Effective Teacher Practices in Community College Online Instruction: An Exploratory Sequential Mixed-Methods Study

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Effective Teacher Practices in Community College Online Instruction: An Exploratory Sequential Mixed-Methods Study

Abstract
Online courses provide access to higher education for many community college students (Allen & Seaman, 2006). Despite the convenience of online classes for community college students and the recent surge in online courses (Allen & Seaman, 2013), they have higher failure rates than face-to-face classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). The study identified what community college students perceived as important elements of teacher practice that led them to feel successful in an online course. The community of inquiry framework (CoI) provided the theoretical framework for the exploratory sequential mixed methods study. Focus group data were analyzed through a qualitative coding process and used to build a quantitative survey instrument. Survey results were analyzed using descriptive statistics to identify their perceived importance (Krueger & Casey, 2015). Results indicated that participants valued having course material well-explained, effective learning tools, applicable course content, timely grading, personal feedback, and the ability to revise their work. Teachers having email contact, participating in online discussions, being available, and caring were also important to participants. Results support the foundation of the community of inquiry framework, particularly teaching presence. The most essential recommendation is to move from a teacher-centered model to a student-centered model for online learning. Recommendations include providing teacher and student preparation for online learning, offering institutional support, and researching best practices in online education.

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Effective Teacher Practices in Community College Online Instruction:
   An Exploratory Sequential Mixed-Methods Study

By

Katharine Rumrill-Teece

Submitted in partial fulfillment
of the requirements for the degree
Ed. D in Executive Leadership

Supervised by
C. Michael Robinson, Ed. D
Committee Member
Julie A. White, Ph. D

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

December, 2015
Dedication

First and foremost, I would like to thank my husband, Mark Teece and my children, Ella and Natalie Teece for their patience, support, and enduring faith. Mark you are my rock, and you fill my life with love, kindness, and humor. I could not have done this without you. Natalie and Ella, you inspire me every day and thank you for cheering me on, for doing homework beside me, and for being so understanding. Most importantly, you always welcomed me home and into your loving arms. While the flow of leftover donut holes and treats may slow down, we will have more cherished time together. I also thank my parents, Meriwether Hagerty Rumrill and Clark Rumrill, and my in-laws, Hanne and Alan Teece, for their thoughtful support.

Each and every member of Cohort One has been very special to me. You have been my constant companions and you have made the journey powerful, soulful, and joyful. I cannot thank you enough for your comradery, affection, and support. I am better for knowing you. Thank you to my sisters, Cathy Dotterer, Wandah Gibbs, and Najah Salaam Jennings-Bay for walking this path with me and freely sharing your eternal humor, intellect, and grace.

My wonderful group, the Shining Lights, Sandra Chapman, Larry Schmeigel, Derrick Suehs, and Shiva Utlasar, thank you for allowing me to shine. You have encouraged me and had faith in me, you have shared your lives with me and supported me over the past two and a half years. We have done this together and I am so grateful for you.
Thank you to my advisor and teacher, Dr. Theresa Pulos, you provided me sage guidance and your intellect and strength are an inspiration to me. Thank you to Dr. Linda Hickmon Evans for your thoughtful encouragement and for bringing so much heart to the program. Thank you also to Dr. Kathleen King, you believed in me and freely shared your wisdom, insight, and humor as I started this journey.

To my dissertation committee chair and teacher, Dr. C. Michael Robinson, you have been a strong guiding force throughout the process. You have taught me about transformative and authentic leadership through your shining example, I am so grateful to have you in my life, thank you. To my dissertation committee member, executive mentor, teacher, colleague, and friend, Dr. Julie A. White, you taught me about leadership, scholarship, passion for work, life balance, and humor. I cannot thank you enough.

Finally, I dedicate this dissertation to each student whose life I have had the honor of touching over the course of my career as an educator.

Education is not preparation for life; education is life itself. –John Dewey
Biographical Sketch

Katharine Rumrill-Teece is the Dean of Humanities and Social Sciences at Onondaga Community College (Onondaga). Katharine received her B.S. in Psychology from Virginia Tech in 1991 and her M.A. in Intercultural Communication from George Mason University in 1996.

Katharine worked as Program Director for International Student House, a non-profit organization in Washington, D.C., from 1994 to 1999. During that time, she also worked as a resident director for Semester at Sea, and a training consultant for various government, private, and non-profit agencies. She started her teaching career at George Mason University and subsequently taught at George Washington University before moving to Syracuse in 1999. Katharine found an academic home at Onondaga as a Professor of Communication, teaching with a group of wonderful people, Crystal Etzel, Anthony Wainwright, Karen Harrison, Mark Muhammad, Carolyn Bice, Laurel Saiz, and Jamie Sindell.

She came to St. John Fisher College in the summer of 2013 and began doctoral studies in the Ed. D Program in Executive Leadership. Katharine pursued her research on effective teacher practices in community college online instruction under the direction of Dr. C. Michael Robinson and Dr. Julie A. White and received the Ed. D degree in 2015.
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I would like to acknowledge both St. John Fisher College and Onondaga Community College for awarding me the inaugural St. John Fisher College -Onondaga Community College Educational Excellence Scholarship Grant, September 2013 – December 2015. I would also like to acknowledge Onondaga Community College for granting me a sabbatical leave to complete my dissertation.

Thank you to my executive mentor, Mike Heise, Director of the Office of Instructional Design and Delivery at Onondaga Community College. Mr. Heise was a fountain of knowledge about online learning and an extremely capable and helpful Executive Mentor. His guidance and support were invaluable to completing my research.
Abstract

Online courses provide access to higher education for many community college students (Allen & Seaman, 2006). Despite the convenience of online classes for community college students and the recent surge in online courses (Allen & Seaman, 2013), they have higher failure rates than face-to-face classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). The study identified what community college students perceived as important elements of teacher practice that led them to feel successful in an online course. The community of inquiry framework (CoI) provided the theoretical framework for the exploratory sequential mixed methods study. Focus group data were analyzed through a qualitative coding process and used to build a quantitative survey instrument. Survey results were analyzed using descriptive statistics to identify their perceived importance (Krueger & Casey, 2015). Results indicated that participants valued having course material well-explained, effective learning tools, applicable course content, timely grading, personal feedback, and the ability to revise their work. Teachers having email contact, participating in online discussions, being available, and caring were also important to participants.

Results support the foundation of the community of inquiry framework, particularly teaching presence. The most essential recommendation is to move from a teacher-centered model to a student-centered model for online learning. Recommendations include providing teacher and student preparation for online learning, offering institutional support, and researching best practices in online education.
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Chapter 1: Introduction

Introduction

Improving retention and graduation rates at colleges and universities has been a priority of policymakers since the 1970s (Dougherty et al., 2014). Colleges are expected to increase retention without increasing tuition costs to students (Belfield, Crosta, & Jenkins, 2014). Meanwhile, community colleges are losing funding because many of them depend on funds from counties and states already stretched beyond their budgetary constraints (D. Jenkins, 2011; Katsinas, Tollefson, & Reamey, 2008; Laves, 2010). Community colleges are tasked with maintaining their accessibility and retaining their students; yet, with a national six-year completion rate of only 20% (The College Board, 2008), community college students are graduating at a much lower rate than 4-year undergraduate institutions (Goldrick-Rab, 2010).

Community colleges are an essential part of supporting the United States economy as it fluctuates (The College Board, 2008). The Obama administration has focused on increasing college graduation rates, specifically associate degrees and professional certifications (D. Jenkins, 2011). Decreasing state budgets and increasing enrollment at community colleges creates a need for institutional change. To increase their accessibility, many community colleges have been early adopters of online education (Parsad & Lewis, 2008). While online courses at community colleges do
increase student access to education (Merisotis & Phipps, 2000), failure rates for online classes are much higher than those for face-to-face classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). Nonetheless, online education is growing at a rapid rate (Allen & Seaman, 2013) and it is imperative to help community college students accomplish their educational goals (Crisp & Mina, 2012).

Students who are successful in accomplishing their educational goals at community colleges can pull themselves out of poverty and alter the trajectories of their lives (Crisp & Mina, 2012). As a component of social justice, it is essential to support students as they invest in their own futures. Online classes and programs provide access to some of the nation’s most vulnerable populations and can support them in their success (T. R. Bailey, Jaggars, & Jenkins, 2015).

Research has consistently examined the institutional perspective and teachers’ perspective on online learning (Hachey, Wladis, & Conway, 2014; Liu, Gomez, & Yen, 2009; Tirrell & Quick, 2012; Wolff, Wood-Kustanowitz, & Ashkenazi, 2014). However, students themselves are very invested in their own success (Tabar-Gaul, 2008). Community college students who can accomplish their academic goals can rise above poverty, save money, get better jobs, or be better prepared to transfer to 4-year colleges (Crisp & Mina, 2012). Online teachers who wish to engage students should be well prepared to teach effectively in this medium (Serwatka, 2005). Examining students’ perceptions of their educational experience can identify the teacher practices that students find most helpful. The study focuses on which teacher practices influence student success from the perspective of the student.
Problem Statement

Over the last 100 years, community colleges in the U.S. have provided open access to those who are seeking education (Boggs, 2010). Community colleges were initially part of a social movement to offer education to those encountering societal and economic obstacles. Community colleges play a vital role in improving and supporting the U.S. economy (Boggs, 2010). However, only approximately 20% of community college students complete degrees after six years (The College Board, 2008). Additionally, completion rates for community colleges are consistently lower than for 4-year undergraduate institutions (Goldrick-Rab, 2010). The current challenge for community colleges is to continue accessibility while achieving the goals of high student retention and success (The College Board, 2008).

Online instruction at community colleges increases student access to education (Merisotis & Phipps, 2000). Student interest in online classes in higher education is growing rapidly. In 2002, approximately 1.6 million students were taking at least one online class and in 2012 more than six million students took one or more online classes (Allen & Seaman, 2013). Allen and Seaman (2011) reported that online learning had the highest rate of growth of any sector in higher education. Between 25% and 33% of U.S. college students have enrolled in at least one online class (Allen & Seaman, 2013). As more institutions offer online courses and degree programs, the field is becoming intensely competitive (Rockinson-Szapkiw, 2009).

Online courses are the best, or sometimes only, avenue to higher education for many community college students (Allen & Seaman, 2006). The accessibility of online classes appeals to community college students who have family commitments, are
between 24 and 29 years old, and are employed (Hampton, 2010; Horn, Nevill, & Griffith, 2006). From 2002 to 2008, community colleges enrolled more than half of the four million students who were taking online classes in the U.S. (Allen & Seaman, 2008). Online courses provide convenient and accessible education; however, they have high attrition rates (Xu & Jaggars, 2013). Despite the convenience of online classes for community college students and the recent surge in online courses (Allen & Seaman, 2013), attrition in online programs can be up to 6 to 7 times higher than in conventional face-to-face classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). High attrition rates in online courses lead to loss of revenue for colleges (Liu et al., 2009) and loss of time and money for students (Tinto, 2006). Academic leaders are being charged with creating, maintaining, and promoting quality distance learning opportunities for students (Rockinson-Szapkiw, 2009). Therefore, retention in online courses is important to students, faculty, and administrators at community colleges offering online courses (Laves, 2010).

Research in higher education has extensively examined how student characteristics such as age (Muilenburg & Berge, 2005; Patterson & McFadden, 2009), cumulative grade point average (GPA) prior to taking an online class (Cochran, Campbell, Baker, & Leeds, 2014; Hachey et al., 2014; Xu & Jaggars, 2013), and time management (Doherty, 2006; Hart, 2012) influence retention in online courses. Additionally, strong teaching strategies, communication with professors, and feedback from professors also influence retention in online classes (Hart, 2012; Shea & Bidjerano, 2009). Teaching presence, which includes course design, teacher practices, and direct
instruction (Anderson, Rourke, Garrison, & Archer, 2001), influences students’ satisfaction with online courses (Laves, 2010).

Online teachers who wish to engage students should be well prepared with the tools and methods necessary to teach effectively (Serwatka, 2005). The distance education research literature frequently examines teacher training (Baran, Correia, & Thompson, 2011; Burd & Buchanan, 2004; Mensch, 2009), teacher preparation (Serwatka, 2005), and instructional design (Betts, Kramer, & Gaines, 2011; Foster, Shurtz, & Pepper, 2014; Richardson et al., 2012). More recently, researchers investigated student perceptions of teacher practices in online classes. These studies were conducted at 4-year undergraduate and graduate universities (Dennen, Darabi, & Smith, 2007; Menchaca & Bekele, 2008; Sheridan & Kelly, 2010). However, no research has been found about student perceptions of the importance of teacher practices in online classes at community colleges.

Examining students' perceptions of their educational experience can identify the teacher practices that help students feel successful in online classes. Dewey (1897) believed students learned best in a collaborative environment and that they should be active participants in their learning. The Deweyen value of active student participation in their education will be a guiding principle for the dissertation. The research will identify what community college students perceive as important elements of teacher practice that lead them to feel successful in an online course.

**Theoretical Rationale**

**Constructivist theory.** Constructivist theory provides a framework to discuss best practices in online teaching at community colleges (Swan, Garrison, & Richardson,
Constructivism is a broadly recognized learning theory (Leidner & Jarvenpaa, 1995) that dictates that each student take active responsibility to build, or construct, their learning (Dewey, 1897; Eom, Wen, & Ashill, 2006; Leidner & Fuller, 1997; Swan et al., 2009). John Dewey, a turn of the 20th-century philosopher and psychologist, wrote prolifically about the constructivist nature of education and learning (Swan et al., 2009). Dewey (1897) envisioned that individual students would learn in a collaborative environment. Teachers would both instruct directly and serve as guides for students. Students would then construct their own meaning as they learned in an active educational community. This democratic idea of engaging in a process of inquiry in an active, inclusive, and diverse environment laid the groundwork for other influential 20th century theorists (Bleazby, 2012). Matthew Lipman, a present day philosopher, applied the ideas of Dewey to the field of education to inform curricular design and teacher practices (Lipman, 2003). He included the concepts of both community, teachers and students working together, and inquiry, the process of learning and questioning, to create the distinct concept of a community of inquiry. Garrison, Anderson, and Archer’s community of inquiry framework (CoI) is rooted in Dewey’s constructivist thinking and Lipman’s subsequent ideas of community and inquiry (Anderson et al., 2001).

**Community of inquiry framework.** The CoI applies Dewey’s constructivist ideas and Lipman’s community of inquiry theory to online education (Swan et al., 2009). Online education is an ideal medium to apply this theoretical context because both writing and analysis can be improved by the additional time for reflection that the asynchronous platform provides (Garrison, Anderson, & Archer, 2003). The CoI refers to the community created by the interaction of three different types of presence:
cognitive, social, and teaching (Shea & Bidjerano, 2009). Social presence is the online interaction and collaboration of students with each other (Garrison, Anderson, & Archer, 2000). It includes students expressing their personalities and creating interpersonal relationships (Meyer, 2013). Teaching presence is the online interaction of students with teachers, including what a teacher does to create a course and to both direct and facilitate learning (Anderson et al., 2001). Cognitive presence is the online interaction of the students with course materials (Shea & Bidjerano, 2009). Cognitive presence highlights academic learning and intellectual reflection on new ideas (Meyer, 2013) and is essential for effective online learning (Garrison et al., 2000). Each type of presence is essential to the framework and supports an effective environment for learning (Laves, 2010; Meyer, 2013; Swan et al., 2009). The CoI has informed the practice of effective online instruction since its inception in 2000 (Swan et al., 2009).

Using the CoI will illuminate the major challenges and opportunities concerning teacher practice for online courses at community colleges (Meyer, 2013). The CoI provides a starting place for practice, has sparked much research, and has been validated by multiple studies (Akyol et al., 2009). The CoI framework provides a helpful theoretical lens through which to view online learning (Anderson et al., 2001; Shea et al., 2010), specifically the teacher practices which guide students to succeed in online courses at community colleges.

**Statement of Purpose**

The purpose of this study is to identify what community college students perceive as important elements of teacher practice that lead them to feel successful in an online
course. This knowledge will lead to improved course development, improved interaction between teachers and students, and direct instruction in online courses.

The dissertation will identify teaching strategies that are the most successful from the perspective of students enrolled in online classes at a community college in Upstate New York (The College). Online teachers should be well prepared in effective teaching strategies in order to engage students (Serwatka, 2005). Moreover, teaching presence, which includes course design, teacher practices, and direct instruction (Anderson et al., 2001), influences students’ satisfaction with a course (Laves, 2010). Some researchers have started to examine student perceptions of teacher practices (Dennen et al., 2007; Menchaca & Bekele, 2008; Sheridan & Kelly, 2010). The dissertation will add to this important body of student-centered research by focusing on the perceptions of community college students.

Research Questions

The following three research questions will be used to achieve the purpose of the study:

1. How do selected students currently enrolled in an online class at The College define success in an online class?
2. What do selected community college students currently enrolled in an online class at The College perceive as important elements of teacher practice to feel successful in an online course?
3. Given the perceived important elements in research question two, what do students currently enrolled in an online class at The College perceive are
the most important elements of teacher practice to feel successful in an online course?

Potential Significance of the Study

Retention at community colleges is a national issue that is also a concern at The College. Community colleges receive revenue in the form of public tax dollars to provide an education to students, yet many students are not completing their degrees. The six-year graduation rate at The College is approximately 20%, which is about the same as the national average (Personal communication, Casey Crabill, August 24, 2014). The total cost of federal, state, and local taxpayer dollars spent on first-year, full-time community college students in the U.S. who drop out is four billion dollars (Schneider & Yin, 2011). Schneider and Yin further state that New York State spent 45 million dollars on first-year community college students who dropped out during the 2008-2009 academic year alone.

Online programs are experiencing such high growth, in part, because it is a cost-effective way to reach a broad population of students, and it increases enrollment (Bacow, Bowen, Guthrie, Lack, & Long, 2012). Reduced funding, fluctuating enrollment, and low retention rates have all affected community colleges (D. Jenkins, 2011). Colleges are obliged to encourage and support student success and students expect to have support as they achieve their goals (Hirsch, 2001; Schneider & Yin, 2011). These obligations also exist for creating quality online courses and programs at community colleges (Rockinson-Szapkiw, 2009).

Much research has focused on both the institutional perspective and teachers’ perspective on online learning (Hachey et al., 2014; Liu et al., 2009; Tirrell & Quick,
However, it is not only colleges and teachers that want students to succeed; students are heavily invested in their own success (Tabar-Gaul, 2008). Community college students who are successful in meeting their academic goals can rise above poverty, save money, get better jobs, or be better prepared to transfer to 4-year colleges (Crisp & Mina, 2012).

Thus, students are the primary stakeholders in higher education, and it is essential to see their perspective on teaching effectiveness to have a more robust understanding of the issue (Hill, Lomas, & MacGregor, 2003). The study will identify which teacher practices in online courses influence student success the most, from the perspective of the student. In times when there is ever more pressure for community colleges to succeed, this valuable insight will expand the body of knowledge and inform teacher training and practices at The College. Online education is here to stay (Allen & Seaman, 2013) and it is time to find effective online teaching methods for 21st-century students. The results of the study will provide a new way of thinking about online course design that could maximize student retention. Student retention in online classes and programs is in the best interest of all community college stakeholders including students, faculty, administrators, policymakers, and funding agencies (Laves, 2010).

Definitions of Terms

There are some inconsistencies in the terminology concerning distance learning and online learning (Inglis, 1999). Distance learning is any learning where students do not have to be physically present at the credit-granting institution. For example, correspondence classes where packages of readings are mailed to students and students submit their work by mail are considered distance learning opportunities. There are also
distance learning courses that solely deliver material via electronic means such as email, but do not offer a chance for students to interact with other students, or even with the teacher. In contrast, online learning uses course management systems such as ANGEL (www.angellearning.com) or Blackboard (www.blackboard.com) so that students can interact with each other via online discussion boards. Online learning, for the purposes of the dissertation, will include any class that is completely delivered online and provides an opportunity for students to interact with the teacher and with other students. Moreover, the format will be asynchronous in nature so that students can do their work at any point during a certain time-frame but will not be required to interact live. This encourages the highest level of accessibility because it eliminates the scheduling challenges that come with having students in different geographic locations and even different time zones (Inglis, 1999).

The word pedagogy is commonly used to refer to teaching children and andragogy is, less commonly, used to refer to teaching adults (Taylor & Kroth, 2009). While the term andragogy is technically the correct term to use for the adult learners in higher education, the term pedagogy is predominantly used in both higher education research and practice when discussing teaching strategies. The term andragogy will be used in the dissertation when the researcher is referring to teaching adults. However, the term pedagogy will be used when it accurately reflects statements cited in the literature.

Chapter Summary

The landscape of higher education is changing. Reduced funding and economic concerns are leading students to look for the best value as they select a college to attend (Belfield et al., 2014). Community colleges focus on accessible education, which has
created a high demand for online education (Xu & Jaggars, 2013). As more community colleges are offering online courses and degree programs, they are competing for the same students (Rockinson-Szapkiw, 2009). For The College to remain competitive in its online course and program offerings, it should find ways to help online students succeed in completing their goals. This can both increase enrollment and retention in online courses and programs (Tabar-Gaul, 2008).

The study provides a history of both community colleges and online education. Additionally, it reviews relevant empirical studies on the topics of retention, student perceptions of teacher practice, and sense of community and interaction in online classes. The study uses exploratory sequential mixed methods including online focus groups and a quantitative survey. The student perspective on teachers’ practices is represented in the results of the online focus groups, and the importance of each practice emerged from the results of the survey. Finally, the study includes implications and limitations, recommendations for research and practice, and policy suggestions for online teaching and learning.
Introduction and Purpose

The purpose of the literature review is to provide an overview of relevant empirical studies in the field of online education. The literature review will focus on student success in online classes at community colleges and will cover topics including the history of community colleges, the history of online education, the CoI Framework, factors affecting retention, faculty preparation for online teaching, and student perceptions of teacher practices. Online education is becoming more prevalent at community colleges. Not only does online education dovetail with community colleges’ open-door policies and accessibility (Boggs, 2010), it is convenient for community college students (Allen & Seaman, 2006) and can be a great source of additional enrollment for community colleges (Laves, 2010). Students who successfully complete their online classes can better meet their goals and increase both their success and the success of the institution (Rockinson-Szapkiw, 2009).

