influence students, instructors, parents, and institutions in selecting online learning as an effective method for learning. At the same time, it could also influence how parties implement the process of online learning as in student selection (criteria), degree of online (e.g., hybrid), purpose (e.g., alternative school), and production (time, effort, and success).

It is important to understand the role that perception plays in online learning. Studies have shown that people "who perceive distance learning as ineffective may attend only to information that supports their beliefs and a negative perception toward a phenomenon such as distance education may predispose a person to act negatively toward that phenomenon" (Pinder, 1998, p. 939). Not everyone perceives information in the same manner and, in theory, these perceptions can turn into self-fulfilling prophecies; "events or actions that occur because we [and other people] have expected them" (Hybels & Weaver, 2004, p. 37). Numerous influences can impact our perception, which makes it even more difficult to understand, identify specific areas, and change the way we think and see the world. This may explain why the most apparent form of negative perception lies with instructors with no experience in online education, in comparison to the positive experiences shown in teachers who have taught online (Seaman, 2009).

The Community College Research Center (CCRC) completed a five-year study in 2011 on 51,000 students attending community college and discovered that students were more likely to fail or drop an online course compared to a traditional face-to-face course.

The study suggested, "that while online learning continues to offer critical flexibility to students and institutions, it does not offer a perfect alternative to the classroom experience" (CCRC, 2011, para. 3). Online learning is largely viewed as a second-rate, inferior approach to traditional learning. A 2011 Babson Survey Research Group study showed that "one-third of all academic leaders polled continue to believe that the learning outcomes for online courses are inferior to those for face-to-face instruction" (Allen & Seaman, 2011, p. 13). In 2014, the Babson Survey Research Group indicated that online learning has slowly gained acceptance, exhibiting that "the percent of academic leaders rating the learning outcomes in online education as the same or superior to those in face-to-face instruction had grown from 57 in 2003 to 77 percent in 2012" (Allen & Seaman, 2014, p. 4). Regardless of the negative perceptions, the increase in online learning may be due to an assortment of variables, such as the struggling economy and the demand for accessibility and convenience.

Student-Instructor Rapport

"Our students have changed radically. Today's students are no longer the people our educational system was designed to teach" (Prensky, 2001, p. 1). Prensky's view of "digital immigrants" teaching "digital natives" provides an illustration of how students today "think and process information fundamentally different" than past generations (Prensky, 2001, p. 1). Students today grew up using computers, cell phones, technology, and the Internet as if it was second nature (digital native). Similar to students, instructors also use cellphones, computers, and an assortment of technology, but were socialized differently placing instructors in a situation where they need to catch-up to students in learning a "new language" that students can already speak (Prensky, 2001).

Experts assert that the timing of learning can also affect how we learn. For instance, learning a new language early in life compared to doing so in adulthood, is absorbed differently by the brain. Different experiences result in the activation of different brain structures (2001). Students today think and process data differently based on the need to keep up with and engage in the fast-paced, technology-dependent, globalized society as an active citizen, or digital native. This socialization difference has resulted in a communication barrier where instructors struggle to reach students using methods that best fit themselves, the digital immigrants. Instructors perceive the learning process as a tradition or set process that worked for them and should work for every student. If students process data differently (as shown below) than past generations, how can educators expect to use the same approaches?

Digital natives:

- "are used to receiving information really fast…they like to multi-task" (Prensky, 2001, p. 2).

- "prefer their graphics before their text rather than the opposite" (Prensky, 2001, p. 2).

- "prefer games to 'serious' work" (Prensky, 2001, p. 2)

Digital immigrants:

- "choose to teach – slowly, step-by-step, one thing at a time, individually" (Prensky, 2001, p. 2).

- "think learning can't (or shouldn't) be fun" (Prensky, 2001, p. 3).

- "don't believe their students can learn successfully while watching TV or listening to music" (Prensky, 2001, p. 3).

Are Online Instructors Essential?

A common bias against online learning is the lack of student connection with the instructor as compared to the traditional face-to-face setting. Collaboration, interaction, higher-order thinking, in-depth learning, and the development of a learning community are all areas of concern that are typically associated with the physical presence of a teacher. Research indicates that, "while there are differences in the way that communication, interaction, and instruction occur in online and classroom delivery, learning outcomes are not necessarily more or less effective in one mode or another" (Mello, 2014, p. 409). The root of any instructional method should focus on the ultimate goal of learning. Arthur Clarke, who envisioned the home computer in 1974, stated that, "if children have interest, then education happens" (as cited in Mitra, 2010). The focus should not be on the instructor or online learning, but the student as a whole, and should encompass students' learning preferences, interests, and abilities. Mitra (2010) explained the need to steer away from traditional, direct instruction methods and involve the student in the learning process.

Online learning, just like face-to-face instruction, is a platform that students can use to learn. If we accept research that validates that students learn differently based on preference (learning styles), background, and experiences, we realize that online learning is not for everyone, but neither is face-to-face instruction. After all, "learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38). A study by Mitra (2012) provided evidence that learning can even take place without an instructor when an environment stimulates a student's interest. In New Delhi, India, Mitra (2010, 2012) provided students the tools to facilitate interest

(computers, Internet access, and a support system for online learning), which ultimately led to student learning that was comparable to students with an instructor.

Another platform that is gaining popularity is "gaming." McGonigal (2010) used gaming as a tool to stimulate interest through real-world applications (e.g., world-saving games). McGonigal's (2010) mission for the future is to "try to make it as easy to save the world in real life as it is to save the world in online games." If designed and implemented appropriately and consistently, gaming can bring about self-motivation and social interaction, which "builds up bonds and trust and cooperation" (McGonigal, 2010), as well as the individual opportunity to excel, obtain positive feedback, and effectively learn about real-life scenarios.

It is evident that appropriate platforms (e.g., Internet, computers, gaming, and mobile devices), if implemented correctly, can suffice in grabbing the generations of digital natives' attention, which reflects the tech-savvy language they understand. As Prensky (2001) explained, the single biggest problem facing education today is that "our digital immigrant instructors who speak an outdated language (that of the pre-digital age) struggle to teach a population that speak an entirely new language" (p. 2).

Are Students' Perceptions of Teaching a Reliable Indicator of Teaching Effectiveness?

There have been concerns that students' perception of teaching and/or how students rate their instructors' quality of instruction provides limited value when it comes to measuring an instructor's overall teaching effectiveness (Greimel-Fuhrmann, 2014). Just the phrase "teaching effectiveness" in itself could be interpreted differently depending on the person being asked. Students, faculty, and administrators may each

interpret teaching effectiveness in an assortment of ways. For instance, what students deem as important may not be a priority for instructors and/or administrators. Variables, such as course delivery, content, and activities could also influence students' perception of teaching, be it consciously or subconsciously, making it difficult to isolate and assess faculty teaching effectiveness merely on students' perceptions alone.

At the same time, there has to be a reason why the majority of public universities facilitate some type of student survey or evaluation tool to measure student perception on teaching effectiveness; many of which use student data as part of their faculty's annual evaluations, tenure, and promotion opportunities (Linse, 2017). Although, student perception cannot be used to completely evaluate teaching effectives as a whole, it is important to recognize that student perception of teaching is a vital part of the formula. If we undermine the input of student perception, we contradict that "students are first hand witnesses of what occurs in the classrooms and so they are in a privileged position to provide feedback on teaching practices" (Vonkova, Zamarro, DeBerg, & Hitt, 2015, p. 4).

With accountability on the rise for public universities, and ultimately faculty, to improve student enrollment, graduation rates, and job-placements, while justifying tuition costs (Cowan, 2013), the need to reexamine the quality (effectiveness) of teaching among faculty is necessary. Arum and Roksa (2011) in their book, *Academically Adrift: Limited Learning on College Campuses*, discussed the slow decline in student learning among college students in the United States. One of their studies in particular included 2,300 students at 24 universities. The results indicated that, "45 percent of these students demonstrate no significant improvement in a range of skills—including critical thinking,

complex reasoning, and writing—during their first two years of college" (Arum & Roksa, 2011, p. 1). Not to say that effective teaching alone can maximize student learning, since students themselves need to also be held accountable to some extent (e.g., studying, time management, prioritizing). However, if we assume that effective teaching increases student learning as research reveals (e.g., effective teaching is the most important component in improving student learning) (Murphy, Elliott, Goldring, & Porter, 2006; Rivkin, Hanushek, & Kain, 2005; Waters, Marzano, & McNulty, 2003), then it is important to evaluate instructors' overall teaching effectiveness, which includes multiple variables, one being student perception.

Faculty Training

In a recent study (Sun & de la Rosa, 2015), 195 online students were surveyed to evaluate if training for online faculty effected and/or influenced student perception of their online instructors. Of the 195 students 122 students responded (62.56% response rate) to the optional questionnaire that was based on a Likert-type scale (strongly disagree, disagree, neutral, agree, and strongly agree) that resembled very closely the Likert-type scale used in the current study, to rate student perception of teaching. Based on the students who responded, 72 students took online courses by faculty who received online training, while 50 students took online courses by faculty who did not receive online training. The results of the study verified that, "the effects of faculty training on learning objectives, outcome assessments, and instructional materials are marginally significant. Yet, faculty training does not seem to have much influence on the use of course technology" (Sun & de la Rosa, 2015, p. 56). It should be noted that the online training provided in this study was delivered by Quality Matters, which "is an

international organization that is recognized as a leader in quality assurance for online education." (Quality Matters, 2017, para. 9).

As Moore and Kearsley (2012) noted that, "distance education is about change…to enable teachers to design courses and interact with learners through technology, administrators in educational and training institutions have to organize their resources differently from what works for classroom teaching" (p. 1). Being an expert in a content/subject area alone is not enough to justify quality of instruction. Context, in this case an instructor's class environment and overall work conditions, can impact the quality of instruction. For example, it should come to no surprise that turnover rates for instructors are substantially higher at lower-performing schools in urban areas. This begs the question: is the higher turnover rate a result of the inability of instructors to teach content or the inability to accommodate to their work environment (context)?

Context matters in teaching; it is much more than simply delivering content. In this regard, higher education has much to learn from the K-12 system. In 2010, Scholastic Corporation and the Bill and Melinda Gates Foundation surveyed 40,000 teachers and discovered that the top reasons why teachers leave their profession include poor working conditions and the lack of support and professional development provided. Taking into consideration that many beginning teachers start their careers in high-need schools (e.g., at-risk, low-income, low-achieving), which in itself can include additional challenges, it is easy to understand why many teachers leave their profession in the first five years based on their work environment as a whole. Teaching experience or the lack thereof alone is not the reason why the majority of beginning teachers leave their profession. The reason originates in the variables that make-up a teacher's working

environment which includes, but is not limited to experience, staff support, professional

development, type of school, school grade, class size, students' behavior, parent

involvement, and work load.

Student achievement suffers when teachers are unfamiliar with and lack

experience teaching in their assigned learning environment (Rivkin et al., 2005), and this

is no different in higher education than in the K-12 system. Preparation is key to

teaching in any learning environment. Melnick and Meister (2008) reviewed 30 years of

literature to evaluate the concerns and differences between beginning and experienced

teachers (three years of experience or more) and found an assortment of issues. Some

included that beginning teachers with less than three years of experience:

> do not have the requisite knowledge of classroom procedures to understand the
>
> complex interrelationship among management, behavior, and academic tasks.
>
> This lack of knowledge prevents new teachers from focusing on student learning;
>
> instead, they are preoccupied with their own behavior as they try different
>
> workable procedures. (Melnick & Meister, 2008, p. 42)

As teachers gain experience in their learning environment they become "more confident

in their judgments and evaluations of their students" (Melnick & Meister, 2008, p. 51).

Overall, beginning teachers struggle primarily based on their unfamiliarity of their

learning environment, which in most cases does not relate to their content area/subject.

Bennett and Lockyer (2004) evaluated the change and transition between

traditional and online learning environments and concluded that while both settings share

many common practices their study verified that:

> technology pervades all aspects of online teaching in ways that both extend and

limit practices common in on campus teaching. The changed nature of teaching in the online environment raises issues for training and support of online teachers that must be addressed by all institutions as increasing emphasis is placed on online learning. (p. 231)

This change in environment has resulted in the need to modify old teaching practices, as well as adopt new ones to successfully train, prepare, and support online faculty in their new teaching environment. With change comes the obstacle of acceptance among all parties (e.g., students, instructors, administrators), which in itself can vary depending on the degree of change and an individual's willingness to adapt to a specific change. This process of change reflects Everett Rogers' (2003) diffusion of innovation theory, which proffers that there are different types of innovation adopters (innovators, early adopters, early majority, late majority, and laggards) based on the rate that people conform to change and/or accept new ideas.

Chapter Summary

Chapter two offered a literature review as a foundation for this study. The chapter investigated online student perception in relation to this study and provided an in-depth understanding of online learning, specifically on students and instructors who took and taught online courses respectively. An overview of online learning was provided, including the potential advantages and disadvantages, best case scenarios, possible perceptions and biases, student perception assessment, and the student-instructor relationship. Faculty training for online instructors was reviewed, placing a large emphasis on the context of course offerings (e.g., online, face-to-face, hybrid). Furthermore, higher education research pertaining to online student perception of

teaching was presented. This included research on student perception as it pertained to

student preparedness and instructors' ability to adapt. In Chapter 3 the methodology of

the study is presented.

III. METHODOLOGY

This study is important to the understanding of the perception of online students pertaining to the quality of instruction offered by online instructors, specifically at one public university in Florida, Sunflower University. Student perception can be a critical reflection of student life and can impact student achievement and satisfaction. An overview of this study's methodology is provided in this chapter.

Research Design

The emphasis of this study was on the perception of online students (quality of instruction) between the academic years of 2011 to 2013 (Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, and Summer 2013) at Sunflower University. This study used the Instructor Evaluation Form that was, and continues to be, administered by Sunflower University. The survey is dispersed to students online at the end of each semester. This survey provided the quantitative data required to answer the research question. It was used to identify the differences in online students' perception on quality of instruction between online instructors who did and did not complete faculty training.

This comparative study linked online students' perception between online instructors who did and did not complete faculty training during a set time period. After obtaining approval through the university's institutional review board (IRB), the researcher collected student and faculty data from Sunflower University (see Appendix A). The Instructor Evaluation Form is completely anonymous. Instructors, including the researcher for this study, had no way of linking surveys to specific students. Student

responses were static and did not change based on time. Instructors' scores based on the Instructor Evaluation Form are shared online by Sunflower University as public information. The researcher collected the majority of data independently during the month of February 2017 and used Excel and the SPSS software to analyze the publicly available data collected to answer the research question for the study. To acquire data on which faculty received online instructor training, the researcher requested and obtained this information from the university departments that ran the Instructor Evaluation Form scores of all faculty who taught online during the timeframe of the study. A letter of cooperation from the testing administration office of the university was obtained and provided.

Research Question

The following research question guided this study: Are there significant differences in online student perception of online instructors who did and who did not complete faculty training as measured by responses to the Instructor Evaluation Form question that asked students to rate the quality of instruction of their instructor?

Sample

The purpose of this study was to determine differences in online students' perception as it pertained to how students rated the quality of instruction between online instructors who did and did not complete faculty training. The participants in this study included online instructors and students from one Florida public university, Sunflower University. After reviewing multiple Florida public universities, it was found favorable to focus on one university based on the inconsistencies among public universities in faculty training for online instructors (e.g., optional, wide-ranging) and the evaluation

method (e.g., survey) used to measure online students' perception. The concept of comparing multiple universities during this study showed conflicting results. By placing emphasis on one public university as it pertained to online faculty training and student perception, the identified university may become a benchmark that could offer valuable information to other institutions.

Sunflower University is classified by the Carnegie Foundation as a large 4-year (or above) university with high research activity and an enrollment in excess of 25,000 students (approximately 80% undergraduate, 15% graduate, and 5% unclassified enrollment) that is primarily nonresidential (The Trustees of Indiana University, 2017). This study did not discriminate based on gender, race, ethnicity, student classification (e.g., freshman, sophomore), age, and/or demographic information. The researcher included all courses that were defined by the Sunflower University's course scheduling process as having an instructional method classified as fully online. The university chosen for this study met all of the following criteria:

- Must be a Florida public university.

- Must be a 4-year or above university.

- Must have high research activity

- Must offer online courses.

- Must offer some type of faculty training for online instructors.

- Must collect survey data on students' perception of courses taken online.

The following steps were taken to ensure confidentiality and anonymity. The institution for this study was assigned a pseudonym name. The real name of the institution was not revealed or published to ensure privacy and identity protection. Data

that were collected for this study came from preexisting public information provided by the institution. The Instructor Evaluation Form results of all online courses offered between the academic years of 2011 to 2013 (Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, and Summer 2013) were collected and reviewed for potential inclusion. 674 courses' surveys taught by 284 instructors were collected be considered for the study to evaluate the possible influences faculty training may have on students' perception, specifically on the quality of instruction. Instructor names were used only to separate data (Instructor Evaluation Form scores) into two groups: instructors who completed faculty training and those who did not. After the two groups were formed instructor names were destroyed and not used. No identifiers of any type were used in this study. This study was approved by the researcher's university IRB and the researcher followed all protocols and procedures assigned by the IRB.