Reviews of Literature

History of community colleges. Over the past 100 years, community colleges have grown at a rapid rate (Boggs, 2010). During the middle of the 20th century, the direction of higher education in the United States shifted from preparing an exclusive few for intellectual excellence to offering the universal opportunity for higher education to all citizens. The 1947 Truman Commission report, which coined the term community
college and encouraged the expansion of these institutions across the nation, was the
catalyst for this shift (Boggs, 2010). Currently, there are community colleges in every
state that provide access to education for the shifting needs of the communities they serve
(The College Board, 2008).

Since their inception over 100 years ago, community colleges have grown in
popularity. There are approximately 1,200 accredited community colleges that have 6.5
million students, nearly half of all undergraduates, enrolled in credit-bearing classes and
five million enrolled students enrolled in noncredit-bearing classes (The College Board,
2008). Community colleges are distinguished from their 4-year counterparts by the
populations they serve and the types of programs they offer. In addition to preparing
students for transfer, community colleges offer a wide range of programs in everything
from nursing, emergency management, auto repair, and hazardous waste disposal to
English literature, history, physics, communication, chemistry, foreign languages, the
arts, philosophy, and human services (Boggs, 2010; The College Board, 2008).

The population served by community colleges is diverse and includes people of
different abilities, ages, ethnicities, nationalities, and socioeconomic status (Provasnik &
Planty, 2008). Community colleges enroll 47% of first-generation college students, 53%
of Hispanic students, 45% of African American students, 52% of Native American
students, and 45% of Asian/Pacific Islander students (Cominole, Riccobono, Siegel, &
Caves, 2010). They also enroll almost 40% of all international undergraduates in college
in the U.S. (The College Board, 2008). Providing educational access to the nation’s
diverse and potentially vulnerable populations is an integral part of the mission of the
community college in the U.S. (Provasnik & Planty, 2008). However, that mission is
hindered by the fact that community colleges have lower graduation rates than 4-year institutions (Goldrick-Rab, 2010; D. Jenkins, 2011; Kirshstein & Wellman, 2012).

The U.S. economy is hurt when not enough students graduate from college and community colleges are important to improving the economy (The College Board, 2008). However, there is concern that investing in community colleges does not provide an adequate return in improved completion rates; after six years only approximately 20% of students complete their courses of study. Actually, “. . . nearly half of instructional spending in community colleges goes to students (and credits) that do not attach to a degree or certificate” (Kirshstein & Wellman, 2012, p. 16). President Barack Obama appealed to community colleges to focus on raising graduation and retention rates by 50% during the ten-year period between 2009 and 2019 (Boggs, 2010).

Community colleges do not have selective admissions standards and thus provide the opportunity for accessible education for all. More than 40% of U.S. undergraduate students attend community colleges (D. Jenkins, 2011). However, completion rates at community colleges have not increased at the same rate as enrollment. Financial challenges and unstable enrollment also affect community colleges (D. Jenkins, 2011). These national issues are also a challenge at the research site, referred to as The College. The three-year graduation rate at The College is 18% ("Programs and academic support committee report and recommendations," 2014). Colleges are being challenged to help students succeed by offering them support and a quality educational experience as they accomplish their goals (Hirsch, 2001; D. Jenkins, 2011). Since online course enrollment is growing at a much faster rate than the overall growth of the total student body in higher
education (Allen & Seaman, 2014), creating quality online courses and programs is an important part of rising to this challenge (Rockinson-Szapkiw, 2009).

**Online learning.** The first efforts at distance education were in the 1800s in the form of correspondence classes, when materials were sent by mail between instructors and students (Bourne, 1998). Subsequently, radio was used as a channel to deliver instruction in the 1920s and during the 1930s television was the preferred method of communication. In the early 1990s Graziani piloted the first courses using computers as the method of delivery. In 1993, the Alfred P. Sloan Foundation offered grants to early users of Asynchronous Learning Networks (ALN) through a program called “Learning Outside the Classroom.” These grants started with New York University and the University of Illinois, and they rapidly increased until the Sloan Foundation awarded approximately 25 million dollars in grants to support the use of ALN. This funding was a catalyst to launch tremendous growth in online learning (Bourne, 1998). Interest and enrollment in online classes at colleges and universities is increasing quickly (Allen & Seaman, 2015; Wolff et al., 2014), as indicated in Table 2.1.

Many colleges are adopting online education due to its potential to improve both teaching and access, and to relieve the constraints on classroom space that come with increasing enrollment (Inglis, 1999). In 2002, approximately 1.6 million students were taking at least one online class (Allen & Seaman, 2008), and in 2012, more than seven million students, 33% of all students enrolled in institutions of higher education in the U.S., took one or more online class. Online education is growing at an average rate of 16%, which is more than six times faster than the 2.5% growth of the total student body in higher education (Allen & Seaman, 2014). This rapid growth increases the importance
of the quality of online courses and the learning experience of the students taking them
(Wang, Shannon, & Ross, 2013).

Table 2.1

<table>
<thead>
<tr>
<th></th>
<th>Total Enrollment</th>
<th>Annual Growth Rate Total Enrollment</th>
<th>Students Taking at Least One Online Course</th>
<th>Online Enrollment Increase over Previous Year</th>
<th>Annual Growth Rate Online Enrollment</th>
<th>Online Enrollment as a Percent of Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002</td>
<td>16,611,710</td>
<td>NA</td>
<td>1,602,970</td>
<td>NA</td>
<td>NA</td>
<td>9.6</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>16,911,481</td>
<td>1.8%</td>
<td>1,971,397</td>
<td>368,427</td>
<td>23.0%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>17,272,043</td>
<td>2.1%</td>
<td>2,329,783</td>
<td>358,386</td>
<td>18.2%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>17,487,481</td>
<td>1.2%</td>
<td>3,180,050</td>
<td>850,267</td>
<td>36.5%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>17,735,872</td>
<td>1.6%</td>
<td>3,488,381</td>
<td>308,331</td>
<td>9.7%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>18,248,133</td>
<td>2.8%</td>
<td>3,938,111</td>
<td>449,730</td>
<td>12.9%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>19,102,811</td>
<td>4.7%</td>
<td>4,606,353</td>
<td>668,242</td>
<td>16.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>20,427,711</td>
<td>6.9%</td>
<td>5,579,022</td>
<td>972,669</td>
<td>21.1%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>21,016,126</td>
<td>2.9%</td>
<td>6,142,280</td>
<td>563,258</td>
<td>10.1%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>20,994,113</td>
<td>-0.1%</td>
<td>6,714,792</td>
<td>572,512</td>
<td>9.3%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>21,253,086</td>
<td>1.2%</td>
<td>7,126,549</td>
<td>411,757</td>
<td>6.1%</td>
<td>33.5%</td>
</tr>
</tbody>
</table>


Seventy percent of colleges and universities concede that they compete for the same students to enroll in online programs and courses. Thus, schools are expanding their geographic range and targeting the non-traditional students who are generally drawn to online classes (Allen & Seaman, 2008). Many non-traditional students attend community colleges. Therefore, due to increased competition to enroll the same students, retaining online students is even more essential. Also, due to increasing enrollment and
demand for education, online formats for courses and degree programs are burgeoning at community colleges (Crawford & Persaud, 2013; Radford, 2011)

Online courses are particularly prevalent at 2-year colleges (Crawford & Persaud, 2013; Radford, 2011). The convenience and accessibility of online classes offer great appeal to community college students who are likely to have family commitments and are usually independent, between 24 and 29 years old, and working - 79% of community college students work while going to school (Hampton, 2010; Horn et al., 2006). Online courses are the best, or sometimes only, avenue to higher education for many community college students (Allen & Seaman, 2006). Community colleges were early adopters of online learning, and their administrators tend to view online learning in a positive light (Allen & Seaman, 2014). From 2002 to 2008, community colleges enrolled more than half of all online students (Allen & Seaman, 2008). During 2011, while there was not significant growth in enrollment at community colleges, enrollment in online courses grew by 8.2% (Crawford & Persaud, 2013).

While enrollment in online classes is the fastest growing part of higher education and has grown at a rate of ten times that of higher education in general (Allen & Seaman, 2011), an average of 47% of online students do not succeed in passing their classes (Tirrell & Quick, 2012). These high growth rates and lower success rates reinforce the priority of conducting research in online education and understanding the experiences of students enrolled in online courses (Wang et al., 2013).

**Theoretical framework.** Constructivist theory provides a foundation to discuss best practices in community college online teaching. Constructivism is a broadly recognized learning theory (Leidner & Jarvenpaa, 1995) that dictates that each student
takes active responsibility to build, or construct, their learning (Dewey, 1897; Eom et al., 2006; Leidner & Fuller, 1997; Swan et al., 2009). Constructivism was a departure from earlier practices of objectivism when teachers solely used lectures to impart knowledge to the student (Eom et al., 2006). Further investigation into constructivism led to the progressive work of John Dewey, a turn of the 20th-century philosopher and psychologist who wrote prolifically about the constructivist nature of education and learning (Swan et al., 2009).

At Johns Hopkins University, Dewey studied under leading pragmatist, Charles S. Pierce. Pierce conceptualized inquiry from the perspective of the natural sciences. His pragmatist ideas inspired Dewey to consider that learning is directly connected to its practical implications and successful use. Subsequently, Dewey applied Pierce’s ideas to the field of education and became a progressive thinker on learning and education for his time (Lipman, 2003).

Dewey (1897) believed that education was integrally connected with both society and the individual. He had a vision that individual students would learn in a collaborative environment and thus would be active and responsible for their own education. The role of the teacher was to both impart information and guide students to learn actively and create meaning in community with each other. His value of collaborative learning environments made him an early advocate of active, or hands-on, learning. Dewey (1897) believed society would be improved when education was reconstructed to focus on inquiry and students actively engaged in a process of inquiry to solve problems.

Additionally, Dewey (1897) believed that insulated communities of like-minded, or similar, people do not challenge each other to inquire at a high level. He supported
interaction among people from different social strata and thought being exposed to different opinions supported inquiry. This democratic idea of engaging in a process of inquiry in an active, inclusive, and diverse environment laid the groundwork for other influential 20th century theorists (Bleazby, 2012).

Matthew Lipman, a present day philosopher, systematically applied the ideas of Dewey to the field of education and used it to inform curricular design and teacher practices (Lipman, 2003). He saw the primary outcome of education as one that should allow students to exchange knowledge and value in a collaborative environment. He integrated the potent concepts of both community, teachers and students working together, and inquiry, the process of learning and questioning, to create the distinct concept of a community of inquiry. Lipman further explained a reflective paradigm of education that assumed that education is interdisciplinary and that it involved

![Figure 2.1. The Community of Inquiry. Adapted from “A theory of critical inquiry in online distance education,” by D. R. Garrison, T. Anderson and W. Archer, 2003, Handbook of distance education, 1, p. 116.]

The ideas of Pierce, Dewey, and Lipman provided the foundation for the emergence of Garrison, Anderson and Archer’s community of inquiry framework (CoI), which applies the community of inquiry theory to online education (Swan et al., 2009). The CoI framework in Figure 2.1 centers on creating social interaction and intellectual learning in an online learning environment (Shea et al., 2010). This framework refers to the community created by the interaction of cognitive presence, social presence, and teaching presence (Shea & Bidjerano, 2009). Social presence is the online interaction and collaboration of students with each other (Garrison et al., 2000). It includes students expressing their personalities and creating interpersonal relationships (Meyer, 2013). Teaching presence is the online interaction of students with teachers, including what a teacher does to create a course and to both direct and facilitate learning (Anderson et al., 2001). Cognitive presence is the online interaction of the students with course materials (Shea & Bidjerano, 2009). Cognitive presence highlights academic learning and intellectual reflection on new ideas (Meyer, 2013) and is essential for effective online learning (Garrison et al., 2000).

Each individual element is essential to the framework, and the interconnection of these three types of presence creates an effective environment for learning (Laves, 2010; Meyer, 2013; Swan et al., 2009). For example, the primary goal of successful education is connected to cognitive presence, and both social and teaching presence enable cognitive presence (Rockinson-Szapkiw, 2009). The CoI has informed the practice of effective online instruction since the model’s inception in 2000 (Swan et al., 2009).
Reviewing literature that examines each individual element will further illustrate how the CoI framework operates within the context of online education.

**Cognitive presence and online education.** Cognitive presence highlights academic learning and intellectual reflection on new ideas. It creates meaning by using four different processes: (a) triggering question, (b) exploration, (c) integration, and (d) resolution (Meyer, 2013). Cognitive presence is important to the online learning process (Garrison et al., 2000). Research that supports this principle was conducted by Shea and Bidjerano (2009) who conducted a cluster analysis to explain the relationship between the three elements of the CoI, cognitive, social and teaching presence. They argued that the CoI needed conceptual and empirical analyses to be clearly understood and created an equilibrium model. Participants \((N = 5024)\) were students registered for online and hybrid classes offered in a multi-institutional online educational network. The instrument was a 37-question survey using a five-point Likert-type scale.

An equilibrium model explained the relationship between cognitive, social and teaching presence. Perceived teaching presence and perceived social presence lead to higher cognitive presence (Shea & Bidjerano, 2009). Therefore, the three types of presence are connected to each other, and cognitive presence is instrumental to the online learning process. The authors encourage researchers to continue to focus on teaching methods and online course design. In addition to having cognitive presence, social presence is important so that students can make connections to each other (Garrison et al., 2000).

**Social presence and online education.** Social presence is the ability of students to share their personalities and create interpersonal relationships (Meyer, 2013).
interactions, or lack thereof, in an online class may leave students feeling disjointed from classmates and longing for the face-to-face social contact of a traditional classroom (Hampton, 2010). Increased social presence can encourage online interaction and learning (Oztok & Brett, 2011) and creates a foundation for cognitive presence (Garrison & Cleveland-Innes, 2005). Examining social presence and online learning can shed light on how students interact and build relationships as they work and learn together in this platform (Oztok & Brett, 2011).

Liu et al. (2009) conducted predictive quantitative research to determine if social presence leads to higher course retention, completing the class with a grade of C or above, and higher final grade in community college distance learning courses. The researchers wanted to inform students about retention issues in online classes to prepare them to stay in online classes and receive higher grades. Students (n = 108) in online classes at a suburban community college in Maryland took the 30-item Social Presence and Privacy Questionnaire (SPPQ) which used a five-point Likert scale (0 = strongly disagree, 4 = strongly agree). Regression analyses showed a positive correlation between social presence and both final grade and retention. The researchers recommended establishing integrated social and learning communities and building effective blended learning programs as important interventions to increase online course retention (Liu et al., 2009).

**Teaching presence and online education.** Teaching presence is essential because it provides fertile ground for both social and cognitive presences to grow (Laves, 2010). Teaching presence is what a teacher does to create a course and both direct and facilitate
learning. There are three parts of teaching presence: (a) instructional design and organization, (b) facilitated discussion, and (c) direct instruction (Anderson et al., 2001).

Shea, Li, Swan, and Pickett (2005) stated that teaching presence has a pivotal role to play when developing online courses. They investigated the role of teaching presence, defined as the primary roles of teachers, and students’ sense of learning community in asynchronous online classes. Participants were taking online classes through the State University of New York (SUNY) which encompasses 32 separate colleges, 21 of which are community colleges. Online students, in the summer of 2004, took Rovai’s Classroom Community Index (Rovai, 2002) designed to compare the sense of community between face-to-face and online courses. Additionally, students responded to questions about their level of learning and satisfaction in the course. Of the initial 2,181 participants randomly selected, 2,036 completed the surveys for a high response rate of 93%. Some students were taking more than one class, so the total amount of surveys collected was 2,314, spread over 581 courses.

Shea et al. (2005) created and validated a survey to measure teaching presence. Participants rated elements of teaching presence on a five-point Likert-type scale (strongly disagree = 0, strongly agree = 4). The study used factor and regression analysis to determine the connection between students’ awareness of effective instructional design and directed facilitation by their course instructors (accounting for 74.37% of the factors’ variability) and their sense of learning community. In addition, the gender of the student had a minor contribution to the sense of learning community. A multiple regression analysis revealed the statistical significance of the model ($p < 0.001$) (Shea et al., 2005). According to the researchers, a limitation of this study was that the surveys were only
taken by students who had completed online courses. Thus, there could be valuable information available by analyzing the responses of those who attempted, but did not complete an online class.

Subsequently, Shea, Li, and Pickett (2006) studied the relationship of teaching presence in developing learning community in both online asynchronous college courses and web-enhanced face-to-face classes. The purpose of their research was to contribute to the body of knowledge on improving both learning and teaching in an online education. Participants in the program of technology and support processes of the SUNY Learning Network were randomly selected to participate in the research. Of the initial 2,253 participants selected, 1067 completed the survey for a response rate of 47%.

Participants, at the end of the fall 2004 semester, took the Teaching Presence Scale (TPS), developed by the authors, to measure students’ perceptions of both teaching presence and learning community. Additionally, they took Rovai’s Classroom Community Index (2002) to measure sense of learning and community. There were no significant differences in total classroom community and teaching presence between face-to-face and online students. Seventy-eight percent of the variability of teaching presence consisted of the following two factors: instructional design and organization, and directed facilitation. Using factor and regression analysis, a clear connection between students’ sense of learning community (the dependent variable) and the dependent variables of strong course design and instructor directed facilitation emerged.

The researchers expressed caution at the generalizability of the results of the study because the data is from a single institution in one state. They do, however, speak to the large size and breadth of the sample. SUNY includes multiple types of institutions,
community colleges, undergraduate liberal arts colleges, technical colleges, and graduate schools. Furthermore, they mentioned that many of the confounds of cross-institutional research are erased by the consistencies of being in the same educational system that uses the same registration process, learning platform, student services, and faculty training program for teaching online courses (Shea et al., 2006).

Tinto (2006) stated that retention, at its core, is a mirror of strong teaching and student education. He further concluded that education is the primary purpose of college faculty and that when faculty focus on teaching well, student retention will increase. Thus, student learning should be the primary focus of retention efforts (Tinto, 2006).

Examining the research around Garrison, Anderson, and Archer’s community of inquiry framework (CoI) illuminated best practices for successful community college online learning (Shea et al., 2010).

**The CoI and retention.** Boston et al. (2010) used a validated survey (Arbaugh et al., 2008) to explore the relationship between components of the CoI framework and retention in online programs. The research problem was low student retention in online programs. The research question was whether there is a statistically significant predictive relationship between CoI survey indicators, and a students’ likelihood to remain enrolled in an online education program of study.

Students ($N=28,877$) enrolled in the American Public University System, a completely online university formerly called the American Military University, took the CoI survey for six semesters. Each of the 34 items was ranked on a five-point Likert scale (strongly disagree = 1, strongly agree = 5). Nineteen of the CoI components made up 21.1% of the variance in student retention. Two components made up all but 0.09%
of the variance: “Online or web-based communication is an excellent medium for social interaction” and “I was able to form distinct impressions of some course participants” (Boston et al., 2010, p. 12). These two indicators concerned affective expression that is an indicator of social presence. A forward method linear regression showed that increased social presence positively influenced retention in online programs. Using a validated survey instrument (Arbaugh et al., 2008) with such a large sample lends statistical credence to the results of this study. The authors recommend that student interactions with each other should be encouraged in online classes (Boston et al., 2010). Therefore, the CoI offers a foundation to examine best practices in community college online teaching (Swan et al., 2009) and sheds light on the major challenges and opportunities specific to teacher practice for online courses at community colleges (Meyer, 2013).

Capra (2014) studied online education specifically from the perspective of community college students and offered a contrasting perspective on the CoI. The purpose of the study was to determine if the social, cognitive, and instructional elements in the CoI were essential to having a meaningful online learning experience. The research question was to determine how community college students in online courses describe their learning experience regarding social, cognitive, and instruction presence. There was a specific focus on differences in responses between traditional and nontraditional students and also between those who were new to online classes and those who had taken previous online classes.

This study used phenomenological research methods by conducting face-to-face interviews and collecting participants’ written responses to prompts for reflective, or journal, writing over the course of a fifteen-week semester. Participants ($n = 15$) were
community college students taking an online class at a midsize, public community college in New Jersey. The identities of the participants were kept confidential through the use of pseudonyms (Capra, 2014).

Capra (2014) used purposive sampling strategies to select participants in order to represent a cross-section of the diversity generally found at community colleges. Participants were categorized as either nontraditional students (23 or older, part-time students, financially secure) or traditional students (age 18–22, depending on others for financial support, and enrolled full-time). There was overlap between these different groups, for example, some students from 18 – 22 were taking part-time classes and some students 23 or older depended on others for monetary support.

Capra (2014) did not reveal a sense of social, cognitive, or teaching presence in this class. Participants reported not having a meaningful learning experience. Concerning social presence, students felt alone and used the words impersonal and dry. They described discussion boards, where students interact with each other online, as forced. Concerning cognitive presence, students did not find the class engaging and used the words monotonous and tedious to describe the coursework. Concerning teaching presence, students described their instructor’s interaction with them as just answering email and used the words disconnected and lurking to describe their sense of the instructor. Concerning those who were taking their first online class, they were disoriented and overwhelmed with the amount of work necessary while they were adjusting to the new technology and learning platform. They reported their reasons for signing up for an online class were because it was convenient and flexible, not because it was their preferred mode of learning.
Seven principles for good practice in undergraduate education. Another framework, adopted for online instruction, is Chickering and Gamson’s (1987) seven principles for good practice in undergraduate education. Tirrell and Quick (2012) used this framework to examine the relationship between teacher practice and attrition. The researchers envisioned the seven principles as a pathway for students, faculty, and administrators to enhance both teaching and learning. The seven principles are: (a) encourages contact between students and faculty; (b) develops reciprocity and cooperation among students; (c) uses active learning techniques; (d) gives prompt feedback; (e) emphasizes time on task; (f) communicates high expectations; and (g) respects diverse talents and ways of learning (Chickering & Gamson, 1987, p. 2).