In total there were 1,727 courses offered online during the timeframe of this study. Based on the criterion set by the researcher (courses must have a minimum number of five student survey respondents) and when an instructor taught online (if training was completed), 674 courses were eligible to be reviewed, which was comprised of 284 instructors. Of these courses, 252 were taught by 114 instructors who completed the faculty training and 422 were taught by 170 instructors who did not complete the faculty training. Since faculty training was offered by the institution in sessions throughout an entire semester it was deemed necessary to isolate instructors who completed the faculty training into three separate groups based on when the instructor completed the training and when he/she taught course(s). Instructors who taught courses before completing and/or during the faculty training were not included in this study.

Depending on the timing of faculty training and course(s) taught, an instructor who completed the faculty training could potentially have courses in three different areas: before, during, and after faculty training. However, only courses that were taught after completing the faculty training were included because the group of faculty who taught while taking the training was too small to include in this analysis.

Instructors' Instructor Evaluation Form scores were grouped for comparison as follows:

- Group 1: 114 instructors taught 252 course(s) after obtaining faculty training.

- Group 2: 170 instructors taught 422 course(s) without completing faculty training.

Survey Instrumentation

The Instructor Evaluation Form was used to evaluate students' perception of online instructors at Sunflower University. Permission was requested and obtained from the institution to collect and evaluate Instructor Evaluation Form data. The researcher made no changes and/or modifications to the survey instrument. After reviewing the Instructor Evaluation Form, it was found favorable to use the survey "as is" considering that the data had already been collected for each online instructor. The ability to make changes to the survey was not optional and the capability to obtain approval and contact each student for each online course was not feasible. The section of the survey that was analyzed for this study was limited to one question that asked students to rate the quality of instruction of their instructor. This Instructor Evaluation Form question was indicated to best answer the research question and was not modified and/or revised for analysis.

Students who completed the Instructor Evaluation Form and answered the identified question selected among one of the five options: excellent (1), very good (2),

good (3), fair (4), and poor (5); a Likert-type scale that offered students the ability to respond positively, negatively, or somewhere in-between. The Instructor Evaluation Form is anonymous and no demographic variables were collected or analyzed. Although, the identified institution's survey instrument has been revised since its initial implementation, the Instructor Evaluation Form used during the timeframe of this study remained unchanged allowing for all survey data to align based on the identified question and scoring. The information provided to the researcher on the Instructor Evaluation Form included the following: academic term, course title, instructor name, campus (e.g., course delivery), college, student enrollment, and student respondents. This information is public record that can be viewed via the institution's webpage.

Reliability

To establish reliability for the Instructor Evaluation Form instrument used in this study, Cronbach's alpha was applied. Ten questions of the 29 from the Instructor Evaluation Form were reviewed. These questions were selected based on type (instructor focus) and the Likert-type scale offered to students. The alpha coefficient for the sample questions on the Instructor Evaluation Form was 0.97 (see Table 1).

Table 1

Instructor Evaluation Form Instrument and Cronbach's Alpha Coefficients

Name	Number of Items	Cronbach's Alpha
Instructor Evaluation Form 10	10	0.97

Data Collection

A quantitative survey, the Instructor Evaluation Form, was used in this study to collect data regarding students' perception of online instructors at one Florida public university, Sunflower University, from 2011 to 2013. The following data collection steps were taken. First, approval was obtained by the university's IRB to proceed with study. Second, after receiving approval, the researcher contacted the university to obtain data. Data were collected for this study during Fall 2017. Data collected for this study were static and did not change based on time.

Data Analysis

The collected data from the Instructor Evaluation Form were analyzed using SPSS version 22. This software assisted the researcher in determining if faculty training for online instructors effected online students' perception on quality of instruction. All data in this study remained confidential and were destroyed after the results were gathered. Tables were produced based on the identified Instructor Evaluation Form question that displayed the two study groups including, number of courses and instructors, the mean score, the standard deviation, and two-way ANOVA analysis. A two-way ANOVA was conducted to examine the effects of faculty training and STEM (science, technology, engineering and mathematics) disciplines on student responses to the select question on the Instructor Evaluation Form at Sunflower University. Courses in the following colleges were considered under the STEM discipline (Engineering, Honors, Nursing, and Science), while the other colleges (Arts, Business, Design, and Education) were categorized under non-STEM. Residual analysis was performed to test for the assumptions of the two-way ANOVA. Outliers were identified by inspection of a

boxplot. Normality was assessed using Shapiro-Wilk's normality test for each cell of the design. Homogeneity of variances was assessed by Levene's test.

Additionally, A two-way ANOVA was conducted to examine the possible effects of faculty training and Sunflower University's colleges (Arts, Business, Design, Education, Engineering, Honors, Nursing, and Science) on students' responses to the select question on the Instructor Evaluation Form. A one-way MANOVA was also conducted to examine the effects of faculty training and the other Instructor Evaluation Form questions (15) that did not assess quality of instruction, but on other areas of the course and instructor which included objectives, instructor availability, assignments, exams, technology use, instructor's preparation, course accessibility, and rating of instructor.

Chapter Summary

Chapter 3 explained the methodology for this study. A quantitative study was completed to evaluate the potential effect faculty training may have on students' perception at one public university in Florida, Sunflower University. Student information on perception assisted in answering the research question for this study. Data analyzed for this study came from student responses on one identified question on the Instructor Evaluation Form. After following the data collection steps, data were next analyzed using SPSS to gain a better understanding of the possible effects faculty training may have on students' perception of online instruction. ANOVAs were performed to answer the research question.

IV. RESULTS

This chapter reports the data obtained from the Instructor Evaluation Form that asks students to rate the quality of instruction for online instructors. This chapter answers the research question in the study by providing the results revealed through the data collection and data analysis procedures. The purpose of this study was to determine differences in online students' perception pertaining to how students rated the quality of instruction between online instructors who did and did not complete faculty training.

Sample Size and Response Rate

As reviewed in Chapter 3, the sample for this study included online instructors who completed or did not complete faculty training and online students from one Florida 4-year public institution with an enrollment in excess of 25,000 students. Institutions considered for this study were limited to universities with a high research activity and a high undergraduate student population that are primarily nonresidential. This study included only online courses taken by students and taught by instructors at all levels (freshman to graduate) between the academic years of 2011 to 2013 (Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, and Summer 2013).

There were 1,727 courses offered online during the timeframe of this study, of which 674 courses fit the criterion for inclusion and had a student respondents of five or more. These were comprised of 284 online instructors; 114 who completed faculty training and 170 who did not complete faculty training. Further, 30,411 students took online course(s) during the academic years of 2011-2013 of which 7,075 responded to the survey (response rate =

31.25%, an average of all courses combined). Table 2 shows the response rates for each

sample group.

Table 2

Number of Respondents by Groups (Student Respondents of Five or More)

Group*	# of Courses	# of Instructors	% Student Responses (average of all courses)
Faculty Training	252	114	28.97%
No Faculty Training	422	170	32.61%

Note. *Grouping of instructors depended upon timing of faculty training and course(s) taught.

Participant Demographics

No demographic information was collected and used for this study. The Instructor

Evaluation Form collected the following course information: semester, year, and college.

Table 3 shows the number of courses in each college.

Table 3

Number of Courses by College by Group

College	Courses Taught by Instructors With Training	Courses Taught by Instructors With No Training	Total
Arts	39	3	42
Business	91	79	170
Design	34	60	94
Education	23	136	159
Engineering	4	20	24
Honors	2	0	2
Nursing	34	99	133
Science	25	25	50
Total	252	422	674

Analysis of Research Question

This study focused on online instructors working at a public university in Florida and the perception of online students between instructors who did and did complete faculty training during two consecutive academic years (2011–2013). A two-way ANOVA was used to answer the research question, which was: Are there significant differences in online student perception of online instructors who did or who did not complete faculty training. There were two independent variables: 1) faculty training with two levels, training and no training; and 2) curriculum being STEM or non-STEM. The dependent variable was the result of the Instructor Evaluation Form.

Student perception of quality of instruction. Table 4 provides a summary of the number of instructors, means, and standard deviations for each group based on

student perception of quality of instruction.

Table 4

Student Perception of Quality of Instruction by Faculty Training Group

Group	# of Courses (N = 674)	Poor	Excellent	Mean*	SD
Faculty Training	252	4.77	1.07	2.14	.71
No Faculty Training	422	4.92	1.00	2.02	.71
Average Across All Courses		4.85	1.04	2.06†	.71

Note. *The greater the mean score the lower the average student rating. Students who completed the Instructor Evaluation Form and answered the identified question selected among one of the five options: excellent (1), very good (2), good (3), fair (4), and poor (5). †Average appears low due to rounding.