Tirrell and Quick (2012) examined if teaching strategies informed by the seven principles affected student retention in online courses. Additionally, the researchers examined if full-time, and part-time faculty used the seven principles of good practice differently. To examine the extent faculty used Chickering’s seven principles, 111 full-time and part-time faculty at three Virginia community colleges who taught online in the previous three semesters were asked to take the Online Implementation of Seven Principles instrument. The survey included 35 items that involved ranking teaching activities on a five-point Likert scale (1 = never, 5 = very often). Fifty faculty (39 full-time and 11 part-time) submitted the survey resulting in a 45% rate of response. Faculty were told to answer the survey while considering the most recent online class they taught. Next, the full-time and part-time faculty responses were compared to determine any notable differences. Finally, the resulting score from the faculty surveys was compared to the attrition rates of their respective online courses (Tirrell & Quick, 2012).
Both full-time \((N = 39)\) and part-time faculty \((N = 11)\) used teaching tactics that mirrored the seven principles of good practice in their online courses, 38\% of mean scores were between a 4.0 and a 5.0; and a total of 96\% of all mean scores were above a 3.0. However, when considering individual items, the averages of items ranged from 2.07 to 4.79. Full-time faculty had slightly higher survey scores \((M = 3.91, SD = 0.532)\) than part-time faculty \((M = 3.61, SD = 0.531)\). Tirrell and Quick (2012) compared survey results to course attrition rates for the class using a Pearson correlation coefficient and revealed a minimal correlation. Results for each of the seven principles were investigated separately; both full-time and part-time faculty had lower scores on the principles measuring innovative instructional strategies. However, there was no link between faculty reports of using these teaching tactics and student attrition rates. The principle of ‘encouraging active learning’ had a moderate association with lowering rates of student attrition (Tirrell & Quick, 2012).

**Quality matters.** Quality Matters (QM) (www.qualitymatters.org) is research-based design for online instruction. Researchers investigated course design as an explanation of retention rates in online courses (Dietz-Uhler, Fisher, & Han, 2007). The purpose of the study was to improve student learning and retention rates by implementing course revisions using QM. Retention was defined as starting work on the first module and remaining enrolled in the course until it finished. QM was used to revise two online courses, one in psychology and one in statistics at a large Midwestern U.S. university. QM uses eight standards to revise online classes: 1) course overview and introduction, 2) learning objectives, 3) assessment and measurement, 4) resources and materials, 5)
learner interaction, 6) course technology, 7) learner support, and 8) accessibility (Dietz-Uhler et al., 2007).

Dietz-Uhler et al. (2007) described how QM created a robust and interactive experience for online students. Once the courses were revised according to the above guidelines, retention rates for both courses were approximately 95%, with psychology offered eleven times and statistics offered six times. While retention rates were impressive in this study, the researchers concede that much evidence for success using this model is anecdotal. They further noted that the study provided an opening to further academic dialogue about course design and retention in online classes. Further research is needed to explore and replicate this retention outcome (Dietz-Uhler et al., 2007).

Similarly, Swan, Matthews, Bogle, Boles, and Day (2012) conducted design-based research to examine connections between course design (using QM principles), learning processes (using CoI principles), and course outcomes. The researchers redesigned the Educational Research Methods course, which was required as part of a completely online graduate-level education program at a small, public university in the Midwestern United States. The preliminary study in this ongoing research used pre/post, quasi-experimental design to observe any change in the learning outcomes and CoI scores (the dependent variables) based on revisions to the course as informed by QM and the CoI (the independent variables). Learning outcomes were measured in the Educational Research Methods class for four semesters from the start of 2009 to the end of fall 2010 through descriptive statistics and variance analysis. Swan et al. (2012) found that implementing course changes based on both the CoI and QM increased both course grade and the final exam scores but not the research proposal grade. These data suggest that
using QM and the CoI principles to inform course revision can increase learning outcomes in online courses.

**Factors that predict retention in online education.** Patterson and McFadden (2009) used archival data to investigate how course delivery, in face-to-face or online classes, influenced dropout rates in the context of multiple academic and demographic factors. Academic factors were program delivery mode, undergraduate grade point average (GPA), admission test scores, and number of courses towards degree. Demographic factors were age, gender and ethnicity. The sample (N = 640) included students at a research university in the Southeast United States who were enrolled in the Master’s of Business Administration (MBA) and Master’s in Communication Sciences and Disorders (CSDI) programs from fall 2002 to fall 2004. The researchers first used descriptive statistics to assess students’ enrollment records. Then, they used t-tests, chi-square tests, and logistic regression to examine the influence of the academic and demographic factors on course retention rates.

Patterson and McFadden (2009) found that online MBA students had a higher dropout rate (42.7%) than face-to-face students. Similarly, the online CDSI students had a higher dropout rate (23.5%) than face-to-face students (4.0%). The data suggests that online MBA students drop out of their programs six times more frequently than their face-to-face equivalents and online CDSI students drop out seven times more frequently than their face-to-face equivalents. Variables affecting the dropout rates of the classes differed for each program. Age (M = 28 for those who persisted, M = 32 for dropouts) and online vs. face-to-face delivery format as previously indicated. A logistic regression showed that age and undergraduate GPA were significant for the CSDI program.
Whereas, admission test scores, gender, or race did not impact dropout rates in either online program (Patterson & McFadden, 2009).

Aragon and Johnson (2008) used both comparative and survey research designs to investigate differences between demographic, enrollment, academic, and self-directed learning characteristics between online course completers and non-completers. This study also used a self-report survey, via three attempts at telephone calls, to gather students’ reasons for not finishing online classes. Out of the 305 students in online courses at a rural Midwestern United States community college in the sample, a total of 189 students completed online courses and 116 did not complete online courses. Results indicated a number of the factors influenced course completion. Gender was positively correlated with course completion. Sixty-six percent of females completed their courses and 53% of males completed their courses. Academic preparedness had a significant, but low negative correlation with courses completion. Finally, students who completed online classes were enrolled in more online classes than those who did not complete online classes. However, ethnicity, age, and eligibility for financial aid showed no significant difference between completers and non-completers (Aragon & Johnson, 2008).

In contrast, Cochran, Campbell, Baker and Leeds (2014) found that GPA, among other factors, showed a significant connection to online course retention. The purpose of the study was to find factors that influenced retention in online classes. They used previous research literature on retention in face-to-face courses to create eight a priori hypotheses concerning student characteristics impacting retention in online classes. Participants were undergraduates (N = 2,314) who were registered for online classes at a
large state university in the United States in the spring of 2010. Two groups of students were compared, one group included students who withdrew from at least one online course and the other group included students who did not withdraw from any online classes.

Cochran et al. (2014) examined institutional data to test their eight hypotheses. They first used univariate analysis and then logistic regression to measure the strengths of the connections between the variables. Both cumulative GPA and student year (senior or non-senior) showed a significant connection to online class retention for all students. A history of dropping an online class, gender, and being a recipient of student loans were other factors that impacted some students within specific majors (Cochran et al., 2014).

Additionally, Doherty (2006) used mixed methods to investigate how student demographics, course communication, and external factors impacted retention (receiving a grade of D or better) in community college online courses. Participants in the study were enrolled in online classes at two Nevada community colleges during the fall semester of 2005. First, to study student demographics, 10,466 records of students enrolled in online classes from both colleges were examined. The researchers determined a significant relationship between gender and retention. Females passed their online classes at a rate of 64.5%, and males passed their online classes at a rate of 59.5%. Spearman's rank correlation coefficient was used and revealed a significant correlation between number of total credits taken, age, current semester number of enrolled credits and successful online course completion. After performing a logistic regression, a Hosmer Lemeshow test revealed that, while results were statistically significant, these factors were not useful to predict success in online classes.
Then, Doherty (2006) studied external factors qualitatively by sending a survey invitation through e-mail to all students who failed an online class. The response rate was low; with only 52 out of a total of 1,107 surveys completed. Sixty-two percent of respondents worked more than 30 hours a week. Fifty-two percent of respondents had taken four or more online classes, and 15% reported that the class was their first online class. Students most frequently reported reasons for failing online classes as lack of communication with the teacher (25%), time management (23%), and procrastination (19%).

Finally, course communication was studied by collecting retention information from a random sample of 30 online courses offered at one of the institutions. Communication ratios for each student, including all teacher discussion posts and e-mails and also all teacher and student discussion posts, were extracted from the electronic course management system. The results were displayed on a scatter plot, which showed no correlation. Some courses with low retention had high communication ratios and some courses with high retention had low communication ratios. Doherty (2006) concluded that busy students were drawn to online classes. These same students had a higher tendency to fail or withdraw from the classes because they did not have the time to invest in online classes.

Likewise, Muilenburg and Berge (2005) sought to understand barriers to successful online learning from the student perspective. They created a survey from a review of the literature and theoretical framework and subsequently piloted and validated that survey. The final survey used a 5-point Likert scale (1 = no barrier, 5 = very strong barrier) to answer 47 items concerning barriers ($N = 1056$). The researchers used
multiple address lists to send electronic invitations to complete the survey, however, the population was neither clearly identified nor connected to a specific institution. Also, some of the respondents in this study had not ever taken an online course. Exploratory factor analysis revealed the following barriers were most important: (a) social interaction, (b) administrative / instructor issues, (c) time and support for studies, and (e) learner motivation. Muilenburg and Berge (2005), used an ANOVA test to discover the factors of online learning enjoyment and social interaction had the strongest relationship to each other. Additional factors with strong relationships to each other were administrative/instructor issues and learner motivation. Finally, there was a small association with learning enjoyment and time and support for online learning (Muilenburg & Berge, 2005).

Additionally, Hachey, Wladis and Conway (2014) used previous online course experience and GPA as determinants of online course success. They examined the relationship between these variables to reveal any differences in success between the students with similar GPAs but different previous online course outcomes. Success was defined as receiving a C- or higher in a subsequent online class. The research took place at a community college with a large and diverse population in an urban area in the United States between 2004 and 2010. Archival data on 962 students from 61 sections of online classes were obtained from the office of institutional research. Instructors were experienced, having taught three or more semesters teaching online and also taught the same classes both face-to-face and online.

Hachey et al. (2014) ran a logistic regression with a dependent variable of success rate and independent variables of GPA and previous online course experience. The
researchers found that GPA was a good indicator of retention for students who were new to online courses, 85.9% of students who had a GPA between a 3.5 and 4.0 were successful 93.3% of the time. For students who had taken online classes previously, it was their previous exposure to online classes that significantly predicted retention in future online classes. The result was more predictive than prior GPA alone. This meant that students with lower GPAs who had already taken an online class were more likely to pass than those with higher GPAs who had not taken a previous online course (Hachey et al., 2014).

Similarly, Wang, Shannon, & Ross (2013) found that earlier experiences in online classes impacted student motivation, satisfaction, and learning in subsequent online classes. The purpose of the study was to describe the association between students’ characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online courses. Participants ($n = 256$) completed the modified motivation strategies learning questionnaire, the online technology self-efficacy scale, and the course satisfaction questionnaire online. They also answered questions concerning demographics and course grades. Structural equation modeling was used to examine connections among participants’ characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning settings.

Students who had already taken online courses had better strategies for learning online and thus, were more motivated in their online courses (Wang et al., 2013). More motivation led to confidence with the technology and satisfaction with the course. Finally, these factors led to stronger grades. The final model described the relationship between the variables well, the chi-square test was statistically significant. Wang and
colleagues (2013) suggested that teachers develop courses to encourage students’ ability to self-regulate their learning. They also suggested that students designate time to focus on completing course work. They further recommend that institutions use learning platforms that are easy to navigate and provide workshops for both students and teachers to improve their experiences with online education.

One of the challenges in reviewing the research on retention is that definitions of retention vary widely. Definitions include passing an online course with a C or higher (Liu et al., 2009), passing a class with a grade of a D or higher (Doherty, 2006), passing a class with a C- or better (Hachey et al., 2014), maintaining active student status in an online program (Boston et al., 2010), first year students continuing on to their second year of college (Meyer, 2013), and reenrolling in college with or without interruption (Boston, Ice, & Gibson, 2011).

Researchers revealed a variety of factors that influenced low retention in online classes. Among these factors are enrollment in a previous online class (Aragon & Johnson, 2008; Hachey et al., 2014; Muilenburg & Berge, 2005; Wang et al., 2013; Xu & Jaggars, 2013) and connecting to others within an online community (Boston et al., 2010; Hart, 2012; Liu et al., 2009; Shea & Bidjerano, 2009). Cumulative GPA prior to taking an online class (Cochran et al., 2014; Hachey et al., 2014; Xu & Jaggars, 2013) and time management (Doherty, 2006; Hart, 2012) were also factors mentioned across studies. Results on age varied with Muilenburg and Berge (2005) finding a positive relationship between age and retention and, in contrast, Patterson and McFadden (2009) finding a negative relationship between age and retention.
Additional factors affecting retention in online classes were strong teaching strategies, communication with professors and feedback from professors (Hart, 2012; Shea & Bidjerano, 2009). Finally, motivation (Hart, 2012; Wang et al., 2013), technology skills (Muilenburg & Berge, 2005; Wang et al., 2013) and satisfaction with online classes (Hart, 2012; Muilenburg & Berge, 2005) were also influential factors.

**Faculty preparation for online instruction.** Preparing teachers to teach online is essential so they can utilize the technology to create a successful learning environment for students (Gold, 2001; Meyer & Murrell, 2014). Batts, Pagliari, Mallett, and McFadden (2010) examined if faculty participated in online course teacher-training and, if so, which practices from the training they implemented into their online classes. Online faculty \( N = 108 \) from eight North Carolina community colleges responded to an emailed link to a web-based survey. On the survey, participants selected each item that was applicable, with no ranking requested. Descriptive statistics revealed that 93% of faculty thought that student learning was improved by implementing best practices in online education. More specifically, faculty reported the following were covered in online teacher training:

. . . timely feedback (68%), using discussion boards to facilitate interaction (67%), providing detailed syllabus information (55%), using online assessment tools (47%), setting rules for a friendly online environment (41%), providing introduction activities (39%) and including graphics, sound, and video to create a sense of “place” (38%) (Batts et al. 2010, pp. 25 - 26).

Furthermore, Batts et al. (2010) reported which practices faculty who received training implemented into their online classes:
... timely feedback (86%), providing a detailed syllabus (75%), using online assessment tools (74%), using discussion boards to facilitate interaction (71%), providing introduction activities (68%), guiding students to external online resources (60%), and setting rules for a friendly online environment (54%). The best practices of including graphics, sound, and video to create a sense of “place” was reported to be used by 37% of the respondents (Batts et al. 2010, p. 26).

Online instructors were also asked what type of training was preferred. The answers to this question were categorized into three areas: policy (36%), platform (33%), and technology (14%). Batts et al. (2010) concluded by emphasizing the importance of quality training for online instructors to successfully deliver online courses.

Likewise, Gold (2001) examined the effectiveness of a constructivist-based online teacher training workshop. The online workshops gave future online teachers experience in being online learners. The workshop emphasized collaboration and discussion and encouraged students to create their own knowledge. Components of the workshop were curriculum, instruction, and assessment. Participants ($N = 57$) were experienced college teachers, with limited experience teaching or taking online courses. Two-thirds of participants planned to teach an online class, in a variety of subjects, in the next year. Most participants were from the Northeast, Midwest and Central regions of the US; there were additional international institutions that participated. Participants were recruited via email and online advertisements. Faculty needed to have access and skills to use email and the internet. Ninety percent of participants voluntarily signed up for the workshop.

Data were collected from a pre- and post-workshop online survey ($N = 44$, completion rate 77%) which asked questions in the area of each of the seven hypotheses.
Independent variables were participation in the course as determined by the self-reported numbers of hours working on the course, total number of course logins, and the number of discussion board posts. Dependent variables emerged from the differences, pre- and post-workshop, to the answers to the survey questions (Gold, 2001).

The hypothesis, the extent to which respondents rethought their teaching practices was related to the increase in exposure to the course, was supported. The survey used a 10-point Likert scale (0 = not at all, 10 = very much) for a statement about how the workshop helped faculty rethink their teaching practices. Evidence of this support was provided through a linear regression with the independent variables of hours spent, course logins, and number of discussion board posts. The strongest determinant of rethinking teaching practices was the total hours spent engaged in the online workshop; the effect increased as the number of hours increased (Gold, 2001).

Another hypothesis, the extent to which attitudes towards various aspects of online teaching and learning was related to the increase in exposure to the course, was supported. Survey results indicated three specific attitudes were statistically significant in a paired sample: online distance learning courses encouraged more student participation than traditional face-to-face courses; online distance learning teachers and students produced learning outcomes better than traditional face-to-face teachers and students; and online distance learning courses had more student-to-student interaction than traditional face-to-face courses. These results indicated that teacher attitude concerning online student participation and engagement shifted the most, reinforcing the constructivist andragogy of the workshop (Gold, 2001).
Marek (2009) examined a different side of online teacher preparation by researching how to create institutional culture that supports faculty as they learn to teach online. The study included faculty participants \((N = 296)\) teaching in American Library Association accredited Library and Information Science programs (LIS). A 16-item survey which included open-ended, multiple choice, and yes/no questions was delivered through an email invitation and link to an online survey. Participants reported a variety of support for their online teaching including informal peer-to-peer training \((n = 179, 63\%)\), informal support through workshops \((n = 165, 58\%)\), more structured institutional training \((n = 125, 44\%)\), and some institutions offered little to no training \((n = 49, 17\%)\).

Additionally, Marek (2009) discovered, through the open-ended questions, that faculty perceived several factors as important to create institutional support to learn to teach online. These included: directed mentoring, monetary compensation during the time of course development, quality training, and ongoing support of online education.

Similarly, Meyer and Murrell (2014) focused on professional development for online faculty in their nation-wide descriptive study. The purpose of their study was to report current institutional practices concerning training content and activities that support the faculty development process for online teaching. The study created a starting point for universities and colleges to evaluate, improve, and assess their faculty development for online teaching. Participants, accessed through professional online organizations, were from 39 colleges and universities that reported the content and activities included in faculty development processes for online education during 2011-2012. The first author created a 26-item survey instrument based on a review of the literature which was delivered through SurveyMonkey. Faculty development
professionals in higher education were asked to report on, and value, their current faculty development content and activities on a five-point Likert scale (0 = not valuable, 4 = extremely valuable).

Results indicated the following content was most frequently included in preparing faculty to teach online: assessment of student learning (97% of the institutions); creating online community (91.1%); and training on the institution’s course management system (CMS), student learning styles, and instructional design models (all at 84%). Assessment of student learning was also ranked highest when surveying the value placed on the content included in faculty development. In contrast, other elements of value were ranked differently than previous results: critical thinking, instructional design models; problem-based learning, and creating community (Meyer & Murrell, 2014).

Meyer and Murrell (2014) reported the following types of training activities, in order of rank, offered were: workshops, one-on-one training opportunities, with short sessions, hands-on training, creating an online course, and a one-time training. Similarly, the value of the types of training, in order of rank, were: one-on-one training, hands-on training, creating an online course, short sessions, and workshops, and peer review of a course. The results of the types of training and the value of the types of training are more in line with each other than the results of the content of the training and the value of that content. Creating an online class and peer review of a course, both very applied strategies, were valued at the highest level. However, they were not included in trainings as frequently as other activities.

**Student perceptions of teacher practices.** There is a variety of research on the ability of students to evaluate effective andragogy of college instructors (Wachtel, 1998).
One of the problems identified with student evaluation of teachers’ practices are that instructors who appear to think in a similar way as students tend to get rated more favorably. Also, ratings can be influenced by characteristics unrelated to effective teaching such as the course content, the instructor, the enrolled students, and the administration of the evaluation. While research has noted correlations between these characteristics and teaching evaluations, these correlations do not definitively indicate a bias or a validity threat concerning student ratings. Indeed, “… after nearly seven decades of research on the use of student evaluations of teaching effectiveness, it can safely be stated that the majority of researchers believe that student ratings are a valid, reliable, and worthwhile means of evaluating teaching” (Wachtell, 1998, p. 192).

Nonetheless, in response to the concerns about students evaluating effective andragogy of college instructors, results will be examined within a theoretical framework and in the context of the literature in the field (Ashcroft & Palacio, 2014).

Hill et al. (2003) studied the key elements that students perceived to be essential for high quality face-to-face education. They found little empirical evidence from reviewing the literature and thus used grounded theory as their framework for research. Hill and colleagues (2003) held six focus groups consisting of undergraduate and graduate students at a university in England in the fields they worked in: business studies, management, education, and nursing. They asked each focus group the question, “What does quality education mean to you?” The study used the constant comparative method to collate responses from separate groups in order to view a broader perspective. Then, the responses were examined and coded for emerging themes.
The following themes, listed in order of importance to the participants, emerged: (a) quality of the lecturer, including classroom delivery, feedback to students during class and on assignments, and relationships with students in the classroom; (b) student engagement with learning; (c) social/emotional support systems; and (d) information technology (IT) and library resources. These themes were then connected to research in the field of learning and teaching styles.

Concerning the theme of the quality of the lecturer, the authors found a connection to the research of Lammers and Murphy (2002) who said that quality education calls for the combination of both strong course design and effective instructor qualities like enthusiasm, expertise and teaching style. These qualities connected to the participants’ responses about valuing instructors, “...who were encouraging, constructive and positive, and transmitted enthusiasm for their subject” (Hill et al., 2003, p. 17). The majority of students’ ideas were under the themes of quality of the lecturer and student engagement with learning.

About the theme of student engagement with learning, students wanted to be able to apply theory and practice in relevant situations and wanted to experience new situations and ideas. Hill et al. (2003) noted the connection to Elton (1998) who believed that teachers should do more than deliver information, but should facilitate learning and “...individual excellence such as empathy, self-reflection, innovation and pedagogic and subject research” (as cited in Hill et al., 2003, p. 18).

Hill and colleagues (2003) further discussed the social/emotional support systems they found to be elements of high quality face-to-face higher education. They found that students valued learning collaboratively and that it inspired them to achieve. These
findings were linked with the humanistic/educative ideas of Goldenberg and Dietrich (2002) about students finding “. . . meaning and significance in authentic personal experiences” (p. 19).