ANOVA Results

A two-way ANOVA was conducted to examine the effects of faculty training (yes or no) and curriculum (STEM or non-STEM) on student responses on the Instructor Evaluation Form. Courses in the following colleges were considered under the STEM discipline (Engineering, Honors, Nursing, and Science), while the other colleges (Arts, Business, Design, and Education) were categorized under non-STEM.

Before conducting the two-way ANOVA several assumptions were verified. Outliers were identified by inspection of a boxplot. Normality was assessed using Shapiro-Wilk's normality test for each cell of the design. Homogeneity of variances was assessed by Levene's test. There were four extreme outliers, identified by being greater than three box-lengths from the edge of the box in a boxplot. These four outliers were subsequently removed from the data (see Figure 1). Residuals were not normally distributed ($p < .05$) and the assumption of homogeneity of variances was violated, as assessed by Levene's test for equality of variances, $p = .000$. The study was conducted

46

using large sample sizes for each group (training, no training, STEM, and non-STEM) and ANOVA, which is considered a robust test against normality assumptions.
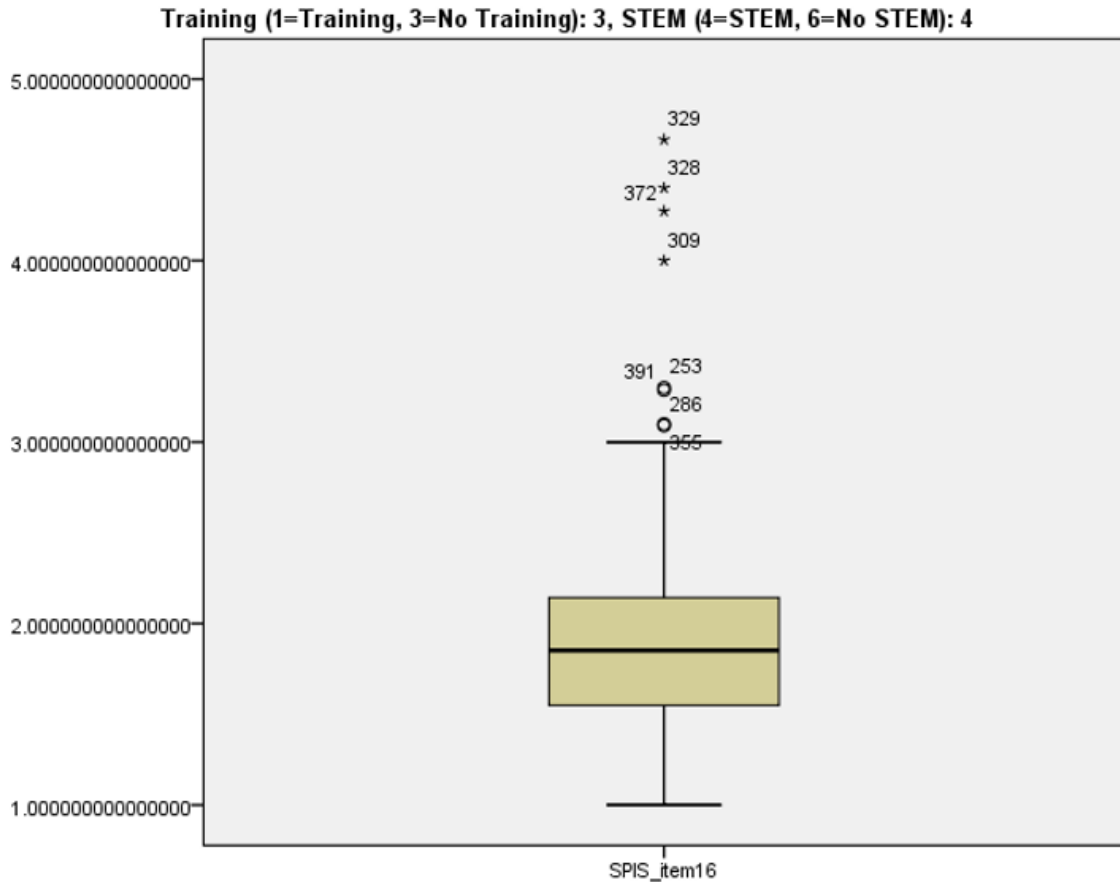
Figure 1. Effect of faculty training and curriculum box plot to assess outliers. *The four outliers that were removed.

The interaction effect between faculty training and STEM on Instructor Evaluation Form was not statistically significant, $F(1, 666) = .140$, $p = .708$, partial $\eta^2 = .000$. Therefore, an analysis of the main effect for faculty training was conducted, which was also not statistically significant, $F(1, 666) = 3.515$, $p = .061$, partial $\eta^2 = .005$. An analysis of the main effect for STEM was conducted that was statistically significant, $F(1, 666) = 15.152$, $p = .000$, partial $\eta^2 = .022$ (Laerd Statistics, 2015). The STEM group contained two levels, so a pairwise comparison level was not run. The average Instructor

47

Evaluation Form scores were: training with STEM = 1.95; training with no STEM = 2.20; no training with STEM = 1.86; and no training with no STEM = 2.07. The total mean Instructor Evaluation Form scores were: training = 2.14; no training = 2.00; STEM = 1.89; and no STEM = 2.12. It is important to note that the greater the mean score the lower the average student rating.

Although, sample sizes for this study were different (unequal), standard deviations (variances) were similar among all subjects. Results suggest that student perception of quality of instruction show no significant difference between instructors who did complete faculty training and those who did not complete faculty training.

Additional Results

As an exploratory exercise, a two-way ANOVA was conducted to examine the possible effects of faculty training and Sunflower University's colleges on students' responses to the select question on the Instructor Evaluation Form. There were two independent variables: 1) faculty training with two levels, training and no training; and 2) colleges with eight levels; Arts, Business, Design, Education, Engineering, Honors, Nursing, and Science. The dependent variable remained the result of the Instructor Evaluation Form.

Before conducting the two-way ANOVA several assumptions were verified. Outliers were identified by inspection of a boxplot. Normality was assessed using Shapiro-Wilk's normality test for each cell of the design. Homogeneity of variances was assessed by Levene's test. There were three extreme outliers, identified by being greater than three box-lengths from the edge of the box in a boxplot. These three outliers were subsequently removed from the data (see Figure 2).
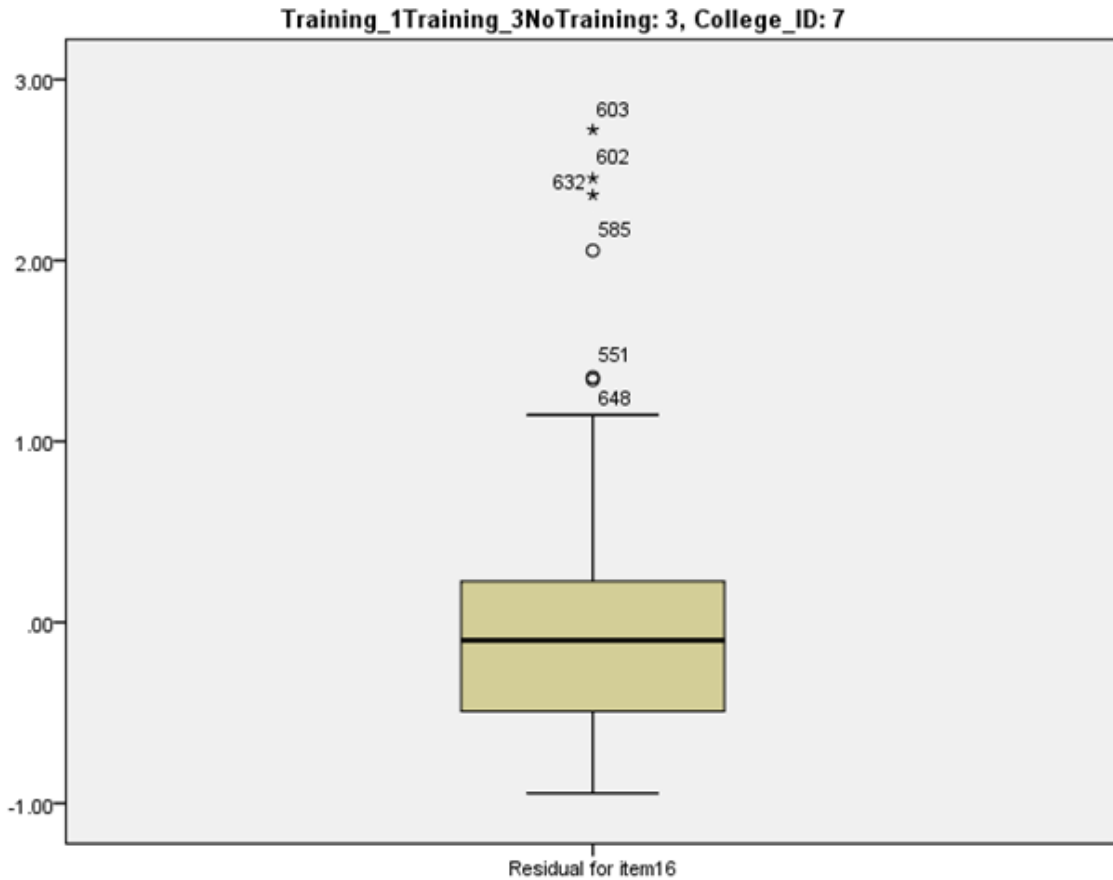
Figure 2. Effect of faculty training and college box plot to assess outliers. *The three outliers that were removed.