While the research focused on student perceptions of quality face-to-face learning, a connection to online education emerged in their work. On one hand, in their discussion, they reflected on the future of education in the electronic medium. They discussed the work of Nixon, Beattie, Challis, and Walker (1998) who reported a growing concern among academics that distance education would erode the student/teacher relationship because it was harder to communicate both passion and enthusiasm through an online medium. On the other hand, the study focused on active learning and teacher engagement which was parallel to the concept of teaching presence in the online education environment as presented by Anderson et al. (2001) in the CoI.

Also focusing on perceptions and academic success, Menchaca and Bekele (2008) conducted a study that examined learner and instructor identified success factors in distance education. Their goal was to inform instructional design, practice, and future research about online learning. To this end, the researchers used qualitative analyses of student and faculty experiences in an online Master in Educational Technology program. The researchers used Participatory Action Research (PAR) as the method to collect and analyze data. The research was conducted with 72 students and six teaching faculty who were engaged in the first five cohorts of a new online master’s program in educational technology at California State University, Sacramento.

Menchaca and Bekele (2008) conducted a literature review to identify and categorize success factors in online classes. These categories were used to create a
qualitative survey with open-ended questions in the following areas: (a) technologies, (b) optimal learning environments, (c) components for success, (d) strategies, (e) prerequisite knowledge, and (f) learning or teaching experiences. Participants were then randomly chosen to engage in focus groups to add more depth to the results of the study. The open-ended and focus group data was coded through the constant comparative method, and researchers identified and refined relationships, themes, and patterns in the data. Qualitative analysis revealed three over-reaching areas and their percent of total coded responses according to students and faculty: technologic (students 49.6%, faculty 56.5%), pedagogic (students 33.8%, faculty 36.9%), and programmatic (students 16.7%, faculty 6.5%).

The pedagogic category included the sub-categories of situated learning and faculty import. Situated learning is learning in the context of a community; both students (13.2% of overall coded responses) and faculty (15.2% of overall coded responses) supported the idea of group work and collaboration in an online medium. The words used to indicate this priority were: “collaboration, teamwork, group work, small groups, and cooperative” (Menchaca & Bekele, 2008, p. 244). Additionally, both students and faculty supported the idea that collaboration is vital to success in an online medium. Phrases that indicated this priority were, “the cohesiveness of the group is extremely important to the entire learning environment” and “a community of learners is essential to success” (Menchaca & Bekele, 2008, p. 244).

Another sub-category under the pedagogy theme was called faculty import and was based around the important role of faculty in the online learning environment (OLE). Both students (3.5% of overall coded responses) and faculty (8.7% of overall coded
responses) supported the importance of the faculty role in the OLE. Of particular priority was the desire for faculty to provide timely and thoughtful feedback to students. The words participants used to indicate this priority were, “immediate feedback is crucial” (Menchaca & Bekele, 2008, p. 245). Also, responses indicated that it was important for faculty to provide support for students and to create a sense of online community. The words used to indicate this priority were: “professors are able to create the intimacy of an online community” (Menchaca & Bekele, 2008, p. 245).

Similarly, Dennen et al. (2007) examined students’ and instructors’ perceptions on performance and satisfaction in online classes. The researchers examined the literature and identified nineteen instructor behaviors particularly salient to online instructor – learner interaction. Then, the selected issues were included in a survey given to online instructors ($N = 32$) and students from their classes ($N = 170$). The sample included 16 professors and 100 students at a large public university and 16 professors and 70 students at a private online university. Instructors were surveyed by phone about which items they thought were most important to student learning and student satisfaction. Then instructors provided their students with a link to an online survey and students rated the same items.

Dennen and colleagues (2007) used frequency distributions and measures of central tendency to analyze the data. They established rankings through mean scores and, within frequency distributions, they used comparative ratings of important, given a rank of four, or very important, given a rank of five. There were clear breaks in the mean clusters and resulting rankings, which demonstrated the importance of certain sets of items to the participants.
First, when considering which teacher practices that instructors believe were important to learner performance, communication and feedback were viewed as most important. Offering extensive feedback, examples and modeling communication skills were seen as most essential to learner performance. In addition to learner performance, instructors were also surveyed about which practices they believed were important to learner satisfaction. Practices connected to communicating with students on an individual basis, that is checking emails, responding to questions, providing extensive and timely feedback, and providing examples, were ranked as most important. Instructors did not view setting face-to-face meeting times as important to either learner performance or satisfaction.

Next, when considering which teacher practices learners believed were important to their own performance and satisfaction, students ranked interpersonal communication and information needs the highest. Interpersonal communication needs included checking email, timely feedback, and discussion board postings. Information needs were providing examples, reviewing course materials, and communicating instructor expectations (Dennen et al., 2007).

Finally, when comparing learner and instructor perceptions about the importance of teacher practices, Dennen et al. (2007) reported similarities among many items and differences in some areas. Students and instructors ranked teacher practices from 1 (most important) to 16 (least important). Students ranked “post to discussion board,” “provide timely feedback,” and “communicate rules/expectations”, as much more important than instructors did. Whereas students ranked “provide extensive feedback” lower than instructors did. The study showed that students ranked the following teacher practices as
most important: maintaining frequency of contact, including answering student questions and giving prompt feedback; having a regular presence in class discussion spaces; and making expectations clear to learners, including offering prototypes of strong assignments (Dennen et al., 2007).

Eom et al. (2006) conducted a study to examine the factors involved in students’ satisfaction and perceived learning outcomes in online courses. The researchers conducted a literature review to create a framework for a conceptual model, six pairs of hypotheses, and a 42-item survey. Participants \(N = 397\) were students who had taken at least one online class at a university in the Midwest of the United States. The independent variables in this study were: course structure, instructor feedback, self-motivation, learning style, interaction, and instructor facilitation as potential determinants of online learning. Eom et al. (2006) found that instructor feedback and learning style were the only variables that were significant. These results indicated that online education is not a panacea; it will not work for every student and every institution. However, it can be a better type of teaching for students with certain visual and read/write learning styles. Additionally, the researchers discovered a clear association between instructor feedback, student satisfaction and perceived outcomes.

Furthermore, Sheridan and Kelly (2010) conducted research concerning the indicators of instructor presence that were important to students in online classes. Sheridan and Kelly noted there has been much research on teaching presence, but limited research on what students believe is important to help them succeed and be satisfied in online courses. The researchers used a cross-sectional survey design. Undergraduate and graduate students \(N = 65\) in online courses at one of two large Midwestern universities
completed an online questionnaire, including open and closed-ended questions. Many of the questions were derived from the teaching presence and social presence scales of the CoI instrument by Garrison et al. (2000).

Participants were asked to rate indicators of instructor presence from 1 (not important at all) to 10 (very important). Responses were then ordered by mean, the four highest means, all above 9.75 with the lowest standard deviations of all the items, concerned making course requirements clear and explicit. The very highest mean was “makes course requirements clear.” The lowest means were what students considered to be the least essential indicators, these were: “seeing the instructor via video,” “participating in chat sessions,” and “the instructor having a personal website they could visit.”

Sheridan and Kelly (2010) calculated correlation coefficients to determine if items with large variability were influenced by students who had taken previous online classes. The three indicators that were least important to students who had previous online course experience were: providing an instructor video, the instructor engaging in chat sessions, and providing an instructor website.

For the open-ended questions the researchers asked students to “write the five most important instructor behaviors for your success in an online class.” Researchers used classical content analysis, including coding and response frequency (Leech & Onwuegbuzie, 2007), and concept mapping (Kane & Trochim, 2007) to interpret their results. Sheridan and Kelly (2010) found three primary higher-order constructs identified in the concept map: setup of class, communication, and instructor attributes. Within the setup of class construct, making requirements clear was reported most frequently out of
the 299 responses. Within the communication construct, communicating with students promptly was reported most frequently. Within the instructor attributes construct, being empathetic was reported most frequently.

The research indicated that students strongly valued instructors who made course requirements clear and responded to their needs (Sheridan & Kelly, 2010). Additionally, students believed instructors should give feedback and respond promptly. However, students did not strongly value face-to-face communication, seeing, or hearing their instructors. Therefore, the results of the study emphasized the importance of instructor presence, especially the communication elements of instructor presence.

The most essential teacher practices distilled from this literature review were: making expectations and course requirements clear to learners (Dennen et al., 2007; Doherty, 2006; Menchaca & Bekele, 2008; Sheridan & Kelly, 2010); communicating, both frequently and in a timely manner (Dennen et al., 2007; Sheridan & Kelly, 2010); having a regular presence in class discussion spaces (Dennen et al., 2007); enhancing teacher – student interaction (Boston, et al., 2001; Picciano 2002); being empathetic (Sheridan & Kelly, 2010); and creating a learning community (Menchaca & Bekele, 2008; Shea et al., 2006; Shea et al., 2005).

The research that found the lowest student satisfaction with online learning (Capra, 2014), including suppressed cognitive and social presence, also reported substantial disappointment with the teacher. While this research sheds light on the potential challenges in online education, it may be seen as an indicator of the importance of teacher practices on the learning and sense of community in online courses (Shea et al., 2006; Shea et al., 2005).
**Interaction and sense of community in online classes.** Picciano (2002) examined if teacher–student interaction is important for a course to be considered successful. The purpose of this study was to examine student interaction and sense of presence, the independent variables, in an online course and their relationship to performance, the dependent variable. Furthermore, students’ perceptions of their interaction and social presence were compared to actual indicators of interaction and social presence. The researchers described the concept of presence in an online course as students feeling part of the course and engaging with the professor and classmates.

The research methods for the study were a descriptive analysis of interaction, presence, and performance data from one completely asynchronous graduate level education course (N = 23) at Hunter College in New York City. Students enrolled in this course were certified teachers pursuing additional certification as school administrators. They completed a 42-item student satisfaction survey, based on the Inventory of Presence Questionnaire and the work of Chih-Hsiaung Tu (2001), which measured student perceptions of the knowledge they gained in the course. Additionally, the researchers collected online discussion participation and scores from two course assignments that were directly connected to the course objectives (Picciano, 2002).

When considering student perceptions of interaction and learning, students answered survey questions concerning the amount and quality of the teacher-student interaction in the online course in relation to face-to-face classes. The student satisfaction survey, which used a five-point Likert-type scale, had a mean score of 4.32 (between somewhat increased and increased) out of a possible 5.0. The results of the study revealed a strong positive correlation between students’ perceptions of the quality
and quantity of their interaction and their perceived performance in the class. In contrast, results differed when considering actual student interaction and performance. The number of actual student postings in discussion boards were correlated with scores on the exam and the case study writing assignment. The resulting correlation coefficients were weaker than the score of perceived interaction, and neither were statistically significant (Picciano, 2002).

Students’ perceptions of social presence showed a negative, but not statistically significant, relationship with the scores on the objective exam. In contrast, their perceptions of social presence had a strong, statistically significant, positive relationship on the written case study assignment. The researchers conceded that further investigation is warranted to understand the complicated interactions between course integration and learning outcomes (Picciano, 2002).

Likewise, Drouin (2008) conducted a mixed methods study to determine the relationship between students’ perceived sense of community (SOC) and satisfaction, achievement, and retention in an online course. Participants were students \(N = 71\), response rate 92% in three sections of an undergraduate psychology course at a mid-sized university in the Midwest of the United States. Once they completed their final exams, students answered questions from an online survey and indicated their expected course grade. Expected course grades were closely correlated to actual grades; thus, the term ‘course grade’ encompasses actual and expected grades.

To examine the factors connected to students’ perceived SOC in an online class, Drouin (2008) used a Pearson correlation. Students’ SOC was significantly associated with the following variables: communication with classmates, communication with the
professor, number of discussion posts, quality of discussion posts, discussion, social discussion board interactions, and satisfaction. Grade and retention were the only factors with no significant association with the other factors. Sense of community had the strongest connection with the communication variables; thus t tests were used to indicate a difference between those who felt a SOC \( n = 37 \) and those who did not feel a SOC \( n = 33 \). Similarly, results indicated significant differences between all the factors except for grade and retention.

To examine if students’ ratings of SOC in an online class were connected more closely to student-instructor interaction or student-student interaction, Drouin (2008) used a Pearson correlation. Student-to-student interaction was associated with SOC but student-to-instructor interaction was not associated with SOC. Drouin (2008) examined if SOC in an online class was connected to student self-reported satisfaction, achievement (grade), or retention (intention to take another online class). Sense of community was associated with student satisfaction, but not with achievement or retention.

The survey included the option to comment on the SOC in the class, 76% chose to leave comments. Many students indicated that they appreciated interacting with each other and did feel a SOC. Comments included, “It was nice because we got to learn a lot about most of the students and this gave us the opportunity to share our thoughts and ideas” and “I enjoyed interacting throughout the discussion board” (Drouin, 2008, p. 279). Some students, however, either did not feel a SOC or did not find SOC important in an online class. Comments included, “If I wanted community, I would have chosen a regular [face-to-face] class” and “It was an Internet course, so I didn’t talk much with my classmates” (Drouin, 2008, p. 279).
Drouin (2008) did not find a connection between SOC and performance (grade). Thirty-seven students said they did not feel a SOC in the class. Of those 37, only three stated they would not enroll in another online class. The mixed methods study found, both qualitatively and quantitatively, that while many students valued SOC, it did not necessarily need to be present for students to stay enrolled in classes.

Similarly, Shea (2006) conducted research on student’s sense of learning community in online environments. The purpose of the study is first to define and measure the concept of an online learning community and then to examine the sense of community in online classes by using the CoI framework and an online survey. The Classroom Community Scale developed by Rovai (2002) includes items that measure both connectedness and learning, including the concepts of cohesion, spirit, trust, interdependence, and the benefits of interaction. Shea (2006) reported that participants in the study were students ($N = 2036$) enrolled in online courses ($N = 581$) in the summer of 2004 in the SUNY system. Twenty-one of the 32 institutions in the SUNY system were community colleges. A survey was integrated into online courses and delivered to a random sample of online learners two weeks before the class ended. The timing of the survey meant that data were only collected from students who finished their classes. Sense of community could be interpreted differently by those who had not finished the class, so care should be taken in generalizing the results of the study.

Shea (2006) described the mean and standard deviation of total learning community ($M = 53.35 / 80, SD = 12.53$), connectedness ($M = 24.14 / 40, SD = 6.70$), learning ($M = 29.22 / 40, SD = 6.93$), and teaching presence ($M = 52.62 / 68, SD = 13.75$). A multiple regression analysis that explored the association between learning
community, teaching presence and demographic data was found significant. After excluding all non-significant factors, a further regression analysis was run and also considered significant. Learning community was associated with gender and the two elements of teaching presence, instructional design and organization, and directed facilitation. Thus, directed facilitation had a stronger association with learning community than the other factors. Therefore, students who have a teacher who has more robust teaching presence are more likely to report a higher a sense of learning community and learning in online classes.

Furthermore, Su, Bonk, Magjuka, Liu, and Lee (2005) studied the importance of interaction in online learning from the perspective of both faculty and students. The mixed method study used surveys (N = 102), content analysis of 27 online courses, interviews with 26 faculty and 10 students, and two focus groups. The surveys included 58 items, rated on a five-point Likert scale, and four open-ended questions. The survey had an internal reliability factor of 0.91 according to Cronbach’s alpha. Participants were faculty teaching in and students enrolled in a top-20 graduate business school at a large university in the Midwest of the United States.

Students perceived that courses in the online MBA program were successful utilizing technologies to enhance teaching and learning. This perception had a positive correlation with student perceptions of the quality of the courses. Overall, students believe that the technology in the program facilitates ‘deep learning’; male students believe this more than female students. Also, around 80% of student participants believed their teachers used teaching activities to encourage their reflective and critical
thinking. The teachers’ work to increase this type of thinking correlated positively with the course satisfaction of students (Su et al., 2005).

Additionally, Su et al. (2005) gleaned responses from the qualitative data that examined perceptions of faculty and students concerning the importance of interaction. The following quotes are from the teacher perspective, “The best teachers in the business school are those that enjoy intense interaction and, at one level, as technology advances I think the better teachers will gravitate toward it” and “I couldn’t figure out a good mechanism for them to present their stuff to their students, to their class mates. So I didn’t have that, and I think that’s a loss, that’s a difference. Now there’s probably ways to do that, maybe, but I didn’t know what that way would be” (Su et al., 2005, p. 11). Teachers believed that online interaction was important but they do not think they had the capability to promote it.

Students had varied responses about the importance of online interaction. The following quotes were from the student perspective, “I personally prefer to have more interaction, because that is the way that I learn” and “You might not get some of the social relationships with the people; I guess I’m not that much of a social person, so it’s been good for me” (Su et al., 2005, pp. 12-13). The study concluded that teachers should continue to find methods of teaching that surpass the challenges of interaction in online education.

Likewise, Mathews and Bhanugopan (2014) investigated what factors were associated with successful online teaching and learning processes in a web-based academic program in China. Participants were a convenience sample of students (N = 407) enrolled in a Bachelor of Business program in China. While there is growing
interest in online education, it is “. . . considered second best in China” (Matthews and Bhanugopan, 2014, p. 64).

Mathews and Bhanugopan (2014) used survey research, employing the MEBIR Scale with a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). A factor analysis was run with the following five factors showing significance: classroom dynamics, online interaction, communication, classroom discussion, and teamwork. The results of the study revealed the importance of collaboration and interaction for students enrolled in the online program. This indicated an “Internet readiness” on the part of the students surveyed and potentially for other university students in China (Mathews & Bhanugopan, 2014).

Sense of community was essential to engaging student interaction in online classes (Eom et al., 2006; Mathews & Bhanugopan, 2014). Faculty perceived that sense of community in online courses interaction was important for students (Drouin, 2008; Mathews & Bhanugopan, 2014). However, results about student perceptions varied with some students appreciating an online sense of community (Drouin, 2008; Shea, 2006) and some students neither wanted nor expected a sense of community in online classes (Drouin, 2008). Sense of community was linked to communication and interaction (Drouin, 2008; Eom et al., 2006; Mathews & Bhanugopan, 2014). In order to enhance this sense of community, teachers need to be well-prepared and supported by their institutions to teach quality online classes (Batts et al., 2010; Gold, 2001; Meyer & Murrell, 2014).
**Chapter Summary**

The purpose of the literature review was to provide an overview of literature in the field of online education, including factors affecting retention, the CoI, faculty preparation for online teaching, and student perceptions of their educational experiences. Distance education is convenient for students and can be a great source of additional enrollment for community colleges. Once students are enrolled in classes, retaining those students increases both their success and the success of the institution. The literature reviewed illuminated multiple factors influencing student retention on online courses, including strong teaching and online course design to encourage learning.

Additionally, the literature revealed that students are able to effectively evaluate teacher practices. Students value community and collaboration in both face-to-face and online environments. Students place value on instructors who communicate expectations clearly. Additionally, they value teacher – student interaction, directed facilitation, instructor responsiveness and communication, and sense of community. The findings support the Deweyen (1897) value of students’ actively participating in their education. The literature suggests that students learn more and are more satisfied with their educational experience when they are in active, collaborative environments. The study expanded the body of literature by using exploratory mixed methods to examine what community college students enrolled in an online class at The College perceived as important elements of teacher practice that led them to feel successful in an online course.
Chapter 3: Research Design Methodology

Introduction

There is a growing divide between the rich and the poor in the U.S., however, a degree from a community college allows a person to earn much more in a year than their counterparts who did not graduate from high school ($38,000 as opposed to $20,000) (The College Board, 2008). Thus, community colleges play a vital role in supporting the U.S. economy. More than 40% of all undergraduate students in the U.S. enrolled in community colleges in 2011, and policy makers are focusing on increasing the usually low graduation rates of these open-door institutions (D. Jenkins, 2011). All the while, state budgets are decreasing which creates conditions ripe for institutional change at community colleges. The College is one of many community colleges with rapidly growing online programs and courses in response to its mandate to offer accessible education. In order to understand the student perspective, the study will investigate what students currently enrolled in an online class at The College perceive as important elements of teacher practice that lead them to feel successful in an online course.

The study used exploratory sequential mixed methods to answer the research questions. Exploratory sequential mixed methods began with a qualitative method that investigated the perceptions of participants (Creswell, 2014). Data from the qualitative method was subsequently analyzed and used to inform the quantitative portion of the
research. Mixed methods emerged in the late 1980s and became popular with researchers in a range of fields including evaluation, education, management, sociology, and health sciences. A challenge with mixed methods research is the time consuming nature of the analysis and development of proficiency in using both qualitative and quantitative methods. However, using both research methods provides more complex data and can lead to more complete understanding of research problems. Additionally, using both methods minimizes the potential limitations of each approach (Creswell, 2014).

To study community college students’ perceptions about teacher practices that led them to feel successful in an online class, focus groups (qualitative) and surveys (quantitative) were used. The qualitative design was an appropriate choice because it allowed responses to emerge from students; this was essential in order to gather student perceptions (Creswell, 2014; Krueger & Casey, 2015). The focus group data were analyzed through a qualitative coding process and used to build a quantitative survey instrument. The survey was given to a larger sample of students who were enrolled in online classes during the spring of 2015. Results of the survey were analyzed using descriptive statistics to identify their perceived importance (Krueger & Casey, 2015). This use of mixed research methods increased the generalizability of the data (Creswell, 2014).

The study answered the following research questions:

1. How do selected students currently enrolled in an online class at The College define success in an online class?
2. What do selected community college students currently enrolled in an online class at The College perceive as important elements of teacher practice that lead them to feel successful in an online course?

3. Given the perceived important elements in research question two, what do students currently enrolled in an online class at The College perceive are the most important elements of teacher practice that lead them to feel successful in an online course?

**Research Context**

The research was conducted at a community college in upstate New York. The College is one of 32 community colleges that are a part of a multi-institution state university network comprised of 64 four-year, research, and community colleges. The College is a 2-year college in the mid-sized city of Syracuse, NY, with a diverse population of approximately 12,800 students. Sixty-four percent of students are from the surrounding county, 32% of students are from racially and ethnically diverse backgrounds, the five-year average enrollment of first-in-family to attend college is 26%, and 50% of students plan to transfer to a 4-year college when they graduate (http://students.sunyocc.edu/life.aspx?id=22580). Students come from urban, suburban, and rural environments; the population is typical of other community colleges of its size and general location. Enrollment at The College grew at a steady rate each year from 2003 to 2012 and, most recently, has leveled off and slightly decreased from 2012 to 2014 (http://www.sunyocc.edu/about.aspx?coll_id=0).