The majority of residuals were not normally distributed ($p < .05$) (see Table 5). The assumption of homogeneity of variances was violated, as assessed by Levene's test for equality of variances ($p = .000$).

Table 5

Residuals Test Results by College

College	Training	No Training
Arts	.026	.141
Business	.000	.001
Design	.119	.000
Education	.008	.000
Engineering	.087	.191
Honors	NA	NA
Nursing	.093	.000
Science	.001	.002

The interaction effect between faculty training and colleges on students' responses to the select question on the Instructor Evaluation Form was not statistically significant, $F(6, 656) = 1.002$, $p = .423$, partial $\eta^2 = .009$. Therefore, an analysis of the main effect for college was performed, which indicated that the main effect was statistically significant, $F(7, 656) = 3.233$, $p = .002$, partial $\eta^2 = .033$. A post hoc test least significant difference (LSD) was run and a significant difference was found between the following colleges: Arts and Design ($p = .039$), Arts and Engineering ($p = .029$), Arts and Nursing ($p = .007$), Business and Design ($p = .001$), Business and Engineering ($p = .005$), Business and Nursing ($p = .000$), Design and Education ($p = .044$), Education and Engineering ($p = 0.46$), and Education and Nursing ($p = .003$). The mean scores for each college are displayed in Table 6.

Table 6

Quality of Instruction by College

			95% Confidence Interval	
College	Mean	Std. Error	Lower Bound	Upper Bound
Arts	2.127	.203	1.727	2.526
Business	2.226	.052	2.124	2.329
Design	1.975	.073	1.832	2.118
Education	2.116	.077	1.966	2.266
Engineering	2.027	.186	1.662	2.392
Honors	1.473	.480	.531	2.416
Nursing	1.865	.068	1.732	1.988
Science	2.031	.096	1.842	2.219

Note. *The greater the mean score the lower the average student rating.

A one-way MANOVA was also conducted to examine the effects of faculty training and the other Instructor Evaluation Form questions (15) that did not assess quality of instruction, but on other areas of courses and instructors that included objectives, instructor availability, assignments, exams, technology use, instructor's preparation, course accessibility, and rating of instructor. There were 15 dependent variables (Instructor Evaluation Form questions) and one independent variable, faculty training, with two levels, training and no training. Before conducting the one-way MANOVA several assumptions were verified. Outliers were identified, but not removed for this entry. Residuals were not normally distributed *(p < .05)* and the assumption of homogeneity of variance-covariance matrices was violated, as assessed by Box's test of equality of covariance matrices *(p = .000)* The Levene's test of homogeneity of variance,

that tests the null hypothesis that the error variance of the dependent variable is equal

across groups, revealed that the majority of questions showed a homogeneity of variance

($p > .05$) (see Table 7).

Table 7

Additional Instructor Evaluation Form Questions Analyzed Using Levene's Test of

Equality of Error Variances

Questions	F	df1	df2	Sig.
1	2.486	1	665	.115
2	3.222	1	665	.073
3	.070	1	665	.791
4	.375	1	665	.541
5	3.544	1	665	.060
6	.343	1	665	.558
7	.557	1	665	.456
8	.042	1	665	.839
9	4.909	1	665	.027
10	3.092	1	665	.079
11	2.388	1	665	.123
12	.605	1	665	.437
13	8.519	1	665	.004
15	.012	1	665	.912
17	.004	1	665	.948

Note. Design: Intercept + Training_1Training3NoTraining. Certain questions were not included since the questions asked students that did not pertain to course or instructor (ex. what grade do you feel you will receive?)

There was a statistically significant difference between faculty training with two levels, training and no training; and the dependent variables (15 Instructor Evaluation Form questions, see Table 10). Five of the 15 Instructor Evaluation Form questions showed a statistically significant difference (see Table 8), which showed a slight negative effect based on training. Means scores for each are displayed in Table 9.

Table 8

Tests of Between-Subjects Effects of Instructor Evaluation Form Questions

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Q1	.408	1	.408	3.394	.066	.005
Q2	.461	1	.461	4.047	**.045**	.006
Q3	.397	1	.397	1.991	.159	.003
Q4	.277	1	.277	2.064	.151	.003
Q5	.502	1	.502	2.973	.085	.004
Q6	.032	1	.032	.159	.690	.000
Q7	.725	1	.725	3.588	.059	.005
Q8	.805	1	.805	2.873	.091	.004
Q9	1.169	1	1.169	8.465	**.004**	.013
Q10	1.083	1	1.083	4.344	**.038**	.006
Q11	.592	1	.592	2.720	.100	.004
Q12	.776	1	.776	3.385	.066	.005
Q13	1.755	1	1.755	10.058	**.002**	.015
Q15	1.136	1	1.136	5.362	**.021**	.008
Q17	.585	1	.585	1.208	.272	.002

Note. Questions that did not pertain to course or instructor were excluded.

Table 9

Relevant Mean Scores of Instructor Evaluation Form Questions

Dependent Variable	Training Mean	No Training Mean
Q1	1.309	1.258
Q2	**1.299**	**1.244**
Q3	1.426	1.375
Q4	1.358	1.315
Q5	1.392	1.335
Q6	1.368	1.353
Q7	1.425	1.357
Q8	1.604	1.532
Q9	**1.405**	**1.319**
Q10	**1.792**	**1.709**
Q11	2.640	2.701
Q12	2.924	2.995
Q13	**1.532**	**1.426**
Q15	**2.338**	**2.423**
Q17	2.353	2.292

Note. Questions that did not pertain to course or instructor were excluded. Mean scores in boldface type showed a significant difference between instructors who did and not complete faculty training,

Table 10

Instructor Evaluation Form Questions

Question #	Emphasis
1	Instructor states objectives
2*	Instructor covered course objectives
3	Instructor was available throughout the course
4	Instructor supported critical thinking
5	Instructor provided assignments that correlated with course material
6	Instructor provided assessments that correlated with course material
7	Instructor was prepared to teach course and deliver technology required
8	Instructor provided beneficial feedback
9*	Online course offering made the course more accessible
10*	Online course offering made it easier to learn course material
11	Online course offering did not promote collaboration amongst colleagues
12	Online course offering made the course less effective
13*	Asked student: Are you likely to enroll in another online course
15*	Asked student: Compare to traditional courses, the workload for this course is considerably more (1), somewhat more (2), about the same, (3) somewhat less (4), considerably less (5)
17	Asked student: Rate your instructor based on other instructors you have taken

Note. *Question showed a significant difference between faculty training.

V. CONCLUSIONS AND RECOMMENDATIONS

The perception of quality of online instruction by online students was examined in this study. Results of the analyses of student perception of their instructors who did and did not complete faculty training for online instruction is discussed in this chapter. This chapter first serves as a summary, then connects the results of the study with the literature review, and finally offers both the significance and recommendations for research and practice.

Summary of Results

This quantitative study sought to determine if significant differences exist between online students' perception of quality of instruction based on whether or not their online faculty completed training to teach online. The research question for this study was: Are there significant differences in online student perception of online instructors who did and who did not complete faculty training as measured by responses to the Instructor Evaluation Form question that asked students to rate the quality of instruction of their instructor? In this study, no significant difference was found in student perception of quality of instruction between online instructors who did and did not complete faculty training in courses with five or more student respondents.

Discussion

Herzberg et al.'s (1967) two-factor theory, also known as Herzberg's motivation hygiene theory, which focuses on the study of job satisfaction, was used as the conceptual framework for interpreting the results of the statistical analyses. To maximize employee

(student) satisfaction one must first remove factors that cause dissatisfaction and then offer motivating factors to increase satisfaction. Although, two factor theory focuses on job satisfaction, most relevant for instructors, its framework is also aligned with students since taking online courses and attending a university can be classified as employment.

Two factor theory. Herzberg et al. (1967) confirms three irregularities that counter assumptions regarding job satisfaction that were pertinent to this study. They examined why employee incentives alone cannot increase satisfaction; why the lack of responsibility and significance of work can lead employees to demonstrate low performance; and why work conditions, such as hours of labor and work schedule, can lead employees to be dissatisfied. Given that most of universities do not offer additional compensation for faculty training, it is important to note that instructors in this study did receive compensation after completing their training program. In this study, no significant difference was found based on student perception of instructors who did or did not complete faculty training, which demonstrates that instructors with or without training were rated essentially the same based on student perception. This reflects Herzberg et al.'s (1967) two factor theory that states that pay alone does not seem to increase satisfaction or performance. Furthermore, instructors in this study were presented with an optional faculty training that was designed to assist and improve their online teaching, however most instructors were not monitored for incorporating what they learned into their teaching after the training. Herzberg et al.'s (1967) theory assists in developing an understanding that without motivation factors, such as sufficient challenges, responsibility, and professional growth and advancement, instructors may not have been completely satisfied. This may have affected their teaching effectiveness in

57

their online courses.

Herzberg et al.'s (1967) theory ranks work conditions among the top six leading factors that can cause job dissatisfaction. Once they volunteered for the training, instructors in this study were required to attend sessions throughout an academic semester that lasted between three to five hours each in order to receive the additional compensation. Attending training remotely (online) and/or watching a recording of a training session was not an option. To complete the faculty training, instructors had to attend each training session in person during the designated times. The ability to attend each training session may have been difficult for some instructors due to their commute and/or other responsibilities they may have been juggling. The rigorous training schedule could have resulted in dissatisfaction among instructors that, in turn, may have negatively impacted teaching effectiveness in their online courses based on student perception as rated on the Instructor Evaluation Form.

The impact of faculty training varied amongst instructors and was dependent upon an assortment of variables, including status (e.g., tenure versus adjunct), schedule, travel, and current income. A highly motivated employee with little to no dissatisfaction in their work environment is the key to maximizing each employee's productivity level (Herzberg et al., 1967). Even though the faculty training in this study met certain factors that may have caused dissatisfaction among some of the instructors, the training included minimum motivation factors that may have allowed instructors to take on ownership or responsibility for their learning, and be more a part of the decision-making process regarding the improvement in their online instruction. While each instructor received the same certificate of completion after completing the faculty training, little follow-up was

implemented to see if instructors were using the information learned in the training in their online courses and if measureable differences and/or improvement could be established among instructors before, during, and after faculty training. Although, professional development and further training was offered to instructors, it was optional and was not completed by all instructors, which could have served as a support system for instructors who were in the beginning stages of implementing new instructional practices.

Academic college as a potential moderating variable. In this study the academic college at Sunflower University within which each instructor taught seemed to moderate student perception of instruction of online courses. Considering the different itineraries that each college may implement (e.g., internal training, staff development and follow-up, allocations of budget, hiring of staff, and course offerings) further research is needed to examine what academic colleges are doing differently to assist and support their online instructors. College culture may also play a role, including how much instructors are trusted to take on responsibility for and decision-making regarding their own professional development, as well as that of their peers.

Significance and Recommendations

The perception of students is a vital component for institutions today, especially when considering competition, reputation, and student enrollment, retention, and graduation rates. How students perceive instructors of an institution can negatively or positively impact a university and a students' ability to learn. This study reviewed student perception of online instruction taken from the Instructor Evaluation Form for several individual semesters. Since courses in an academic program typically build upon

each other based on prerequisites, a domino effect could occur based on one poorly taught online course. The quality of instruction can dramatically impact a student academically, mentally, physically, emotionally, and financially, not to mention their overall college experience. For instance, a student scheduled to learn about the foundations of accounting during the fall semester who struggles in the course when faced with poor instruction in the online environment could lead to the student needing to obtain a tutor, dropping and taking the course with another instructor, passing the course without obtaining perquisites for upcoming course(s), failing the course, changing major/degree, or even discontinuing courses and/or enrollment. Since quality of online instruction is vital for student learning, particularly for commuter students or those with dependents, four recommendations are made below.

First, with minimum research in the field of online learning, specifically on the valuation of student perception on instruction, this study makes an important contribution to the current research at public institutions. While there is an assortment of studies conducted on the perception of students and faculty training, there has been little research focusing directly on the quality of instruction based on student perception and faculty training. The majority of studies have focused on traditional courses when assessing student perception on instruction, and if applicable, faculty training. Most of the literature on online courses and/or faculty training use measurements outside of student perception to assess the overall quality of teaching and/or of the course itself. When considering the State of Florida, studies that are current and/or resemble this study could not be identified by the researcher at the time this study was conducted. Based on the significance of offering high quality instruction in online courses and the dramatic

increase in online learning nationwide, this study could serve as a framework for any public university in the United States. The option to take online course today may considerably be the only option for certain students to obtain an education and complete a degree, which may place many students in a predicament if quality of instruction is poor. The negative perception of students can produce a toxic learning environment that can result in students being unmotivated, failing to learn, and choosing not to continue their education. Further, students who choose to discontinue taking courses online could lead to a financial loss for the institution. To sustain and improve online student perception of instruction, faculty need to be prepared, skilled, and knowledgeable to meet students' needs in an online environment. Since a large percentage of online instructors started their teaching in the traditional setting it is important for institutions to educate and prepare instructors on the differences of context and how teaching online will result in implementing different instructional practices, course design and delivery, content resources, communication, and the use of technology.

Second, the results obtained from this study can provide valuable information to public institutions to assist and improve online learning as it pertains to faculty training and the quality of instruction offered. In this study, no significant difference was found between Instructor Evaluation Form scores and instructors of online courses who did and did not complete faculty training for online instruction. Based on the data provided for six academic semesters, the completion of faculty training did not significantly effect student perception of quality of instruction. This leads to the assumption that the faculty training provided may have be inadequate or ineffective in the areas of accessibility, structure, content, instructional methods, accountability, implementation, and evaluation

and improvement of the training. Reflecting upon Herzberg et al. (1967), holding

instructors accountable for implementing their learning could have dramatically

improved student perception of quality of instruction. Minimum observations or

assessments were used after faculty training to assess if trained instructors were applying

the skills and knowledge learned inside their own online courses. No specific

measurement tool was used to evaluate potential improvement of instructors' teaching

and online courses before, during, or after faculty training, aside from the Instructor

Evaluation Form. Holding instructors responsible for online teaching while encouraging

them to take ownership for improvement, could maximize online instructors' ability to

reach their fullest potential and productivity.

Third, instructors in the process of completing the faculty training were rated the

lowest in student perception. This could have been from an assortment of reasons, one

potential explanation being dissonance between an instructor's existing prior knowledge

of teaching, be it online and/or in a traditional setting, and the new material taught during

the faculty training that may have been outside of an instructor's normal context, thus

potentially interfering with learning and application of new knowledge and skills.

Instructors who taught online during the faculty training may have incorporated newly

learned concepts and materials from the training, yet with possibly little experience and

practice during the same semester, potentially making it more difficult for students to

understand. The integration of new material and the level of removal and/or revisions to

old material could have occurred. Regardless, it is not recommended—especially while

teaching an online course—to add, delete, and/or revise a course during a semester.

Thus, in training, instructors should be advised not to mix new and old methods of

teaching, which can confuse students and may result in course activities that have a mixture of designs, organization, resources, tools, and communication making it challenging for students to understand and complete.

Seeing that instructors after faculty training scored basically the same (mean scores) as instructors who never completed faculty training, it may be safe to say that instructors after training went back to their "old ways" of teaching. To prevent instructors from reverting back to their original teaching methods, instructors need the opportunity to practice new skills and knowledge learned during training in a safe environment that would not affect student learning prior to formal implementation in their online courses. For instance, instructors could work in redesigning their online course(s) using a practice course viewable only to the instructor and appropriate parties. This course could then be reviewed by the trainers and could also be an opportunity for colleagues to peer review each other's courses and provide constructive feedback. Only after requirements are met and the instructor is prepared to facilitate an online course using best practices for teaching online would the course then be offered to students under than newly training instructor.

Fourth, results of this study did show a significant difference between an academic college and student perception of quality of instruction. In this study, the colleges of Nursing and Design faired better in terms of improvement of faculty instruction based on student perception. Sunflower University should seek to understand the factors causing this difference in these academic colleges, which might include a difference in faculty training design, content, implementation, support, assessment, and other factors. The institution could than develop a university-wide initiative that all

colleges could follow to bring consistency to faculty training with the overall goal of improving online learning for all students across the university.