Online education is a priority for student success at The College. Online course enrollment grew from 28 students in four courses in the fall of 2001 to 4,326 students
enrolled in 209 courses in the spring of 2013 (Heise, Matechack, & Prestopnick, 2013). In the fall of 2014, The College offered 12 fully-online degrees and certificate programs, and the 2011 - 2016 strategic plan includes a goal to offer 16 fully online degrees and certificate programs by 2016 (Tarby & Awuah, 2014).

The Office of Instructional Design & Delivery (IDD) leads the instructional design efforts for online, web-enhanced, and blended courses (Heise et al., 2013). The mission of IDD includes targeting programs and services that significantly impact student success, including all aspects of online learning. To this end, IDD runs and maintains a Faculty Resource Center which houses 10 computers and is consistently used for training, workshops, and walk-in traffic. The IDD staff creates and facilitates all training modules to prepare faculty who are developing online courses. Faculty are trained in online teaching strategies and technology management. The IDD also reviews and approves all online courses before they are taught (Heise et al., 2013).

The researcher completed the National Institutes of Health Protecting Human Research Participants certification. A letter of support was obtained from The College, as recorded in Appendix A, and the study was approved by the Institutional Review Board (IRB) at St. John Fisher College, as indicated in Appendix B.

Research Participants

Qualitative focus group. Simple random sampling (Fowler, 2014) techniques were used to select focus group participants from the total population of post high-school students who were enrolled in at least one fully asynchronous online class during the spring 2015 semester at The College. Random selection of participants led to a sample population that was representative of the total population (Mertens & Wilson, 2012).
There were 238 sections of online classes offered through the ANGEL course management system at The College during the spring 2015 semester, with an approximate total enrollment of 4,700 students. During the two-week recruitment period, IDD sent an email request for volunteers to each student enrolled in an online class.

Informed consent was received from all focus group participants. They were informed that a doctoral student was administering the study and that their perceptions of teacher practices in online courses may be included in the results of a dissertation for the Doctorate in Executive Leadership program at St. John Fisher College. Also, participants were informed that their identities would be completely anonymous. Ensuring anonymity and protecting data was essential because the data came from the researcher’s home organization (Ashcroft & Palacio, 2014). IDD disaggregated the names of participants to maintain their anonymity. IDD had access to students’ names but not the student responses, and the researcher had access to the student responses, but not the student names. Finally, to protect the identity of online teachers at The College, participants were instructed not to identify their instructors’ names or any course names or numbers.

Incentives for research participation can be very helpful to encourage interaction (Krueger & Casey, 2015). First, students were informed of the value of their participation in learning about the process of online education and the benefit of interacting with others with whom they share a common experience. Then, they were informed about the value of their perspective and the opportunity they had to influence online teaching practices. Additionally, participants who posted at least three times in the online focus group received a $5.00 gift card.
Two focus groups were conducted to reveal and compare themes that emerged from participants’ responses. To encourage rich descriptive responses, there should be approximately five participants in each online focus group (Krueger & Casey, 2015). A protocol was created to guide the focus groups, as recorded in Appendix C. To ensure that at least five participants were active in each focus group, 18 students were randomly selected using a random number generator from the pool of volunteers who responded to the email they received. This allowed for some potential attrition and created two groups of between five and nine participants.

Quantitative survey. For the quantitative survey portion of the study, IDD sent an invitation email, including a link to the Qualtrics survey (Qualtrics.org), to all students enrolled in online courses during the spring 2015 semester. One follow-up email was sent to remind participants to respond to the survey. Once students responded to the survey, they received a message thanking them for their time and their participation. To confirm the selection of a representative sample, the following demographic and background information was collected: gender, age, and ethnicity. Participants were also asked about their employment status, if they had taken an online class previously, and if they were full-time or part-time students.

Consent was received from all survey participants. Before they began the survey, all participants were required to read the consent form and click on a box that indicated they understood the parameters of the study and were over 18 years old. Also, participants were informed that their identities would be kept anonymous. Once again, IDD disaggregated the names of participants to maintain their anonymity. Participants
who engaged in the survey portion of the research were entered into a drawing for one of four $25.00 gift cards.

**Instruments Used in Data Collection**

*Qualitative focus group.* Focus group methodology was a sound way to research student perceptions because focus groups reveal the opinions, beliefs, and ideas of people who share common attributes (Krueger & Casey, 2015). Krueger and Casey (2015) further state that focus group facilitators should create a relaxed and open atmosphere for conversations on a specific topic. Specifically, an online asynchronous focus group was used for the qualitative portion of the data collection. This platform was accessible to a wide variety of participants across geographic regions, time zones, and schedules (Marshall & Rossman, 2010). Participants only needed access to a computer and an Internet connection. Access is one of the major factors in the need for online education at community colleges (Merisotis & Phipps, 2000). Face-to-face focus groups could exclude those students without ready access to the campus; this is the population who could be best-served by taking online classes.

The limitations and benefits of this platform are similar to those inherent to online learning. First, an online focus group can lack spontaneity compared to face-to-face focus groups (Krueger & Casey, 2015). Next, the online platform can lack the depth of nonverbal feedback that face-to-face contact can provide. There are, however, considerable benefits to using an online platform for a focus group. Some participants feel safer in an online focus group in the absence of receiving the nonverbal cues they may associate with approval and disapproval of a facilitator. Also, online focus groups can provide participants more time to reflect on questions and could yield responses with
more depth (Krueger & Casey, 2015). Additionally, this method is social in nature, has strong “face validity,” allows for probing follow-up questions, and is relatively low cost (Fowler, 2014; Marshall & Rossman, 2010). Finally, this format provides an electronic record of responses that can be organized by topic and subsequently coded to yield qualitative data (Krueger & Casey, 2015).

The focus group platform was administered in ANGEL, The College’s online course management system. All students who were enrolled in an online class during the spring 2015 semester at The College had access to ANGEL and should have been familiar with the technology by the middle of the semester, when the focus group took place. Advantages of this electronic medium were the affordability, the fast speed for collecting data, and the simplicity of accessing questions. Also, the electronic medium increased the validity of collecting sensitive data because participants did not need to respond face-to-face (Fowler, 2014).

Online focus group protocol called for providing clear instructions, keeping the technology straight-forward and familiar, being welcoming and personable, and creating a layout that was easy to navigate (Krueger & Casey, 2015). Also, to encourage quality responses, open-ended, straightforward questions were essential because they provided a comfortable atmosphere for participants to express their ideas (Marshall & Rossman, 2010). Focus group participants were asked prompt questions which were directly related to the research questions or to topics that emerged in the literature review, for example, “What do you consider to be success in an online class?” and “What does your professor do that helps you to feel successful in the online class you are taking?” The researcher facilitated the focus group, any potential bias from knowing specific students
was mitigated by the anonymity of this forum. The focus group instructions and questions were piloted in a field pre-test to understand the clarity of the instructions and determine validity (Fowler, 2014). To this end, five professors at The College participated in a prototype focus group. Modifications were made based on feedback from the field pre-test.

Informed consent, anonymity, and data storage were important to consider while collecting data (Creswell, 2014). Before accessing the online focus group, participants gave their informed consent to participate in the research (Marshall & Rossman, 2010) as recorded in Appendix D. Participants’ names were suppressed to ensure anonymity and encourage candid responses. To protect the identity of the professors, participants were asked not to identify the specific classes they took or the names of their teachers. Data from the online focus groups was collected through an electronic transcript of the discussion and analyzed through coding. Data were stored electronically, and hard copies were kept off-site at the researcher’s home for a minimum of three years.

**Quantitative survey.** The next phase of the exploratory sequential mixed method study called for the qualitative data results to inform the quantitative instrument (Creswell, 2014). Results from the online focus groups were analyzed for categories and themes and then subsequently clustered together (Marshall & Rossman, 2010). To line up with the research questions, the most essential elements of teacher practices that emerged through this process and a quantitative survey was created using Qualtrics, a third-party survey system that ensured anonymity, to triangulate the findings. The most frequently mentioned elements of teacher practice distilled from the qualitative data were listed in the survey. Participants used the following Likert scale to rate perceived
importance of the major themes that emerge from the focus group: (5) Extremely
important (4) Very Important (3) Important (2) Slightly important, and (1) Unimportant.
Thus, the study assessed the degree of importance. The survey instructions and scale
were piloted in a field pre-test to ensure clarity (Fowler, 2014). To this end, three faculty
members, three students, and one administrator volunteered to complete the survey, and it
was modified based on the feedback received. Survey validity was determined through
accepted face and content validity measures.

Like the qualitative data collection, the quantitative survey was delivered
electronically. Upon accessing the survey, participants read an invitation letter detailing
the procedures, including maintaining anonymity and use of the results, and purpose of
the research project. They were then be prompted to click on an ‘I Agree’ button to give
their informed consent, seen in Appendix E, before they can participate in the research
(Marshall & Rossman, 2010). Data was stored electronically, and hard copies were kept
off site at the researcher’s home for a minimum of three years.

Data Analysis

Qualitative focus groups. In qualitative research design, it is imperative to
examine the role of the researcher in the study and to manage any bias (Creswell, 2014).
To mitigate bias, the tenets of insider research were used. Insider research primarily
concerns comprehending and improving processes at the institution where the researcher
works (Ashcroft & Palacio, 2014). It is an effective way of examining both teaching
practices and underlying values. However, research by an insider can be overly
introspective or biased. A professor from a different SUNY college reviewed the
research methods and analysis process to provide an alternate perspective. Also, to
identify alternate conclusions from data analysis, the literature was reviewed with care taken to use multiple sources. Additionally, a theoretical framework, the CoI, was used as the foundation for analysis and combated the tendency towards anecdotal results of insider research (Ashcroft & Palacio, 2014). Finally, assumptions about the behavior and characteristics of both the instructor and the students were bracketed to examine the data through the unbiased lens of a researcher (Marshall & Rossman, 2010).

The researcher in this study was a faculty member at The College who has designed and taught multiple online classes since the fall of 2006. Additionally, the researcher has advised online students and understands the experiences of students who have both excelled and failed classes taught in an online format. The perceptions and expectations of the researcher were separated, or bracketed, from the data collection process to remove assumptions about outcomes (Marshall & Rossman, 2010). In additional efforts to mitigate bias, the researcher worked closely with a committee of professionals who were consulted for insight into the coding process. It is important to note that the research was centered on student perceptions, not faculty perceptions, which allowed for some professional distance.

The focus group responses were clustered into various themes and constant comparative analysis was used to identify how the emerging themes connected to each other and the major findings in the literature review (Marshall & Rossman, 2010). Structural and then pattern coding were used to analyze the data. Structural coding is a preliminary, or first-cycle, coding method that uses an applicable phrase to represent a topic or section of data as they connect to a guiding research question (Saldaña, 2012). Results were further coded by the frequency or scarcity of certain themes that provided a
foundation for the next phase, pattern coding. Pattern coding is a more in-depth, or second-cycle, coding method that extracts the main themes from the structured coding data. The use of pattern coding provides more meaning from the data. Therefore, in addition to identifying larger themes, it can find explanations in the data (Saldaña, 2012). For example, searching for words such as “because” in the focus group transcripts can clarify students’ perceptions of what causes them to feel successful in an online class. Using these coding methods led to a greater understanding of both how students’ defined success in an online class and what they perceived teachers did that helped them to feel successful.

**Quantitative survey.** The quantitative survey was analyzed using the descriptive statistics of mean, standard deviation, and range (Creswell, 2014). Results were clearly displayed in a table that ranked the perceived importance of each of the critical elements of teacher practice initially identified from the focus group data. The analysis of the quantitative results was used to determine the generalizability of the perceived importance of the critical elements of teacher practice that influence students’ feeling successful in online classes.

**Chapter Summary**

The online platform provides many educational opportunities for community college students (Allen & Seaman, 2013); however, many students are not successful in these classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). These failure rates are challenging for both colleges and students (Tinto, 2006). Examining students’ perceptions can identify the teacher practices that students find most helpful to their success (Hill et al., 2003). To this end, exploratory sequential mixed
methods were used to determine what community college students currently enrolled in an online class at The College perceive as critical elements of teacher practice that lead them to feel successful in an online course.
Chapter 4: Results

Introduction and Problem Statement

Online learning is growing at a fast pace to fill a need for access to education (Allen & Seaman, 2013). The study investigated what students enrolled in an online class at The College during the spring 2015 semester perceived as important elements of teacher practice that led them to feel successful in online courses. The study used exploratory sequential mixed methods to answer the research questions. An online focus group was conducted and, after analysis of the qualitative data, a quantitative survey was created and distributed in the field.

Qualitative methods summary. A field pre-test was conducted to understand the clarity of the instructions, the clear flow of information, and to determine the validity of the online focus groups (Fowler, 2014). Four professors and one professional administrator in the field of distance learning previewed the online focus group protocol; modifications were made based on their feedback.

Emails were sent to all of the 1,984 students enrolled in online classes at The College in the spring of 2015 inviting them to participate in an online focus group. Thirty-eight people responded to the email request, and a random sample of 18 participants were selected using a random number generator to create two focus groups with nine participants each. All 38 volunteers were sent a message informing them if they had been selected to participate. Those who were not selected were thanked for their
interest and encouraged to participate in the survey that would be launched subsequently. The students who were selected were added to a custom online course that hosted the focus group and were instructed on the start dates and terms of their participation.

Krueger and Casey (2015) recommended a focus group size of around five members. Of the nine participants selected for each of the two focus groups, one focus group had five people actively participate, and the other focus group had seven people actively participate, for a total of 12 participants.

The asynchronous focus groups were open for three days with multiple reminders sent to encourage participation. Each research question had a discussion thread. The question prompt for the first discussion thread read, “When thinking about an online class, how do you define success? In other words, what would need to happen for you to say that you had been successful?” The next question prompt stated, “What are important things that teachers do to help you feel successful in an online course? Please respond to this question and then also respond to two posts from other participants in the discussion.” Participants were asked to post at least four times in their online focus group. Each participant posted an average of seven times which indicated strong engagement. Another indicator of engagement is how many times participants directly connected to each other in the focus groups. The phrase I agree was frequently used and some participants were more engaged and directly interacted with each other as indicated in the following statement, “I am very sorry for your frustration. Hang in there.”

Names were suppressed and the researcher was not given administrative rights to the focus groups to protect the anonymity of the participants. Informed consent was received from all focus group participants, and complete anonymity was guaranteed by
the researcher. The Office of Instructional Design & Delivery (IDD) emailed $5.00 gift cards to each participant who posted any responses in the online focus groups.

Quantitative methods summary. The qualitative data was then used to develop a quantitative survey. Major themes were analyzed from the online focus group data; the most prevalent themes that emerged from the analysis were used to create a 16 item survey. In the survey, participants were asked to rate the importance of each of the 16 items on the following Likert scale: (5) Extremely important (4) Very Important (3) Important (2) Slightly important, and (1) Unimportant. The survey instructions and scale were piloted in a field pre-test to ensure clarity. Three students, three professors, and one academic administrator reviewed the survey. Modifications were made based on their feedback.

An email invitation, including a link to the Qualtrics survey (Qualtrics.org), was sent to all of the 1,984 students enrolled in at least one online class in the spring 2015 semester at The College. Participants who participated in the online focus groups were included in the survey invitation. All participants who completed the survey were included in the results. The survey was open for two weeks and one follow-up email was sent to encourage participation in the survey. Informed consent, confirmation of age (over 18), and agreement to participate in the study were received from all survey respondents. Participants who completed the survey were entered into a drawing and four of them received $25.00 gift certificates. One hundred and sixteen of the 1,984 emails sent were returned marked ‘undeliverable’, and two students were no longer taking classes at the college. Therefore, out of the 1,866 students who received the survey link; 117 surveys were returned for a response rate of 6%.
Research Questions and Participant Demographics

The study answered the following research questions:

1. How do selected students currently enrolled in an online class at The College define success in an online class?

2. What do selected community college students currently enrolled in an online class at The College perceive as important elements of teacher practice that lead them to feel successful in an online course?

3. Given the perceived important elements in research question two, what do students currently enrolled in an online class at The College perceive are the most important elements of teacher practice that lead them to feel successful in an online course?

No demographic information was collected to ensure complete anonymity for the small number of participants who participated in the qualitative online focus groups. To understand the demographics and background of the sample in the quantitative survey, the following information was collected: gender, age, ethnicity, employment status, full or part-time student status, number of online classes taken, and enrollment in fully online degree programs.

Participants were students who were enrolled in an online class at The College in the spring of 2015. Overall, the sample was familiar with online learning; 96.6% (n = 112) had taken an online class previously and 18.8% (n = 21) were enrolled in a fully online degree. Most participants (65.8%, n = 77) had taken between one and five online classes and 32.5% (n = 38) had taken six or more online classes as seen in Figure 4.1.
The sample was mostly female (78.3%, $n = 90$) with less male participants (20.9%, $n = 24$), and one participant with another gender identity who chose not to specify. This percentage varies substantially from the institutional enrollment of 51.7% of participants identifying as female and 48.3% of participants identifying as male.

Participants varied in age, the largest groups were in the range of 21-24 years old (25.6%, $n = 30$) and 30-39 years old (22.4%, $n = 26$), as indicated in Figure 4.2.
Full-time students accounted for 67% \( (n = 77) \) of the population with the other 33% \( (n = 38) \) going to school part-time. Most participants were working in addition to taking classes (81.1%, \( n = 95 \)), with 41.9% \( (n = 49) \) being employed part-time and 39.3% \( (n = 46) \) being employed full-time. Participants were mostly White (80.3%, \( n = 94 \)) with 12% identifying as Black or African American \( (n = 14) \), and 7.7% identifying as Asian \( (n = 9) \). Additionally, 2.6% of participants identified as international students \( (n = 3) \), 2.6% identified as other \( (n = 3) \), 1.8% identified as Hispanic or Latino \( (n = 2) \), and 1.7% identified as American Indian or Alaska Native \( (n = 2) \). Most of the demographic information was parallel to the overall demographics of the host institution, with a few differences noted in Figure 4.3. Some populations diverged from those of the host institution. There was a higher percentage of international students in the general College population than in the survey sample (9.1% compared to 2.6%). There was a higher percentage of Asians in the survey sample (7.7% compared to 3.4%) than in the general population.

![Figure 4.3. Race and ethnicity of survey participants and the institution as a whole.](image)
Data Analysis and Findings

The data analysis began while the online focus groups were active. The researcher monitored the discussion as it was evolving, read all responses, and participated by occasionally asking for clarification and acknowledging participants’ responses. One such response was, “Thank you for sharing the qualities that you think are important in an online teacher. I can see how listening, flexibility, and humor are all helpful. Are there any particular ways that a teacher could design a class that might help you feel successful?”

Once all the focus group data was collected, the data analysis continued with focused reading and rereading of the discussion transcripts. Initial coding was conducted including note taking, highlighting, recording first reactions, and writing a list of provisional codes. The data were organized by the research questions they answered. The focus group responses were clustered into various themes, and constant comparative analysis was used to identify how the emerging themes connected to each other and the major findings in the literature review (Marshall & Rossman, 2010). In this case, the emerging themes were examined regarding direct connections to the community of inquiry (CoI) framework. Subsequently, structural and then pattern coding was used to analyze the data. Structural coding is a preliminary, or first-cycle, coding method that uses an applicable phrase to represent a topic or section of data as they connect to a guiding research question (Saldaña, 2012). Results were further coded by the frequency or scarcity of certain themes that provided the foundation for the next phase, pattern coding. Pattern coding is a more in-depth, or second-cycle, coding method that extracts the main themes from the structured coding data. The use of pattern coding provided
more meaning from the data. Therefore, in addition to identifying larger themes, it found explanations in the data (Saldaña, 2012). When reporting the data, quotations from the online focus groups were used to substantiate findings and accurately report themes that emerged in the data.

Using these coding methods, as displayed in Table 4.1, led to a greater understanding of both how students define success in an online class and what they perceived teachers do that helped them to be successful. These methods of analysis were consistent with exploratory sequential mixed methods and yielded a robust array of responses that were included as elements of teacher practice in the subsequent survey.

**Defining success in online classes.** Research question 1 states, “How do selected students currently enrolled in an online class at The College define success in an online class?” The question asked in the online focus group was, “When, thinking about an online class, how do you define success? In other words, what would need to happen for you to say that you had been successful?” The themes that emerged from the online focus group data to define success were grades, learning, application, accomplishing goals, and time management as recorded in Table 4.2.

**Grades.** Participants frequently identified grades as an indicator of success in online classes. Grades were mentioned 13 times by the participants in the online focus groups. Grades were described as either passing the class, getting an A, or getting a good grade. For the purposes of the study, grades were defined as receiving a passing grade in an online class. The concepts of learning and grades were consistently intertwined in the data, “Learning in a course is always a measure of a success, and a good grade will happen as a result of a high level of learning.”
Table 4.1

*Data Analysis Procedures and Descriptions*

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online focus groups</td>
<td>Monitored online discussions, read responses and asked prompt questions as needed</td>
</tr>
<tr>
<td>Formated online focus group data</td>
<td>Data from two online focus groups were formatted for readability and analysis</td>
</tr>
<tr>
<td>Read data</td>
<td>Data were read multiple times, main ideas and first reactions to the data were recorded</td>
</tr>
<tr>
<td>Initial analysis</td>
<td>Read, re-read, underline, highlight, took notes of words that stood out, were repeated, or were emphasized.</td>
</tr>
<tr>
<td>Sorted data by research questions</td>
<td>Data were organized by which research questions they answered. Data that did not fit into research questions were noted and categorized.</td>
</tr>
<tr>
<td>Coding</td>
<td>Emotion coding, evaluation coding, theme coding, line by line coding</td>
</tr>
<tr>
<td>Emotion coding</td>
<td>Noted emotions that surfaced in the data</td>
</tr>
<tr>
<td>Evaluation coding</td>
<td>Analyzed data for how participants evaluate teacher practices</td>
</tr>
<tr>
<td>Theme coding</td>
<td>Analyzed data for overarching themes and subthemes.</td>
</tr>
<tr>
<td>Line by line coding</td>
<td>Narrowed data to phrases, words, quotes, looked at emphasis</td>
</tr>
<tr>
<td>Constant comparative analysis</td>
<td>Compared data to theoretical framework at all stages of analysis</td>
</tr>
<tr>
<td>Create Survey</td>
<td>Used prevalent themes from coding and analysis to create survey questions</td>
</tr>
<tr>
<td>Survey Analysis</td>
<td>Analyzed for levels of importance using descriptive statistics of mean, range, and standard deviation</td>
</tr>
</tbody>
</table>
**Learning.** Learning also emerged as a prevalent indicator of success. Learning was defined as understanding the subject being taught. Participants frequently referred to learning as a definition of success. They described learning as mastering or gaining a complete understanding of a particular subject. One participant identified learning as “. . . the greatest measure of success.”