Recommendations for Future Research

The results of this study brought about the need to examine additional questions for future research. First, although this study evaluated the differences in online student perception between online instructors who did and did not complete faculty training, further research is needed to identify other factors that may influence quality of instruction. This study was limited to one public university in the State of Florida that included 670 online courses and 435 instructors, of which 114 completed the faculty training and 170 did not complete the faculty training offered by the institution. Future research might consider reviewing numerous institutions inside Florida and throughout the United States to assess if patterns exist between faculty training and student perception of online instruction. Are there faculty training models among institutions that resemble each other? Would it be possible to classify multiple universities into categories similar to the Carnegie Classification of Institutions of Higher Education based on institution size, type of faculty training provided, and type of assessment(s) used to measure quality of instruction? By identifying and grouping multiple universities throughout the United States into similar categories, could underlying factors influencing quality of instruction be identified?

Second, a limitation of this study is that the institutions reviewed to be potentially included and the one institution selected for this study were all in the State of Florida. Although online courses can be taught and taken remotely, thereby placing any institution in any state on the same playing field, it is important to consider that each state has

different requirements, standards, budgets, and restrictions when offering online courses. Even universities located in the same proximity could potentially enforce different guidelines, policies, and procedures. Assessment of instruction could also vary across states and universities making it difficult to compare institutions and pinpoint factors that need to be addressed to sustain and improve quality of instruction. Location, as well as the variables influenced by it, could directly or indirectly influence student perception of quality of instruction. A recommendation would be that a national survey be developed and implemented similar to how the National Center for Education Statistics conducts annual surveys. A standard survey that all institutions complete would allow higher education institutions to identify possible strengths and weaknesses and review overall results as pertaining to student perception of online instruction.

Third, this study examined only one area of teaching during a set period of time (2011–2013) based on student perception of instruction, which was part of the Instructor Evaluation Form offered at the end of each semester at Sunflower University. It is important to note that change and/or the ability to learn and implement a new concept takes time. Instructors who completed faculty training in this study were evaluated in most cases one to three semesters after completing the training, which may have not allowed enough time for instructors to transition and appropriately implement what they had learned. Furthermore, an assortment of teaching areas may have influenced student perception that could be reflected in future research. To measure an instructor's quality of instruction merely on student perception may also need to be reconsidered, and/or the timing and number of times students are assessed throughout a semester could be manipulated as a variable in future research. Perhaps an assortment of assessments, such

as a university review and/or external review, would bring about different results. Could a formula be established based on student perception, course design, and teaching methods to provide a more accurate rating of quality of instruction? Further research could be used to develop a universal assessment of quality of instruction, which could, in turn, assist institutions in identifying positive factors in professionally advancing online instructors.

Fourth, this study never examined students and their skills and abilities to successfully take an online course. Without a certain degree of awareness in areas such as computer skills, digital communication, self-regulation, and time management, students may fall behind and even fail an online course. This study focused mainly on the preparation and evaluation of online instructors; however, it would seem reasonable for students themselves to go through some type of preliminary review or assessment to ensure that they have the appropriate skills to learn and succeed in an online environment. A student lacking a basic understanding of computer and Internet skills might struggle in an online course, which could influence how the student rates his or her instructor's quality of instruction. How universities acclimate students to online learning environments could be considered in future studies. Further, the lack of prerequisites could impact student learning and indirectly be linked to perception of quality of instruction. Students could be assessed, preferably at the start of each online course in which they enroll, to ensure that proper support and resources are provided. For example, to being an online course each student could be mandated to complete and pass a non-graded assessment that reviews their readiness to take online courses and evaluates their knowledge, skills, and ability to use a computer, search the web, work inside a

learning management system, and use essential tools and applications.

Fifth, the Instructor Evaluation Form included in this study was done so only in courses with five student respondents or more, which could be considered a low return rate. Students in this study were notified by email to complete the Instructor Evaluation Form, which was completely voluntarily. To ensure that that appropriate target population is being represented, future studies could consider increasing the minimum number of respondents. To increase response rates and improve both the reliability and validity of the study it is recommended that institutions consider sending frequent reminders to students at the end of each semester, both via email and inside the learning management system being used to teach the course. Institutions should ensure that their surveys are accessible on any electronic device, are Americans with Disabilities Act compliant, and minimize the number and length of survey questions to increase survey completion and improve the quality of data obtained. The Instructor Evaluation Form used in this study asked 29 questions, some of which were closely related and not needed.

Conclusion

The purpose of this study was to determine differences in online student perception of quality of instruction between online instructors who did and did not complete faculty training at Sunflower University. The results of this study showed no significant difference in student perception of quality of instruction between online instructors who did and did not complete faculty training in courses with five or more student respondents. This indicates that regardless of whether an instructor had training or not, he or she was rated essentially the same based on student perception. This study adds to the current research on online learning regarding the improvement of the quality

67

of instruction in online courses based on the identified differences of online student perception and the completion of faculty training.

Researching ways to improve online learning is important for students, instructors, and institutions. The results of this study highlighted areas in need of improvement in faculty training, student perception, and quality of instruction. Recommendations include reviewing faculty training models and assessment tools used to measure quality of instruction at comparable institutions throughout the United States. Furthermore, it is essential to investigate additional areas regarding student perception and the variables that impact being a successful online student and an effective online instructor. To continually improve quality of instruction based on the perception of students, institutions throughout the United States should continue to study ways to improve teaching and learning online.

APPENDIX

Appendix A. IRB Approval Letter

FAU

FLORIDA ATLANTIC UNIVERSITY

DATE: December 18, 2017

TO: Dr. Robert Shockley
FROM: Florida Atlantic University Social, Behavioral and Educational Research IRB

IRBNET ID #:   954128-3
PROTOCOL TITLE: [954128-3] STUDENTS' PERCEPTION OF ONLINE INSTRUCTORS AT A
                         FLORIDA PUBLIC UNIVERSITY

PROJECT TYPE: *Continuing Review / Progress Report*
ACTION: APPROVED

APPROVAL DATE: December 18, 2017
EXPIRATION DATE: January 13, 2019

REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # *B7*

Thank you for your submission of Continuing Review/Progress Report materials for this research study. The Florida Atlantic University Social, Behavioral and Educational Research IRB has APPROVED your *Continuing Review / Progress Report*. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

- *This study continuation is approved for data analysis only.*
- It is important that you use the approved, stamped consent documents or procedures included with this letter.
- ****Please note that any revision to previously approved materials or procedures, including modifications to numbers of subjects, must be approved by the IRB before it is initiated.** Please use the amendment form to request IRB approval of a proposed revision.
- All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All regulatory and sponsor reporting requirements should also be followed, if applicable.
- Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.
- Please note that all research records must be retained for a minimum of three years.
- **This approval is valid for one year.** A Continuing Review form will be required prior to the expiration date if this project will continue beyond one year.

If you have any questions or comments about this correspondence, please contact Donna Simonovitch at:

Institutional Review Board

Research Integrity/Division of Research
Florida Atlantic University
Boca Raton, FL 33431
Phone: 561.297.1383
researchintegrity@fau.edu

* Please include your protocol number and title in all correspondence with this office.

**This letter has been electronically signed in accordance with all applicable regulations,
and a copy is retained within our records.**

Generated on IRBNet

REFERENCES

Allen, I. E., & Seaman, J. (2003, September). *Sizing the opportunity: The quality of online education in the United States, 2002 and 2003*. Needham, MA: The Sloan Consortium.

http://sloanconsortium.org/sites/default/files/sizing_opportunity_2.pdf

Allen, I. E., & Seaman, J. (2011, November). *Going the distance: Online education in the United States, 2011*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group, LLC. Retrieved from

http://www.onlinelearningsurvey.com/reports/goingthedistance.pdf

Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Wellesley, MA: Babson College.

Allen, I. E., & Seaman, J. (2014, January). *Grade change: Tracking online education in the United States*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group, LLC. Retrieved from

http://www.onlinelearningsurvey.com/reports/gradechange.pdf

Allen, I. E., Seaman, J., Poulin, R., & Straut, T. T. (2016, February). *Online report card: Tracking online education in the United States*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group, LLC. Retrieved from

http://onlinelearningsurvey.com/reports/onlinereportcard.pdf

Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college Campuses*. Chicago, IL: University of Chicago Press.

Astin, A. (1993). *What matters in college? Four critical years revisited.* San Francisco, CA: Jossey-Bass.

Bean, J. P., & Bradley, R. K. (1986). Untangling the satisfaction-performance relationship for college students. *Journal of Higher Education*, *57*(4), 393–412.

Bennett, S., & Lockyer, L. (2004). Becoming an online teacher: Adapting to a changed environment for teaching and learning in higher education. *Educational Media International*, *41*(3), 231–248.

Columbaro, N., & Monaghan, C. (2009). Employer perceptions of online degrees: A literature review. *Online Journal of Distance Learning Administration*. Retrieved from http://www.westga.edu/~distance/ojdla/spring121/columbaro121.html

Community College Research Center. (2011, July 14). *Regardless of background, online students drop out more often than classroom counterparts* (Press release). Retrieved from http://ccrc.tc.columbia.edu/press-releases/online-students-drop-out-more-often-than-classroom-counterparts.html

Cowan, K. (2013, December 15). *Higher education's higher accountability*. Washington, DC: American Council on Education. Retrieved from http://www.acenet.edu/the-presidency/columns-and-features/Pages/Higher-Education's-Higher-Accountability.aspx

Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). *Job satisfaction: How people feel about their jobs and how it affects their affects their performance*. New York, NY: Lexington Press.

Eagan, M. K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Whang Sayson, H., & Rios-Aguilar, C. (2017). *The American freshman: National norms fall 2016*. Los Angeles, CA: Higher Education Research Institute, University of California.

Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. *Engineering Education*, *78*(7), 674–681.

Fontaine M. (2014). Student relationship management (SRM) in higher education: Addressing the expectations of an ever evolving demographic and its impact on retention. *Journal of Education and Human Development*, *3*(2), 105–119.

Freitas, J., & Gold, C. (2015). *Preparing faculty to teach online*. Sacramento, CA: Academic Senate for California Community Colleges. Retrieved from http://www.asccc.org/content/preparing-faculty-teach-online

Gardner, H. (1983). *Frames of mind: the theory of multiple intelligences*. New York, NY: Basic Books.

Greimel-Fuhrmann, B. (2014). Student's perception of teaching behaviour and its effect on evaluation. *International Journal for Cross-Disciplinary Subjects in Education*, *5*(1), 1557–1563.

Haynie, D. (2014, June 3). Why online education may drive down the cost of your degree. *U.S. News and World Report*. Retrieved from https://www.usnews.com/

Herzberg, F., Mausner, B., & Snyderman, B. (1967). *The motivation to work*. New York, NY: Wiley.

Hybels, S., & Weaver, R. L., II (2004). *Communicating effectively* (7th ed.). New York, NY: McGraw-Hill.

Jamrisko, M., & Kolet, I. (2012, August 15). Cost of college degree in U.S. soars 12 fold: Chart of the day. *Bloomberg News*. Retrieved from https://www.bloomberg.com/

Kanuka, H., & Jugdev, K. (2006). Distance education MBA students: An investigation into the use of an orientation course to address academic and social integration issues. *Open Learning*, *21*(2), 153–166.

Keramidas, C. (2012). Are undergraduate students ready for online learning? A comparison of online and face-to-face sections of a course. *Rural Special Education Quarterly*, *31*(4), 25–32.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.

Laerd Statistics. (2015). *Two-way ANOVA using SPSS statistics* (Statistical tutorials and software guides). Retrieved from https://statistics.laerd.com/

Lee, R., & Robbins, S. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology*, *45*(3), 338–345.

Linse, A. R. (2017). Interpreting and using student ratings data: Guidance for faculty serving as administrators and on evaluation committees. *Studies in Educational Evaluation*, *54*, 94–106.

Luckin, R., Puntambekar, S., Goodyear, P., Grabowski, B., Underwood, J., & Winters, N. (Eds.). (2013). *Handbook of design in educational technology*. New York, NY: Routledge.

McGonigal, J. (2010). *Gaming can make a better world* [Video]. *TED Talks*. Retrieved

    from

    https://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010, September).

    Evaluation of evidence based practices in online learning: A meta-analysis and

    review of online learning studies (Revised). Washington, DC: Policy and Program

    Studies Service, Office of Planning, Evaluation, and Policy Development, U.S.

    Department of Education. Retrieved from

    http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Mello, J. A. (2014). *Strategic human resource management* (4th ed.). Stamford, CT:

    Cengage Learning.

Melnick, S., & Meister, D. (2008). A comparison of beginning and experienced

    teachers' concerns. *Educational Research Quarterly, 31*(3), 39–56.

Michael, T. B., & Williams, M. A. (2013). Student equity: Discouraging cheating in

    online courses. *Administrative Issues Journal, Education, Practice and*

    Research, *3*(2). Retrieved from http://dx.doi.org/10.5929/2013.3.2.8

Mitra, S. (2010, July). *The child-driven education* [Video podcast]. *TEDGlobal2010*.

    Retrieved from

    https://www.ted.com/talks/sugata_mitra_the_child_driven_education

Mitra, S. (2012, February 3). The Hole in the Wall Project and the power of self-

    organized learning (Web log post). *Edutopia*. Retrieved from

    https://www.edutopia.org/blog/self-organized-learning-sugata-mitra

Moore, M. G., & Kearsley, G. (2012). *Distance education: A systems view of online learning* (3rd ed.). Belmont, CA: Wadsworth.

Murphy, J., Elliott, S. N., Goldring, E., & Porter, A. C. (2006). *Learning-centered leadership: A conceptual foundation*. Nashville, TN: Learning Sciences Institute, Vanderbilt University.

National Center for Education Statistics. (2016). *Digest of education statistics, 2015: Table 311.15* (NCES 2016-014). Washington, DC: Institute for Education Sciences, U.S. Department of Education.

Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the virtual classroom*. San Francisco, CA: Jossey-Bass.

Palloff, R. M., & Pratt K., (2011). *The excellent online instructor: Strategies for professional development*. San Francisco, CA: Jossey-Bass.

Peacock, S., Murray, S., Dean, J., Brown, D., Girdler, S., & Mastrominico, B. (2012). Exploring tutor and student experiences in online synchronous learning environments in the performing arts. *Creative Education*, *3*(7), 1269–1280.

Pike, G. R. (1991). The effects of background, coursework, and involvement on students' grades and satisfaction. *Research in Higher Education*, *32*(1), 15–30.

Pinder, C. (1998). *Work motivation in organizational behavior*. Upper Saddle River, NJ: Prentice Hall.

Pisapia, J. (2009). *The strategic leader: New tactics for a globalizing world*. Charlotte, NC: Information Age Publishers.

Powers, W. (2015). *SACS.* The University of Texas at Austin. Retrieved from https://www.utexas.edu/provost/sacs/

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, *9*(5), 1–6.

Prensky, M. (2009). H. sapiens digital: From digital immigrants and digital natives to digital wisdom. *Innovate: Journal of Online Education*, *5*(3),. Retrieved from http://nsuworks.nova.edu/innovate/vol5/iss3/1

Quality Matters. (2017). *About Quality Matters*. Annapolis, MD: Author. Retrieved from https://www.qualitymatters.org/why-quality-matters/about-qm

Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica, 73*(2), 417–458.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Schreiner, L. (2009). *Linking student satisfaction and retention*. Iowa City, IA: Noel-Levitz.

Seaman, J. (2009, August). *Online learning as a strategic asset: Volume II: The paradox of faculty voices: Views and experiences with online learning*. Washington, DC: Association of Public and Land-grant Universities and Babson Survey Research Group. Retrieved from https://files.eric.ed.gov/fulltext/ED517311.pdf

Sorensen, C. (2012). Learning online at the K-12 level: A parent/guardian perspective. *International Journal of Instructional Media*, *39*(4), 297–308.

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). (2006). *Faculty credentials*. Retrieved from http://www.sacscoc.org/pdf/081705/faculty%20credentials.pdf

Sun, J., & de la Rosa, R. (2015). Faculty training and student perceptions: Does

quality matter? *Internet Learning*, *4*(1). Retrieved from

http://digitalcommons.apus.edu/internetlearning/vol4/iss1/4

The Trouble With Online College. (2013, February 18). Editorial. *The New York Times*.

Retrieved from http://www.nytimes.com/

The Trustees of Indiana University. (2017). *Carnegie Classification of Institutions of*

Higher Education: Institution lookup. Retrieved from

http://carnegieclassifications.iu.edu/lookup_listings/institution.php

Vonkova, H., Zamarro, G., DeBerg, V., & Hitt, C. (2015, June). *Comparisons of student*

perceptions of teacher's performance in the classroom: Using parametric

anchoring vignette methods for improving comparability (EDRE Working Paper

No. 2015-01). Retrieved from

http://www.uaedreform.org/downloads/2015/05/comparisons-of-student-

perceptions-of-teachers-performance-in-the-classroom-using-parametric-

anchoring-vignette-methods-for-improving-comparability.pdf

Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years*

of research tells us about the effect of leadership on student achievement

(Working paper). Aurora, CO: Mid-Continent Research for Education and

Learning. Retrieved from https://files.eric.ed.gov/fulltext/ED481972.pdf