**Application.** Another theme in the data that defined success was application, defined as being able to apply the information learned in a course. Participants reported wanting to be able to use the information they learned from a course in future endeavors. For example:

> Defining success to me I answer in two questions . . . Did I get an ‘A’ in that course, and did I retain and utilize the information I learned in the online class, in my daily life? If both of these are yes, then I feel the class was a success. There is no point to a course if I didn’t get a good grade and don’t utilize what I have learned.

Being exposed to new experiences that would be useful in the future also emerged as an element of the theme of application.

**Accomplishing goals.** Accomplishing goals emerged as a defining theme for success. Accomplishing goals was defined as making progress towards preset goals and included completing a course, completing a semester, and making progress towards receiving a degree.

> Completing a course was seen as a way to define success in an online class, “The fact that I also completed the whole class also makes me feel successful. Going back to school as an adult with a family, and a full time job is hard.” Completing a semester also
emerged as a defining element of success in online classes, “The fact that I can say I completed another semester is something that I can honestly say that I am proud of myself for.” Working towards completing a degree was another theme as evidenced by this statement, “Everyday I do homework but this semester hasn't been easy. But I’m proud of myself because half way finish for getting [sic] my degree.”

**Time management.** A final theme that emerged from the data was how successful time management, organizing time and staying focused, defined success in an online class. An example from the data was:

> When thinking about an online class I define success as managing your time in an orderly manner. You need to be able to budget each thing you do in your daily routine whether it include [sic] school or not and make everything fit into a schedule that works for you.

There was substantial emphasis in the qualitative data on time management not only defining success, but leading to success in an online class:

> Focusing and being able to get myself organized during an online class is the key for success for me. If I get distracted or don’t schedule out my study time the online experience can go from being a pleasant experience to becoming a very stressful one. It is important to be on top of due dates and stay ahead.

Procrastinating could result in mediocre work or even a failing grade.

Certain emotional rewards from successful time management such as pride and relief emerged from the focus group data:
Online classes are a lot of work, but I’ve learned that if you sit down and focus and get the assignments in on time or even early, you feel stress free and you tend to feel more relaxed knowing that you have your work done.

This theme was also evident in the following statement, “So true, doing the assignments on time makes one feel just so much more relaxed. Plus, this way there is no need to rush, which will most likely be rewarded with a higher grade. Time management is key!”

Table 4.2

Definitions of Success in Online Classes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Supporting Phrases/Descriptions</th>
<th>Working Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>Grade, good grade, passing grade, getting an A</td>
<td>Receiving a passing grade</td>
</tr>
<tr>
<td>Learning</td>
<td>Learning, retain information learned, complete understanding of the subject, better/increased/great understanding, gain new knowledge, learn as much as a face-to-face class, gain something from it, high level of learning</td>
<td>Understanding the subject being taught</td>
</tr>
<tr>
<td>Application</td>
<td>Utilize the information I learned, gain new knowledge, new experience that would help in the future</td>
<td>Ability to apply the information from the course</td>
</tr>
<tr>
<td>Accomplishing Goals</td>
<td>Completing the whole class, completing another semester, being halfway finished with degree, staying on track</td>
<td>Making progress towards preset goals</td>
</tr>
<tr>
<td>Time Management</td>
<td>Focus, organize time, stay ahead, self-disciplined, balance workload, work my hardest, budget time, plan time, be disciplined, managing time, time management is key!</td>
<td>Organizing time and staying focused</td>
</tr>
</tbody>
</table>
What teachers do that helps students be successful. Research question 2 stated, “What do selected community college students currently enrolled in an online class at The College perceive as important elements of teacher practice that lead them to successfully complete an online course?” This question was answered in the online focus groups and a variety of themes emerged from the data including explanation, instruction, evaluation, and engagement. All of the themes could be connected to the concept of teaching presence in the community of inquiry framework (CoI). Teaching presence is the online interaction of students with teachers, including (1) instructional design and organization, (2) facilitated discussion, and (3) direct instruction (Anderson et al., 2001).

Explanation. Explanation, defined as clearly describing expectations and assignment instructions, emerged as a theme in the data. This was mentioned multiple times throughout the online focus groups. Participants described the importance of a having a strong introduction to the course that included clear instructions, a good syllabus, clear due dates, examples of assignments, and clear answers to questions. For example, one participant stated, “I think it is important that professor’s have clear and concise instructions, rubrics, and a syllabus.” One participant mentioned the following about due dates, “Consistency to [sic] – having the same things due at the same time every week is good for those who can’t get on every single day to check.”

Participants mentioned the challenges of not understanding instructions from a teacher: “I have been in a situation where I have ask the teacher a question and they never given me the answer . . . and I still don’t understand the assignment and this cause me to be confuse.” Another comment supporting this theme was:
It is very frustrating when a professor has instructions that are jumbled and confusing and then when you email them to ask a question they do not respond. It feels like you have to assume you know what they are looking for and hope for the best.

**Instruction.** Instruction, also a part of teaching presence as indicated in the CoI, is another element of teacher practice that emerged from the data. Instruction is defined as methods used to design and teach an online course. Subthemes that emerged are tools, active instruction, and a connection to content.

**Tools.** Tools, defined as resources an instructor provides to help students learn, emerged as a theme from the data. Tools discussed were PowerPoint slides, videos, and links to relevant teaching resources as indicated in the following quote:

I love when teachers provide you with links to the assignments you are currently working on. For example, if you need to work on a research project on any subject, the teacher may give you multiple links that provides you with information you need to complete the assignments. This really makes finding useful information easy and less stressful.

Participants linked tools directly to learning, “Teachers have to stimulate learning for the students. This can include videos, link to applicable sites and the opportunity for students to get involved in an area of the class that they find interesting.” Additional evidence of tools being linked directly to learning is:

If the teacher is expecting from students to master the course and main concepts, he/she will do its best to pass the message using all the tools in his/her possession
(links, videos, email . . .), and this won’t feel anymore like an online class maybe better.

**Connection to content.** The theme of connecting to the content, showing care and interest in the course subject, was important to participants as evidenced by the following statements, “Teachers need to put forth an effort to make the class interesting, applicable to students, relevant and up to date with current knowledge about the subject.” “Teachers need to care about the subject that they are teaching about. If they don’t care, their student will not care.” Another participant supported this theme with the following statement:

There was one class I needed to complete my major. I liked the class so much, it created an interest in taking other classes similar to it just to gain a better understanding of the subject. In this class, without meeting the instructor, you could tell how much they really loved the subject they were teaching by reading the comments they made as part of the discussions and other class comments.

**Evaluation.** Evaluation, defined as measuring student progress in a course, was another important theme that emerged from the data. As elements of this theme, participants mentioned grading, receiving personal feedback on assignments, and the opportunity to revise their work.

**Grading.** Grading, defined as appraising student work, emerged as a theme that helped participants feel successful in an online class. One participant mentioned, “I want to know that my teacher is there to help and is actually checking in on the work I am doing so that I know I am on the right track.” Another comment that supports this theme
was, “In one course I had, the instructor would not get back to me regarding assignments and grades. I ended up withdrawing from the course . . .”

Timeliness of grading was also an important factor mentioned by participants:

I have had professors that do that and then do not grade work throughout the course, which does not give you a chance to do better if you need to and makes things far more frustrating than they need to be.

**Personal feedback.** Participants described the theme of personal feedback, individualized constructive criticism on their classwork, in the data, “ . . . feedback is huge! I like to know that I’m on the right track that the work I am doing is what I should be doing and I am getting the right idea out of the course.” Another statement that supported this theme was, “Feedback is also important for success, as it is a sign that the teacher is aware about his/her student’s abilities and can detect their struggles to help them.” Final evidence for the theme of personal feedback was:

After every paper I turn in, along with my grade, the teacher writes I response note about my grade. The professor explains why I got the grade I did. If it was low, what I could have done to make it better. If it was a good grade, what they liked about the paper and what points I hit well. I like this, it allows me to feel proud of what I have turned in. As well as, giving me constructive criticism to make something better or to point out what I didn’t get in the concept.

Participants expressed their disappointment when they did not get timely feedback on graded assignments in the following statements, “ . . .sometimes you would not get a response right away (days) that could impact the next item you would be working on.” Another participant stated:
Teacher input I feel is the most important thing in making a difference in my success in the courses. Some comments were in response to a homework assignment, discussion or etc. Other comments were general comments for all of the class to view.

The following statement also emphasized the theme, “Teachers who assign work and give out grades with little explanation . . . should not be allowed to teach online courses.”

Revision. Participants brought up the theme of revision, the ability to apply teacher feedback by rewriting assignments, as important to helping them feel successful in online classes. For example, learning what a teacher liked about a paper and what to improve on, “. . . allows me to feel proud of what I have turned in.” Participants appreciated the opportunity to revise their work:

When I took one of my first online classes I had not written a college paper in twenty five years. It took me a little time to review and understand the format for the paper. The instructor let you submit it early for review and made suggestions so you could resubmit it on the due date. This was extremely helpful . . . I was able to get my paper back in time to make corrections and improve my grade.

Another participant made the following statement about revising work:

I have had great experiences with some online courses, where the teacher seems to follow up or ask if I have additional questions, have made comments; letting me know my posts were on track, and have given me chances to work on improving coursework that was submitted.

Communication. Communication, defined as interacting directly with students through sending and receiving messages, emerged as a strong theme in the data, “It seems
that part of our success in the courses online is the ability to communicate with our professor and their ability to encourage us to do well.” Communication is also emphasized in the following statement,

I think **COMMUNICATION** is the most important thing that a teacher should have so those taking online classes don't fall behind. From my perspective when you are left alone to do the course without any communication from your instructor because he/she relies on websites accesses that we are required to subscribe in to do assignments, they forget about you...no ppt, no emails, no nothing just read the book that you bought, here is the list of your chapters, do your exams online, and see you in the final... so if you are not familiar with the course, you won't do good [*sic*].

Within the overarching theme of communication, the following subthemes emerged: email contact, participation in online discussions, and availability.

*Email contact.* Email contact is defined as responding to and initiating email correspondence with students. Participants mentioned that teachers’ timely responses to emails helped them feel successful in online courses:

I love knowing that if I have a quick question to ask my teacher, I can email them and they usually respond within that day. There is nothing better than a teacher that takes pride in their work and the success of their students.

Another participant stated, “The important things that a teacher can do to help me feel successful is when I have a question to ask, he or she [could] answer me back as soon as possible.”
As an indicator of the importance of email contact, participants emphasized frustration with not receiving email responses from teachers, “Some teachers have been great with leaving feedback and responding to email. Where others have made me feel like I was bothering them or that my questions and concerns were unimportant.” Another statement reinforced this point, “The worst thing for me has been sending an email asking a question and never getting a response that can be extremely frustrating.”

In addition to responding to emails, participants discussed the importance of having teachers who actively reached out to them. They wanted to be reminded of upcoming assignments or any changes in assignments or due dates. One particular student thought the teacher should send an email to individual students if they fell behind in the class. Participants described posting announcements, reminding students about deadlines, and just having a sense that the teacher was there were important for them to feel successful in an online class as shown in the following statement:

Some important things that teachers do are, ask you how you are doing in the class to make sure you’re up to speed with your other classmates, posting on the main forum in the class to remind you of upcoming assignments and exams, also I love when teachers are there when you need them.

*Participating in online discussions.* Participants were also interested in having teachers participate in online discussions. This meant that teachers would actively read and respond to student posts in online discussions. This emerged from the data in multiple ways, one participant mentioned that “I believe the teacher being an active member of the discussion groups and leaving feedback is vital to my success as an online learner.” Another participant said, “In the classes where the discussion was a big part of
the class, the teachers I had were highly active in the discussion. These courses made me want to take additional classes with the same professor.” Another participant mentioned that, “Courses where there was a lot of participation by the teacher in the class made me want to participate more and I had a better understanding of the subject.” Participation was also emphasized in the following statement, “Having the instructor actively participate in an area where all of the participants can access the information I feel makes you not feel as if you are working on the course independently.” One final statement supports the theme, “A teachers job is to teach and lead the discussion. So to me, even in an online discussion they should be more active and participate more often themselves.” From these statements, it is evident that teacher participation in online helps students to feel successful in an online class.

Another way participants emphasized the importance of teacher participation in online discussions was by describing how challenging it was when teachers do not participate, “I believe opening up modules and it just be a read and do the work with no feedback is not helping me be successful in really learning the material.” Another supporting statement was, “Sometimes I feel like they don’t really read what anyone is writing and just counting how many times they see a participants name posted.”

*Availability.* Availability, defined as having access to instructors, was a theme that emerged from the data as indicated in the following statement, “I understand how busy some teachers become but if you are teaching an online class you need to make your presence known and interact with your students.” Participants mentioned both online and face-to-face office hours as a useful means of contacting their professors. One participant in particular appreciated meeting a teacher face to face:
I met with one of my teachers today and I feel better having met with her. It gives it a more human element when you can meet with the teacher. She also helped to explain things I was not understanding and to actually help me realize a few things about my education plan.

Additional participants preferred online office hours as evidenced by the following comment:

Office hours don’t necessarily work if you are in online student unless you are going to have some online office hours which wouldn’t be a bad idea if you are teaching an online class. I understand teachers are very busy but if you are going to choose to teach an online class, you should be reachable to your online student.

Overall, how teachers communicated in online classes was of primary concern to participants in the online focus group. Participants wanted their instructors to be accessible and found it challenging when instructors were not available, “There is nothing more frustrating than Professor’s [sic] who are “absent” from class, especially the ones that are that way throughout the entire semester.”

*Consideration.* Consideration, defined as behavior that shows instructors care about their students, was mentioned throughout the data as helping students feel successful:

I have had teachers who are accommodating and willing to help their students, and it is a great feeling to know that your professor wants to help you learn the material and do the best you can in their class, so long as you put forth a good effort.
Another participant supported this viewpoint, “Because even though you are not going to a real classroom it’s nice to know that someone is there listening and caring about how you are doing.”

An element of the theme of consideration was that participants had mixed experiences based on their teachers:

I have had teachers on all ends of the spectrum. Great ones that really help you and seem like they care about you doing well and other ones that seem like that could care less and like the fact I even emailed them for help is a huge bother to them.

Participants were directly affected if they did not think teachers cared about them, “I have encountered professors that are very helpful and are very patient. I would have a very difficult time and I would be very discouraged if I had professors that felt I was a nuisance.” Participants described thinking teachers did not care about them:

I would have to say I notice that most of the teachers that I have had for my classes online have not been very encouraging when it comes to what we have been doing online. It’s been more like "here's the coursework, don't miss your deadlines, this is what I expect from you." I am not trying to say I have had a mostly negative experience with online classes but I notice a detachment that teachers have from an in person class compared to taking a class online.

Participants expressed considerable emotion and emphasis when discussing what teachers did that made it seem as if they did not care:

The teacher acted . . . irritated [with] my emails for help and I was a complete bother to her. I even got an email . . . at one point telling me that I should be
mapping out my own educational plan at this point and if I needed help with the course matter I should google it . . . I think when the teacher decides to teach an online class they have to really be ready to teach an online class the same as they would an in person class.

Table 4.3

Teacher Practices that Help Students Feel Successful in an Online Class, Summary of Themes.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes or Descriptions</th>
<th>Working Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Strong introduction to the course with clear instructions, a good syllabus, clear due dates, examples of assignments, and clear answers to questions</td>
<td>Clearly describing expectations and assignment instructions</td>
</tr>
<tr>
<td>Instruction</td>
<td>Tools</td>
<td>Methods used to design and teach an online course</td>
</tr>
<tr>
<td></td>
<td>Connection to content</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>Grading</td>
<td>Measuring student progress in a course</td>
</tr>
<tr>
<td></td>
<td>Personal feedback</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revision</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Email contact</td>
<td>Interacting directly with students</td>
</tr>
<tr>
<td></td>
<td>Participating in online discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td></td>
</tr>
<tr>
<td>Consideration</td>
<td>Accommodating, willing to help, listening and caring</td>
<td>Behavior that shows instructors care about their students</td>
</tr>
</tbody>
</table>

To summarize, the main themes that emerged from the data in response to research question 2 were explanation, instruction, evaluation, communication, and consideration as displayed in Table 4.3. Participants valued having all course material well-explained. Quality instruction was valued including effective learning tools and a
connection to the content. Evaluation was also important to participants, in the form of timely grading, personal feedback, and the ability to revise work. The theme of communication revealed the importance of being in email contact with an instructor, having an instructor participate in online discussions, and having an instructor who was available to students. Finally, participants reported wanting their online teachers to be considerate, including listening, accommodating, helping, and caring about students.

The most important things that teachers do to help students feel successful.

Research question 3 states, “Given the perceived important elements in research question two, what do students currently enrolled in an online class at The College perceive are the most important elements of teacher practice that lead them to successfully complete an online course?” Consistent with exploratory sequential mixed methods, the qualitative data from the online focus groups was used to create a quantitative survey. On the survey, participants used a five-point Likert scale to evaluate each of the teacher practices that helped them feel successful in an online class. The survey was analyzed using the descriptive statistics of mean, standard deviation, and range (Creswell, 2014). Table 4.4 ranks the perceived importance of each of the critical elements of teacher practice initially identified from the focus group data.

To further break down the data, elements of teacher practice were clustered by levels of importance. Results indicated that participants classified the following elements from very important to extremely important: makes the course content interesting; includes links to relevant articles; video clips or PowerPoint presentations to help teach ideas; promptly grades your assignments; does a good job introducing you to the course; promptly responds to any emails you send; gives you personal feedback on your
assignments, such as telling you what you did well and what you could improve on; clearly explains the course assignments and expectations; has expertise in the subject she or he is teaching; and clearly explains the due dates for assignments. From these results, it is evident that elements of teacher practice that included clearly explaining due dates and assignments as well as wanting teachers to have expertise in their subject were at the very highest levels of importance as indicated in Table 4.4.

Elements of teacher practice with means that fit into the ‘important’ range (means of 3.0 - 3.99 were: makes an effort to keep you ‘on track,’ has convenient online office hours, actively contacts you if you are behind in the class, shows he or she cares about you, and actively participates in online discussions.

Elements of teacher practice with means that fit into the unimportant or slightly important’ range (means of 1.0 - 2.9) were: has convenient face-to-face office hours, and helps you get to know your online classmates, as recorded in Table 4.4.

Mixed methods, areas of agreement. Most of the themes that emerged from the online focus groups were confirmed by the survey results. Fourteen of the sixteen items on the survey were ranked as important, very important, or extremely important by the 117 survey respondents as indicated in Table 4.4. Therefore, the qualitative themes of explanation, instruction, evaluation, communication, and consideration were all supported by the quantitative data.
Table 4.4

Teacher Practices that Help Students Feel Successful in an Online Class, Listed by Importance

<table>
<thead>
<tr>
<th>In order to feel successful in an online class, how important is it that your teacher:</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items labeled as very important or extremely important (means between 4.0 and 5.0)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearly explains the due dates for assignments</td>
<td>1</td>
<td>5</td>
<td>4.75</td>
<td>0.592</td>
</tr>
<tr>
<td>Has expertise in the subject she or he is teaching</td>
<td>1</td>
<td>5</td>
<td>4.66</td>
<td>0.647</td>
</tr>
<tr>
<td>Clearly explains the course assignments and expectations</td>
<td>1</td>
<td>5</td>
<td>4.61</td>
<td>0.685</td>
</tr>
<tr>
<td>Gives personal feedback on your assignments</td>
<td>2</td>
<td>5</td>
<td>4.46</td>
<td>0.703</td>
</tr>
<tr>
<td>Promptly responds to any emails you send</td>
<td>1</td>
<td>5</td>
<td>4.37</td>
<td>0.850</td>
</tr>
<tr>
<td>Does a good job introducing you to the course</td>
<td>1</td>
<td>5</td>
<td>4.10</td>
<td>0.888</td>
</tr>
<tr>
<td>Promptly grades your assignments</td>
<td>2</td>
<td>5</td>
<td>4.06</td>
<td>0.868</td>
</tr>
<tr>
<td>Includes links to relevant articles, video clips or PowerPoint presentations to help teach ideas</td>
<td>1</td>
<td>5</td>
<td>4.05</td>
<td>0.857</td>
</tr>
<tr>
<td>Makes the course content interesting</td>
<td>1</td>
<td>5</td>
<td>4.00</td>
<td>0.969</td>
</tr>
<tr>
<td><strong>Items labeled as important (means between 3.0 and 3.9)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes an effort to keep you ‘on track’</td>
<td>1</td>
<td>5</td>
<td>3.50</td>
<td>1.095</td>
</tr>
<tr>
<td>Has convenient online office hours</td>
<td>1</td>
<td>5</td>
<td>3.36</td>
<td>1.134</td>
</tr>
<tr>
<td>Actively contacts you if you are behind in the class</td>
<td>1</td>
<td>5</td>
<td>3.33</td>
<td>1.241</td>
</tr>
<tr>
<td>Shows he or she cares about you</td>
<td>1</td>
<td>5</td>
<td>3.33</td>
<td>1.78</td>
</tr>
<tr>
<td>Actively participates in online discussions</td>
<td>1</td>
<td>5</td>
<td>3.32</td>
<td>1.191</td>
</tr>
<tr>
<td><strong>Items labeled as less important (means between 1.0 and 2.9)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has convenient face-to-face office hours</td>
<td>1</td>
<td>5</td>
<td>2.61</td>
<td>1.264</td>
</tr>
<tr>
<td>Helps you get to know your online classmates</td>
<td>1</td>
<td>5</td>
<td>2.16</td>
<td>1.060</td>
</tr>
</tbody>
</table>
Teachers’ timely responses to emails emerged as a very strong theme in the qualitative data. Therefore a question of how participants defined *timely* was included in the survey, as displayed in Table 4.5. Out of 115 participants who answered this question, 35% \((n = 40)\) of them wanted a response within six hours, 95% of them \((n = 109)\) wanted a response within 24 hours, and 99% of them \((n = 114)\) wanted a response in less than 48 hours.

Table 4.5

*Student Definitions of Timely Response to Email Questions*

<table>
<thead>
<tr>
<th>Time frame for teacher response</th>
<th>Number of responses</th>
<th>Percentage of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 12 hours</td>
<td>40</td>
<td>35%</td>
</tr>
<tr>
<td>6 – 12 hours</td>
<td>26</td>
<td>23%</td>
</tr>
<tr>
<td>12 – 24 hours</td>
<td>43</td>
<td>37%</td>
</tr>
<tr>
<td>24 – 48 hours</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>2 – 4 days</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>4 – 7 days</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Mixed methods, areas of contrast.** There were areas of contrast between the results of the online focus groups and the survey. Two of the factors that emerged as important to help students feel successful in an online class from qualitative data were rated in the unimportant or slightly important range in the survey results. These factors were, help you get to know your online classmates \((M = 2.16, SD = 1.060)\) and has convenient face-to-face office hours \((M = 2.61, SD = 1.264)\). These elements emerged as
important to individuals in the qualitative data that had fewer participants \((n = 12)\) and were not supported by the larger body of quantitative data in the survey \((n = 117)\).

The importance of instructors being experts in their field was not mentioned in the online focus groups. It was included as one of the questions on the survey to confirm that it was not an essential element of teacher practice that helped students feel successful in an online class. In contrast to the results of the online focus group, teachers’ expertise emerged as one of the most important elements of teacher practice in the survey \((M = 4.66, SD = 0.647)\).

**Summary of Results**

The study examined students’ perceptions using exploratory sequential mixed methods and identified the critical elements of teacher practice that led students to feel successful in an online course. The results of the study indicated that success was defined as a passing grade, learning, being able to apply the information learned, making progress towards academic goals, and being able to manage time. The main themes that emerged from the online focus group data in response to research question 2 were explanation, instruction, evaluation, communication, and consideration. Students thought it was important to have all course material well-explained. Quality instruction was valued including effective learning tools and a connection to the content. Evaluation was also important to participants, in the form of timely grading, personal feedback, and the ability to revise work. Likewise being in email contact with an instructor, participating in online discussions and being available to students, as indicated in the theme of communication, was important. Finally, participants reported wanting their online teachers to be considerate of them, accommodate them, listen to them, be willing to help
them, and to care about them. Results supported the foundation of the community of inquiry (CoI) framework, particularly teaching presence.

Overall, the quantitative data from the survey supported the results of the online focus group, with 14 of the 16 items being rated ‘important,’ ‘very important,’ or ‘extremely important.’ The results of the survey did not support the importance of getting to know online classmates and teachers having convenient face-to-face office hours. The survey did reveal the importance of teacher expertise in the content area, which did not emerge as a theme in the online focus group data. Next, chapter five contains the discussion of the results including the implications and limitations of the study. Recommendations for research, policy, and practice will be suggested. The discussion will be connected to CoI and the entire study will be summarized.
Chapter 5: Discussion

Introduction

To increase their accessibility, many community colleges have been early adopters of online education (Parsad & Lewis, 2008). While online courses at community colleges do increase student access to education (Merisotis & Phipps, 2000), failure rates for online classes are much higher than those for face to face classes (R. Jenkins, 2011; Patterson & McFadden, 2009; Xu & Jaggars, 2013). Therefore, the objectives of the study are to understand how online students define success in an online class, what teacher practices make students feel successful, and the importance of these teacher practices to students. These objectives were all met. The student perspective on teachers’ practices is represented in the results of the online focus groups, and the importance of each practice emerged from the results of the survey. This chapter includes the implications of the study, which are framed by the community of inquiry framework (CoI), and the limitations of the study. Recommendations for research and practice will be discussed including how to move forward the agenda and policies for online teaching and learning. Finally, the chapter will conclude with a summary of the entire study.

Implications of Findings

Online education is here to stay (Allen & Seaman, 2013) and it is time to find effective online teaching methods for 21st-century students. The results of the study emphasize the importance of effective online course design, facilitating learning, and
direct communication between teachers and students. These findings support the theoretical framework of the CoI, particularly the concept of teaching presence (Anderson et al., 2001; Park et al., 2015; Shea et al., 2006; Shea et al., 2005), in helping students feel successful in online classes. In times when there is ever more pressure for community colleges to succeed, this valuable insight expands the body of knowledge and will inform professional practices in the field.

**Implications for theory and understanding the field.** The CoI has informed the practice of effective online instruction since the model’s inception in 2000 (Swan et al., 2009). It offers a foundation to examine best practices in community college online teaching (Swan et al., 2009) and sheds light on the major challenges and opportunities specific to teacher practice for online courses at community colleges (Meyer, 2013). Teaching presence includes what a teacher does to create a course and both direct and facilitate learning including, (1) instructional design and organization, (2) facilitated discussion, and (3) direct instruction (Anderson et al., 2001).

**Explanation and clarity.** Sheridan and Kelly (2010) found that making course requirements clear is one of the most important teacher practices that helped students to feel satisfied in an online class. Furthermore, students value clear explanations of course material as important to both their satisfaction and performance in an online class (Dennen et al., 2007). The CoI includes instructional organization as an element of teaching presence in an online class (Garrison et al., 2000). In line with these findings, the current study reveals that students need clear, understandable, and well-explained course content. The theme of explanation and clarity emerges in the focus group data, however, it is not the most prevalent theme. While it is not surprising that students want
assignments and due dates explained clearly, these are some of the most essential elements of teacher practice as indicated in the survey. For example, “clearly explains the due dates for assignments” \( (M = 4.75/5.00, SD = 0.592) \) is rated most important of all sixteen elements on the survey and “clearly explains the course assignments and expectations” \( (M = 4.61/5.00, SD = 0.685) \) is rated the third most important element of teacher practice that helps students feel successful.

**Communication and caring.** In addition to making course requirements clear, communicating with students in a timely manner and being empathetic are the most important teacher practices that helped students to feel satisfied in an online class (Sheridan & Kelly, 2010). The results of the study reveal the importance of the communication elements of teaching presence. The majority of the data from the online focus groups emphasize that students want their teachers to be engaged in online courses, and the concepts of communication and caring are consistently paired together. Participants in the study appreciate receiving encouragement and support from their teachers. Communication, responding to and engaging with students, is a way that students determine that their instructors care about them, for example, “Part of our success in the courses online is the ability to communicate with our professors and their ability to encourage us to do well.” When a teacher responds to an email in less than 24 hours or posts in an online discussion this leads students to feel cared about and as if they matter (Sheridan & Kelly, 2010; Skramstad, Schlosser, & Orellana, 2012). Students want to know that their teachers are there for them, and students also want to feel cared about (Delaney, Johnson, Johnson, & Treslan, 2010). They admire teachers who take pride in their work and want students to be successful.
Answering emails, participating in online discussions, and being available to students are important to participants in the current study. Additionally, students want to feel that they are important enough to be actively encouraged. For example, teachers need to go beyond responding to email, but also need to initiate purposeful communication (Skramstad et al., 2012). This type of communication involves checking up on students, monitoring their engagement, and reminding them of upcoming assignments. Students have a strong desire to have teachers reach out to them (Betts, 2009; Perry & Edwards, 2005).

The study reveals that students are deeply frustrated by teachers who are absent from the class, or unresponsive. The lack of interactions in an online class may leave students feeling disjoined from classmates and longing for the face-to-face social contact of a traditional classroom (Delaney et al., 2010; Hampton, 2010). Participants report feeling isolated in online classes as indicated by the comment, “We are people too. We are trying to get our education just the same. Me emailing you about something I don’t understand is the equivalent of me raising my hand in class. Don’t blow me off and tell me to look else where.” Participants in the online focus group are very concerned about teachers being responsive, available, and engaged in the class. Teacher responsiveness keeps students from feeling isolated in an online course (Delaney et al., 2010; Perry & Edwards, 2005).

Teaching presence, an integral part of the CoI, is an essential theme that includes communication in online classes. Teaching presence refers to the interactions between teachers and students in online classes (Anderson et al., 2001). The study reveals that communication is a primary indicator of instructors who care and students report both
communication and caring as pivotal in helping them feel successful in an online class. Teaching presence has an important role to play in developing a sense of learning community (Shea et al., 2006; Shea et al., 2005) and increasing retention for students in online courses. For example, less student-instructor communication in a course leads to higher failure rates (Doherty, 2006) and helpful teaching strategies such as communication with professors and receiving feedback from professors positively influences retention in online classes (Drouin, 2008; Hart, 2012; Shea & Bidjerano, 2009).

It is noteworthy that the survey participants are predominantly female (78%, n = 90). This could affect the results of the survey due to a tendency for some women to be more collaborative and focused on relationships than men (Bostock & Lizhi, 2005; Vandervoort, 2000). This tendency is also evident in online discussions (Shea et al., 2005). Women are more active in online discussions and perceived a more robust connection to their online classmates and sense of community than their male counterparts (Rovai & Baker, 2005). Women are found to be more strategic learners and thus more adaptable to the online platform (Tsai, Liang, Hou, & Tsai, 2015). The online platform can create a safer environment than face-to-face classes for women to self-disclose and engage in discussions (Tomai, Mebane, Rosa, & Benedetti, 2014; Weatherly, 2011). Furthermore, women want mentors to support them attaining their educational goals through online learning (Weatherly, 2011). These relational factors could impact the emphasis on the need for caring and a sense of community in online classes as indicated in the results of the study.
Implications for decision making. Institutions will benefit by examining the policies and systems that are in place to support online faculty and online students (Betts et al., 2011). First, the decision to pursue online learning as an institution should be considered. For many years, enrollment numbers have been how community colleges benchmark their success (T. R. Bailey et al., 2015). Many community colleges have increased their enrollment numbers through adding online courses and programs to their curricular offerings (Bacow et al., 2012; Parsad & Lewis, 2008). Currently, improving services and retaining students is seen as more of a priority than purely increasing enrollment (T. R. Bailey et al., 2015). Retention is essential for online classes, which have higher failure rates than face to face classes (T. R. Bailey et al., 2015; Patterson & McFadden, 2009). It is imperative to have policies and systems that support both enrollment and retention in online classes.

Selecting instructors who will be strong candidates for teaching online can also be integrated into policy at community colleges. Online courses can seem attractive to faculty who may prefer more flexible schedules, but who may not fully understand the amount of work involved in teaching online. They need to be constantly connected and available in a culture of communication where students demand speedy responses (Sheridan & Kelly, 2010; Skramstad et al., 2012). The study revealed that almost all students expect a response within 24 hours, but many prefer an even faster response (within six hours). It can be a mismatch between students’ expectations for immediate access and faculty expectations for flexibility and streamlined teaching.

Implications for professional practice. Online teachers who wish to engage students should be well prepared with the tools and methods necessary to teach
effectively (Serwatka, 2005). The distance education research literature frequently examines teacher training (Baran et al., 2011; Burd & Buchanan, 2004; Mensch, 2009), teacher preparation (Serwatka, 2005), and instructional design (Betts et al., 2011; Foster et al., 2014; Richardson et al., 2012) as important elements of creating successful online classes. Additionally, effective teaching strategies, communication with professors, and feedback from professors have a positive relationship with retention rates in online classes (Hart, 2012; Shea & Bidjerano, 2009) and modifying course design leads to improved outcomes in online learning (Swan et al., 2012). Preparing teachers effectively can lead to improved course development, interaction between teachers and students, direct instruction, better outcomes, and higher retention in online courses. Therefore, effective training programs should be implemented for both online teachers and students.

The technology and delivery model for online learning is innovative (Christensen, Horn, & Johnson, 2008). However, the course facilitation, instructional design, and teacher practices in many online classes do not help students succeed (Allen & Seaman, 2010). Faculty should teach online not because of convenient scheduling, but because they are committed to helping students succeed. What if online teaching opportunities were only afforded to the best and brightest faculty with the highest success rates in face-to-face classes?

Unanticipated results. Unanticipated results emerged from the qualitative data. Participants discussed the nature of online learning, the importance of family support, and their personal work habits. Participants who compared online classes to face-to-face classes said that online classes are harder, professors grade harder, and professors give more homework. Also, some participants mentioned that having family support made a
substantial difference for them to be successful in online classes. Participants frequently spoke of their personal responsibility for their education, and they shared ideas about how to be successful in online classes. Students even defined success in online classes as how they managed their time. Doherty (2006) found that students reported procrastination and poor time management as significant barriers to their success in online class. Poor time management can also influence retention in online courses (Doherty, 2006; Hart, 2012).

Limitations

One limitation of the study is the potential underrepresentation of students who are typically not engaged in their online classes. Those students who were not logging on to their online courses or checking their college email, and who thus may have had higher failure rates, did not see the survey invitation. It was beyond the scope of this study to address this challenge, but further research including this population could yield compelling results. Another limitation of the study is that 96.6% (n = 112) of the students surveyed had taken an online class previously. Wang et al. (2013) found that students who had already taken online courses had better strategies for learning online and thus were more motivated, confident, and successful in their online courses. Previous exposure to online classes predicts future retention in online classes (Hachey et al., 2014). Therefore, valuable information can be gleaned from analyzing the responses of those who attempted, but did not complete an online class (Shea et al., 2005).

Demographics of the sample population are mostly in line with institutional demographics. However, survey respondents are overwhelmingly female, 78% as opposed to the 52% at the college, which may skew results. Additionally, incentives are
used in the study and while they are useful to remove or reduce barriers to participation and encourage engagement in research studies they could influence results by skewing the population of respondents (Krueger & Casey, 2015). The survey sample overlapped with the online focus groups to increase the response rate for the survey. While the response percentage is low (6%), it exceeds the researcher’s goal of receiving at least 100 completed surveys. Qualitative methods do not necessarily lead to generalizability. However, most of the themes that emerge from the online focus group are supported by the survey.

Recommendations

One of the reasons that online programs are experiencing such high growth is because many community college leaders believe that it increases enrollment and is a more cost-effective way to reach a broader population of students. Some institutions are developing online programs as an alternate revenue stream (Bacow et al., 2012; Parsad & Lewis, 2008). Community colleges receive public tax dollars to provide an education to students. It is unethical for an institution to receive student tuition and public money and not provide students with the best possible chance to succeed (Personal communication, Julie A. White, Ph. D, November 5, 2015). The total cost of federal, state, and local taxpayer dollars spent on first-year, full-time community college students in the U.S. who drop out is four billion dollars (Schneider & Yin, 2011). Schneider and Yin further state that New York State spent 45 million dollars on first-year community college students who dropped out during the 2008-2009 academic year alone. Students have finite financial aid, and it is unethical to receive state and federal tax dollars without delivering
on the promise of an education. The community college system needs to use all means at its disposal to support students in their educational goals (Schneider & Yin, 2011).

Community colleges invest heavily in recruiting, which can be more costly than investing in retaining the students they already have (Astin, 1993). Retention in community colleges is essential to help students accomplish their educational goals (Tinto, 2006). Online classes offer educational access to community college students (Allen & Seaman, 2008; Hampton, 2010; Horn et al., 2006) and provide the flexibility many of them need (T. R. Bailey et al., 2015). Online classes have been found to predict increased student retention rates (Fike & Fike, 2008) and, if well-done, can be the best delivery method to help students feel supported and cared about, as indicated in the results of the study.

True innovation calls for completely rethinking the model of teaching online, as in Figure 5.1. The most essential recommendation that is anchored in the data from the study is to move from a teacher-centered model to a student-centered model for online learning. It is imperative to use best practices for online education to harness the

![Figure 5.1. Factors that create successful online classes.](image)
potential of this learning platform and to help students succeed (Clench & King, 2015).

Quality online instruction that includes clear explanation and teacher engagement is valued by participants in the study. Recommendations in the areas of faculty and student preparation for online education, institutional support, and modeling online programs after successful existing models are included in the following section, see Figure 5.2. These recommendations for research and practice that encourage quality online instruction and student success will forward the agenda and policies for online teaching and learning.

Figure 5.2. Elements of faculty preparation, student preparation and training, and institutional support that create successful online classes.

**Faculty preparation for online education.** Community colleges should implement comprehensive faculty development programs before they implement online educational programs. This professional development should include effective training for technology and best practice online andragogical strategies, which many community
college teachers have never received (Fernández-Balboa & Stiehl, 1995). This will help support student success and a more student-centered model of teaching and learning online. Therefore, recommendations for faculty preparation include certification, technological and andragogical support, and initiating faculty incentive programs.

**Certification and screening for online teachers.** A commitment to quality instruction is essential for online programs that support student success (Salter, 2012). The technology and delivery model for online learning is seen as innovative compared to more traditional face-to-face models of instruction (Christensen et al., 2008). However, the course facilitation, instructional design, and teacher practices in many online classes do not help students succeed (Allen & Seaman, 2010). While there is much concern about the quality of online instruction, low-quality education is not unique to the online platform. There are many teacher-centered teaching strategies in face-to-face classes that are ineffective. Instructors who do not meet student needs in face-to-face classes may not meet them in online classes either. Similarly, a good face-to-face instructor can apply innovative instructional online teaching methods to create high-quality online classes (Cox, 2009). Therefore, effective instructors can not only adapt, but thrive in the innovative and challenging field of online learning. They can serve their own needs as well as those of the institution and the students (Navarro, 2015).

Full-time faculty at community colleges have intense teaching loads, sometimes five classes a semester or more (Christensen & Eyring, 2011). Online teaching can seem like a more streamlined option that allows for the flexibility of scheduling that many people drawn to academics seek in lieu of potential higher salaries in the private sector. However, faculty should not teach online not because it offers flexible and convenient
scheduling, but because they are effective teachers who are committed to helping students succeed.

Therefore, to ensure a student-centered model for online learning, community colleges who provide online learning options for their students should approve and certify teachers before they can teach online classes. Successful models for online teacher certification should be investigated such as open online courses on online teaching strategies (Lane, 2013). A teacher certification program for online instructors should include guidance on student-centered pedagogy (Mensch, 2009). For example, online teachers need to be both flexible and responsive in addition to being technologically savvy (Hannay & Newvine, 2006). Hannay and Newvine (2006) further maintain that online teachers should have strong communication skills and be able to create an effective and supportive environment for online learning. Additionally, textbooks can serve as guides to student-centered online instruction learning (Ko & Rossen, 2010). Results of this study, including effective communication, creating a supportive learning environment, and giving clear explanations of course requirements, should be included in the required certification training.

As far as institutional policy, community colleges, when creating or reforming online programs, can include training opportunities as a gateway to certifying teachers to teach online. In concert with certification for online teachers, online programs with low pass rates should be discontinued. Potential barriers to certifying teachers for online instruction could arise in a unionized environment or if there was a lack of administrative support (Mensch, 2009).
Training in andragogy. Providing ample technical support for online teachers is essential and most institutions and faculty value this type of training (Bacow et al., 2012). It takes a significant amount of time to develop an online class and then even more time is required to successfully facilitate and direct learning in an online class (Bacow et al., 2012; Lackey, 2011). Training in sound andragogical methods is sometimes overlooked (Lane, 2013). However, this training is essential to prepare faculty for online teaching (Bacow et al., 2012; Lackey, 2011). Even faculty who are well-versed in sound face-to-face instructional techniques need to modify their teaching strategies to teach online classes effectively (T. O. Lewis, 2007). However, Meyer and Murrell (2014) found that potential online faculty seem more interested in faculty development programs concerned with managing technology rather than training about andragogy and strategies for encouraging student success.

For example, at The College, each online course receives a helpful review by qualified distance learning professionals before it is launched. The review discusses the flow of information and how the technology is utilized. In accordance with the faculty union contract, the distance learning instructional designers are specifically instructed not to give feedback on andragogy. Therefore, there is limited subsequent monitoring of online course instruction and facilitation. The College has excellent support for creating classes and could expand on training surrounding student-centered andragogy and effective class facilitation. Using the results of the study and experienced online teachers/trainers to highlight the important components of student success can lead to the integration of best practices for student success.
The primary responsibility of tenured and tenure-track faculty at community colleges is teaching. They teach, on average, double the number of courses that their 4-year research institution counterparts teach (Christensen & Eyring, 2011). While community college faculty are primary teachers, most of them are content experts and may have no, or minimal, training in education (Fernández-Balboa & Stiehl, 1995). A review of online courses reveals that some online courses are repetitive and do not encourage student engagement, therefore, the act of putting a face-to-face class in an online format does not necessarily harness the potential of this educational platform (Clench & King, 2015). It is essential that online courses be developed in line with best practices for instructional design and course facilitation (Foster et al., 2014).

Participants in the study suggest that training in andragogy should be student-centered and should focus on writing clear online instructions, creating rubrics for grading, allowing students to build skills by revising their work, and creating a responsive and caring environment for online students. Student-centered online learning emphasizes the role of teachers as guides, who facilitate meaningful and applied learning to students (Burd & Buchanan, 2004). Furthermore, Burd and Buchanan state that it is important to design and facilitate online courses that adapt to student learning styles and needs. Courses that make these adaptations lead to fulfilling educational experiences for both teachers and students. Training could include activities that involve collaboration such as online group projects, ‘field trips,’ or interactive writing assignments (Gold, 2001) and strategies to allow students to feel successful, such as clear online course development (Meyer & Murrell, 2014).
Training for online communication. The study revealed that communication in the form of responsiveness and feedback on student work was particularly valuable to students. Betts (2009) supported this priority by finding that student-centered training programs for online teachers should emphasize important practices in meaningful online communication with students. Communication with students is very important in online classes, and when they are created as independent study classes they are usually unsuccessful (Means, Toyama, Murphy, Bakia, & Jones, 2009). Teachers’ connections with students encourage them to feel a part of a community even though they are not in the same location and have no face-to-face contact (Dixson, 2012). When communicating with online students, it is important to be student-centered and to have empathy for their needs as individuals and online learners (Burd & Buchanan, 2004). Instructors should serve as facilitators and engage in genuine dialogue with their students, this will encourage student involvement and will prevent students from feeling isolated in online classes (Arbaugh & Hornik, 2006; Burd & Buchanan, 2004). Furthermore, Hannay and Newvine (2006) maintain that online teachers should have strong communication skills and be willing and able to engage consistently with students in a variety of contexts. To address the results of the study, communication training should include students’ needs for timely responses. The study reveals that participants found timely communication essential. It shows that online teachers care about students and it also helps students to feel successful in online classes.

Online training for online teaching. There should be some form of online training as part of preparing teachers for online instruction (Batts et al., 2010; Burd & Buchanan, 2004; Gold, 2001; C. C. Lewis & Abdul-Hamid, 2006; Meyer & Murrell,
Many faculty who teach online have not taken an online class and may lack empathy for the experience of students (Gold, 2001). Moreover, much of the training for online instructors is face-to-face (Gold, 1999; Lane, 2013). Face-to-face training for online teaching can be helpful, but it should be done in tandem with online training to provide experience both teaching and learning in the online medium (Lane, 2013). It is essential for teachers to have the experience of being an online student and knowing how to discern elements of online classes that help students feel successful and elements that are frustrating for students (Gold, 2001). Training for online instructors would be improved by adding an online element (Clench & King, 2015; Gold, 2001; Lane, 2013).

**Student preparation for online education.** Students need to be better prepared with the technology and skills that it takes to help them succeed in online classes. They also need to be more informed on strategies for learning in online courses. Online courses can seem very attractive to students with significant challenges with access to education.

**Training for online students.** Potential online students could benefit greatly from training to prepare them to take online classes (Betts et al., 2011). When students register for an online class, they could be directed to resources that would help them understand the challenges and opportunities of online learning. They can then consider their learning style and preferences as they assess if they are good candidates for online learning. Subsequently, well-developed training can help students learn how to be as successful as possible in online courses. In contrast to the mostly face-to-face training for faculty preparing to teach online classes, most training for students taking online classes is online. It could be helpful to have a hybrid training program for students who may need
some extra help figuring out how to learn through this new platform. They can then begin online classes with new skills and a full understanding of the potential and limitations of the medium.

**Gateway class for online students.** A gateway class such as a well-developed first-year experience course can prepare students for online learning and improve student success and completion rates (Glazer & Murphy, 2015). The College can modify its more traditional face-to-face first-year experience class to be a hybrid course with an integrated introduction to online learning. This course could also introduce students to both online and face-to-face support that is available on campus, such as tutoring in writing, math, and study skills, so their introductory college experience can build the scaffolding required for their future academic development and success. Implementing an orientation to online learning for students increases their chances of success; it does require institutional alignment and dedication to developing online programs that support persistence of adult students (Glazer & Murphy, 2015).

**Institutional support.** Institutional and administrative support for online students and faculty who teach online is imperative to enhance success in online learning (Marek, 2009).

**Incentivizing online teaching for faculty.** Institutional support is essential for implementing changes to increase the success of online classes and programs. To encourage faculty to teach online, institutions should make it easy to do so (Bacow et al., 2012). Considering that it can be more work to manage an online class than a face-to-face class, considerable attention to online instructional strategies and success is warranted. Positive outcomes, including higher retention rates, in online classes should
be incentivized for faculty. Recommendations for incentivizing online classes in the form of a stipend or release from teaching are not new (Bacow et al., 2012). However, faculty who have higher than average retention rates should receive some incentive in the form of recognition, scholarships to give to students, or performance-based raises or stipends. To encourage innovative instruction by faculty, an award could be created to celebrate advances and leadership in effective online teaching strategies.

**Purposeful online enrollment for students.** Some students may see online classes as their only opportunity for a college education (Allen & Seaman, 2008). In contrast, other students who register for classes late may register for online classes because those classes are the only ones with open spaces. Administrative support in the way of quality enrollment management services could help to predict enrollment trends and provide an adequate selection of courses for students. This way students can create a class schedule that provides them a foundation for success, including purposeful enrollment in online classes. Regardless of why students are enrolled in an online class, it is an institutional obligation to prepare them well for their online education.

**Review best practices of a successful online program.** Distance education is viewed as a perfect platform for the innovative practice in learning outcomes based education. Further research into the practices and performance at institutions with high success rates for online classes and programs, such as Southern New Hampshire University (SNHU), is warranted. SNHU (http://www.snhu.edu/) has created a vibrant and successful online education program by investing substantially in academic excellence, providing outstanding advising, and delivering robust support services for students (Pulley, 2014). At SNHU, administrators support academic learning and
innovation; and a top team of distance learning professionals design classes and implement best practices for online learning. A campus visit to SNHU by distance learning professionals, including faculty and administrators, would be fruitful to learn about best practices in the field.

**Future research in the field.** To harness the vast possibilities of online learning, more research in the field of online teacher practices is warranted. It would be enlightening to include the perspective of students who have taken and failed an online class to understand if different teacher practices could have supported their success. Also, research into the timeliness of communication and its effect on students’ engagement in online classes is warranted as suggested by the results of the work of Skramstad et al. (2012) and C. J. Bailey (2008).

The majority of participants referred to how teachers interact with them having a substantial effect on them feeling successful and the survey data corroborated this sentiment. Therefore, research to create and evaluate teacher training on communication and engagement in online classes is warranted. Future research in student perceptions of both social presence and cognitive presence is also warranted to add to the growing body of knowledge about the CoI in online learning. Additional experimental research concerning online teaching strategies, where an intervention is added to some online classes and not others, could reveal promising results.

Student retention in online classes and programs is in the best interest of all community college stakeholders including students, faculty, administrators, policymakers, and funding agencies (Laves, 2010). Future research on online classes and programs with high retention rates such as Online Human Touch (Betts et al., 2011),
Quality Matters (Dietz-Uhler et al., 2007; Swan et al., 2012), and the successful programs at SNHU (Grush, 2013; Pulley, 2014) would be useful. This research will allow institutions to support faculty as they emulate successful practices in their teaching and, therefore, increase retention rates.

The study identifies which teacher practices in online courses influence student success the most, from the perspective of the student. In times when there is ever more pressure for community colleges to succeed, this valuable insight expands the body of knowledge and will inform teacher training and practices at The College.

Conclusion

Community colleges are part of a social movement to offer education to those encountering societal and economic obstacles. Community colleges are an essential part of supporting the United States economy (Boggs, 2010; The College Board, 2008). Community college students who can accomplish their academic goals can rise above poverty, save money, get better jobs, or be better prepared to transfer to 4-year colleges (Crisp & Mina, 2012). To increase their accessibility, many community colleges have been early adopters of online education (Parsad & Lewis, 2008). The accessibility of online classes appeals to community college students who have family commitments, are between 24 and 29 years old, and are employed (Hampton, 2010; Horn et al., 2006). Student interest in online classes in higher education is growing rapidly. In 2002, approximately 1.6 million students were taking at least one online class (Allen & Seaman, 2008) and in 2012 more than six million students took one or more online classes (Allen & Seaman, 2013). However, failure rates for online classes are much higher than those for face to face classes (T. R. Bailey et al., 2015; R. Jenkins, 2011;
Patterson & McFadden, 2009; Xu & Jaggars, 2013). It is imperative to help community college students accomplish their educational goals (Crisp & Mina, 2012).

The purpose of this study is to identify what community college students perceive as important elements of teacher practice that lead them to feel successful in an online course. This knowledge leads to improved course development, improved interaction between teachers and students, and direct instruction in online courses. The following research questions guide the purpose of the study:

1. How do selected students currently enrolled in an online class at The College define success in an online class?

2. What do selected community college students currently enrolled in an online class at The College perceive as important elements of teacher practice to feel successful in an online course?

3. Given the perceived important elements in research question two, what do students currently enrolled in an online class at The College perceive are the most important elements of teacher practice to feel successful in an online course?

The community of inquiry framework (CoI), based on constructivist learning theory, provides the theoretical framework for the study of teacher practices in online courses. Dewey (1897) was an early constructivist thinker who believed students learned best in a collaborative environment and that they should be active participants in their learning. The CoI applies Dewey’s constructivist ideas to online education (Swan et al., 2009) and has informed the practice of effective online instruction since its inception in 2000 (Swan et al., 2009). The CoI refers to the community created by the interaction of
cognitive presence, social presence, and teaching presence (Shea & Bidjerano, 2009). Social presence is the online interaction and collaboration of students with each other (Garrison et al., 2000). It includes students expressing their personalities and creating interpersonal relationships (Meyer, 2013). Cognitive presence is the online interaction of the students with course materials (Shea & Bidjerano, 2009). Cognitive presence highlights academic learning and intellectual reflection on new ideas (Meyer, 2013). The concept of teaching presence, which includes course design, teacher practices, and direct instruction (Anderson et al., 2001), is particularly relevant to the study.

The literature review provides a history of community colleges and an overview of the field of online education. It also includes an introduction to the CoI, including factors affecting retention. Researchers reveal a variety of factors that influence low retention in online classes. Among these factors are enrollment in a previous online class (Aragon & Johnson, 2008; Hachey et al., 2014; Muilenburg & Berge, 2005; Wang et al., 2013; Xu & Jaggars, 2013) and connecting to others within an online community (Boston et al., 2010; Hart, 2012; Liu et al., 2009; Shea & Bidjerano, 2009). Cumulative GPA prior to taking an online class (Cochran et al., 2014; Hachey et al., 2014; Xu & Jaggars, 2013) and time management (Doherty, 2006; Hart, 2012) are also factors mentioned across studies. Additional factors affecting retention in online classes are strong teaching strategies, communication with professors and feedback from professors (Hart, 2012; Shea & Bidjerano, 2009). Finally, motivation (Hart, 2012; Wang et al., 2013), technology skills (Muilenburg & Berge, 2005; Wang et al., 2013) and satisfaction with online classes (Hart, 2012; Muilenburg & Berge, 2005) also influence retention in online classes.
Preparing teachers to teach online is essential so they can utilize the technology to create a successful learning environment for students (Gold, 2001; Meyer & Murrell, 2014). Batts et al. (2010) found that faculty who receive training for teaching online think student learning is improved by implementing best practices in online education. Gold (2001) examines the effectiveness of a constructivist-based online teacher training workshop, and Marek (2009) examines how to create an institutional culture that supports faculty as they learn to teach online. Meyer and Murrell (2014) report institutional practices concerning training content and activities that support faculty development for online teaching.

Student perceptions and evaluations of teaching practices are valid, reliable, and useful (Wachtel, 1998). Essential teacher practices distilled from the literature are: making expectations and course requirements clear to learners (Dennen et al., 2007; Sheridan & Kelly, 2010); communicating, both frequently and in a timely manner (Dennen et al., 2007; Sheridan & Kelly, 2010); having a regular presence in class discussion spaces (Dennen et al., 2007); enhancing teacher – student interaction (Boston, et al, 2001; Picciano 2002); being empathetic (Sheridan & Kelly, 2010); sharing enthusiasm and expertise (Hill et al., 2003); and creating a learning community (Hill et al., 2003; Menchaca & Bekele, 2008; Shea et al., 2006; Shea et al., 2005). There is a clear association between instructor feedback, student satisfaction and perceived outcomes in online classes (Eom et al., 2006).

Sense of community is essential to engaging student interaction in online classes (Eom et al., 2006; Mathews & Bhanugopan, 2014). Faculty perceive that sense of community in online courses interaction is important for students (Drouin, 2008;
Mathews & Bhanugopan, 2014). However, results from student perceptions vary with some students appreciating an online sense of community (Drouin, 2008; Shea, 2006) and some students neither wanting nor expecting a sense of community in online classes (Drouin, 2008). Sense of community is linked to communication and interaction (Drouin, 2008; Eom et al., 2006; Mathews & Bhanugopan, 2014). To enhance this sense of community, institutions need to prepare and support faculty in delivering quality online classes (Batts et al., 2010; Gold, 2001; Meyer & Murrell, 2014).

The study used exploratory sequential mixed methods, through online focus groups and a quantitative survey, to determine the important elements of teacher practice, and how important each element is in helping students feel successful in their online classes. An online focus group was conducted and, after analysis of the qualitative data through accepted processes (Saldaña, 2012), a quantitative survey was created and distributed in the field. The survey was given to a larger sample of students currently enrolled in online classes. Participants were students enrolled in an online class at The College during the spring 2015 semester. Demographics of the sample population mirrored the overall demographics of The College. Results of the survey were analyzed using descriptive statistics to identify their perceived importance (Krueger & Casey, 2015).

The results of the study indicate that success is defined as a passing grade, learning, being able to apply the information learned, making progress towards academic goals, and being able to manage time. The main themes that emerge from the online focus group data in response to research question 2 are explanation, instruction, evaluation, communication, and consideration. Students thought it was important to have
all course material well-explained and quality instruction is also valued, including effective learning tools and a connection to the content. Evaluation is also important to participants, in the form of timely grading, personal feedback, and the ability to revise work. Helpful communication practices such as responding to email promptly, participating in online discussions, and being available encourage student learning and prevents students from feeling isolated in online classes. Furthermore, participants report wanting their online teachers to be considerate of them, accommodate them, listen to them, be willing to help them, and to care about them. The constant thread of emotion in the discussions shows students’ personal investment in online learning and indicates a strong craving for learning, success, and responsive instructors.

Overall, the quantitative data from the survey supported the results of the online focus group, with 14 of the 16 items being rated ‘important,’ ‘very important,’ or ‘extremely important.’ The results of the survey did not support the importance of getting to know online classmates and teachers having convenient face-to-face office hours. The survey did reveal the importance of teacher expertise in the content area, which did not emerge as a theme in the online focus group data. The results of the study were in line with the tenets of teaching presence in the CoI framework. Strong course design, teacher practices, and directed instruction help students to feel successful in online classes (Anderson et al., 2001).

Finally, the study discusses implications for scholarship and knowledge in the field, including the continued relevance of the CoI, and the importance of explanation, clarity, communication, caring, and teacher responsiveness. Limitations of the study are included as well as recommendations. The most essential recommendation is to move
from a teacher-centered model to a student-centered model for online learning. Recommendations for research and practice include providing teacher and student preparation for online learning, offering institutional support, and researching best practices in online education. For example, it could be transformative to model online programs at The College after successful existing models such as those at Southern New Hampshire University (SNHU), which has created a vibrant and successful online education program. The recommendations for research and practice that encourage quality online instruction and student success will forward the agenda and policies for online teaching and learning.

Truman’s 1947 Commission on Higher Education discussed the need for public education to provide access to education to all people no matter what their economic status, religion, sex, or national origin (Gilbert & Heller, 2013). Online education provides access to some of the nation’s most vulnerable populations (T. R. Bailey et al., 2015). It is costly and unethical to create and deliver online classes that do not support community college student success (Schneider & Yin, 2011). Serving this population supports the wider view of social justice as applied to community college higher education. It is imperative to use best practices for online education to harness the potential of this learning platform and to help students succeed (Clench & King, 2015).

Indeed, true innovation calls for completely rethinking the model of teaching online.

The study revealed what students want teachers to do in online classes to help them feel successful. Caring, communication, and engagement emerged as essential themes. These themes, however, are not unique to online learning, they are also important for face-to-face students. It is worth considering that online learning, or some
form of hybrid learning, could have the greatest potential to meet student needs. Online learning provides an opportunity to reach more people in greater depth. If online learning is truly anchored in student success and student-centered practices, it has the potential to transform community college education in the US.
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Appendix A

Letter of Support
Onondaga Community College

St. John Fisher College
Institutional Review Board
3690 East Avenue
Rochester, NY 14618

February 6, 2015

To the Institutional Review Board:

Katharine Rumrill-Teece is a student in the Doctorate of Executive Leadership program at St. John Fisher College and a faculty member at Onondaga Community College.

I have reviewed her research proposal and I support Professor Rumrill-Teece conducting her doctoral research on student perceptions of teacher practice in online courses at Onondaga Community College (Onondaga).

Please contact me if you have any questions.

Sincerely,

Cathleen McCollin
Provost and Senior Vice President
Onondaga Community College
February 19, 2015

Katharine Rumrill Teece
St. John Fisher College

Dear Ms. Teece:

Thank you for submitting your research proposal to the Institutional Review Board.

I am pleased to inform you that the Board has approved your Expedited Review project, “Student Perceptions of Teacher Practice in Online Courses”.

Following federal guidelines, research related records should be maintained in a secure area for three years following the completion of the project at which time they may be destroyed.

Should you have any questions about this process or your responsibilities, please contact me at irb@sjfc.edu.

Sincerely,

Eileen Lynd-Balta, Ph.D.
Chair, Institutional Review Board

ELB:jdr
Appendix C

Online Focus Group Protocol

The online discussion will include the following general instructions:

*Thank you for agreeing to participate in this online discussion group. The discussion will be open for three days. We would appreciate it if you would post at least 4 times. We know your time is valuable; your ideas are important and will be used to improve the quality of online classes in the future. Thank you!*

Additionally, instructions will be included for each discussion question:

*For the following question, please submit one post (more if you would like). You do not need to respond to others in the discussion.*

**Discussion Question 1:** When thinking about an online class, how do you define success? In other words, what would need to happen for you to say that you had been successful?

*For the following question, please submit at least one post in direct response to the question. We would also appreciate it if you would respond to at least two other posts from others in the focus group. For example, if you agree or disagree with what someone else writes you could comment on what they said and why you agree or disagree with it.*

**Discussion Question 2:** What are important things that teachers do that would help you feel successful in an online course?

To encourage interaction, the facilitator will have the option to ask the following prompt questions which are directly related to the research questions and to topics that emerged in the literature review:

**Optional discussion prompt 1:** What does your professor do that helps you to be successful in the online class you are taking?

**Optional discussion prompt 2:** When you answer, think about how the teacher designs the course.

**Optional discussion prompt 2:** When you answer, think about how the teacher interacts with the class.

**Optional discussion prompt 3:** When you answer, think about how the teacher delivers information to you in the class.
Appendix D

Informed Consent - Online Focus Group

INFORMED CONSENT FORM – ONLINE FOCUS GROUP

St. John Fisher College

Title of study: Student Perceptions of Teacher Practice in Online Courses
Name of researcher: Katharine Rummill-Teece (315) 401-8727, Ed.D Candidate, SJFC
Faculty Supervisor: Michael Robinson, Ed.D (robinson@example.edu)
Purpose of study: To determine what you think teachers do that helps you feel successful in online classes
Place of study: Onondaga Community College
Length of participation: The focus group will be open over three days, it will take less than one hour to participate in the focus group.
Risks and benefits: There are no risks to you from your participation in this online focus group.
Method for protecting confidentiality/privacy: All your responses will be anonymous as the researcher will not know who you are. The Office on Instructional Design and Delivery at OCC will keep a list of names of all student participants so you may receive your five dollar gift card.

Your rights: As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to you.
5. Be informed of the results of the study.

If you experience emotional or physical discomfort due to participation in this study, please contact the researcher, Katharine Rummill-Teece at (315) 401-8727 for appropriate referrals.

The Institutional Review Board (IRB) of St. John Fisher College has reviewed this project. For any concerns regarding confidentiality, please call Jill Rothbun 685-385-8012. She will direct your call to a member of the IRB at St. John Fisher College.

☐ Click here to indicate that you have read and understood the study described above and have access to a copy of this form.
☐ Click here to indicate that you are 18 years of age or older.
☐ Click here to indicate that you agree to participate in the study as outlined above.

Date: Wednesday, February 18, 2015

Approval Date: 2-14-15
## Appendix E

### Informed Consent – Survey

**INFORMED CONSENT FORM – SURVEY**

**St. John Fisher College**

<table>
<thead>
<tr>
<th>Title of study:</th>
<th>Student Perceptions of Teacher Practice in Online Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of researcher:</td>
<td>Katharine Rumilli-Teece (315) 491-8727, Ed.D Candidate, SJFC</td>
</tr>
<tr>
<td>Faculty Supervisor:</td>
<td>Michael Robinson, Ed. D (<a href="mailto:crobinson@sjfc.edu">crobinson@sjfc.edu</a>)</td>
</tr>
<tr>
<td>Purpose of study:</td>
<td>To determine what you think teachers do that helps you feel successful in online classes</td>
</tr>
<tr>
<td>Place of study:</td>
<td>Onondaga Community College</td>
</tr>
<tr>
<td>Length of participation:</td>
<td>The survey will be open for a two-week period. It will take approximately 10 minutes to complete the survey.</td>
</tr>
<tr>
<td>Risks and benefits:</td>
<td>There are no risks to you from completing this survey.</td>
</tr>
<tr>
<td>Method for protecting confidentiality/privacy:</td>
<td>All your responses will be anonymous so the researcher will not know who you are. The Office on Instructional Design and Delivery at OCC will keep a list of names of all student participants so you may be enrolled in the drawing for a $50.00 gift card.</td>
</tr>
</tbody>
</table>

**Your rights:** As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to you.
5. Be informed of the results of the study.

If you experience emotional or physical discomfort due to participation in this study, please contact the researcher, Katharine Rumilli-Teece at (315) 491-8727 for appropriate referrals.

The Institutional Review Board (IRB) of St. John Fisher College has reviewed this project. For any concerns regarding confidentiality, please call Jill Rathbun 585-385-8012. She will direct your call to a member of the IRB at St. John Fisher College.

- [ ] Click here to indicate that you have read and understood the study described above and have access to a copy of this form.
- [ ] Click here to indicate that you are 18 years of age or older.
- [ ] Click here to indicate that you agree to participate in the study as outlined above.

**Date** Wednesday, February 18, 2015