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The Voice of the Learner: The Lived Experience of Successful Online Students

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THE VOICE OF THE LEARNER:

THE LIVED EXPERIENCE OF SUCCESSFUL ONLINE STUDENTS

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The purpose of this qualitative dissertation is to explore the lived experience of online students. This study provided real-world accounts of students who graduated from graduate programs offered at both online non-profit and for-profit institutions. The grand research question is "What are the lived experiences of successful graduate students who have graduated from online programs as viewed through the theoretical lens of the Community of Inquiry framework?" This inquiry was designed to identify the types of academic support successful students used while pursuing their graduate degrees online.

The study's literature review generated questions such as: "What is it like for online students to overcome online learning limitations?" These limitations include areas such as access to instructor, peer or technical support. Literature indicates that social and instructor support are two areas that greatly influence a learner's satisfaction with their online course as well as their overall success in an online program. The overarching purpose of this study is to examine the methods that successful online students used to overcome barriers they faced when pursuing online education. The literature review influenced the development of four research questions.

RQ1: What are the barriers to online graduate student success?

RQ2: What are the critical factors of online learning that lead to online graduate student success?

RQ3: Is instructor support more important to the online graduate student success than peer support?

RQ4: What types of social supports do successful online graduate students use?

This study used a transcendental phenomenological qualitative design to explore and aid in answering these research questions (Moustakas, 1994). Data collection included in-depth interviews with a non-homogenous, purposive sample of twelve co-researchers. The participants each graduated from a 100% online graduate-level program from either a for-profit or non-profit, post-secondary institution. The fact that the participants completed their academic course of study that they started is the measure of success for this study. For this study, graduation is the ultimate measure of persistence.

DEDICATION

This research study is dedicated to the people existential to my life and my life's work.

To my comprehensive sanity-saver and partner in dissertating…Dr. Evelyn Mocek.

To my Gonzos. Dr. Laurie Grosik and Dr. David Porter.

You three were my support group and the impetus for this study.

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Your friendship is invaluable to me. Thank you for seeing me to the finish line.

To my family…for being there, always.

To my dad…for my love of education and for showing me how to

persevere in the face of challenges.

To my mom…whose support was steadfast, unwavering, and unconditional.

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"And she loved the little boy, very, very much - even more than she loved herself."

-Shel Silverstein, *The Giving Tree.*

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You were a small child when I started this program and grew into a young man by the time I finished. You probably should not have had to shoulder the burden placed upon you, but you rose valiantly to the challenge. You are my greatest source of support and inspiration. I hope to have shown you that with hard work, all things are possible. It is for you that I do all things.

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CHAPTER ONE

THE PROBLEM

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you." –Zig Ziglar (2010)

Higher Education is at a crossroads between its traditions of the past and the fulfillment of its future. This is a critical issue for society as the education of the populace increases employment and economic security for the nation (Bransford, Brown & Cocking, 2000; Keeling & Hersh, 2012; McClelland, 1967). The wage premium for a college degree is in the millions over a student's lifetime (Abel & Deitz, 2014; Carnevale, Rose & Cheah, 2011; Doyle & Skinner, 2016.). Today's students question the pursuit of higher education due to the rising costs of college tuition and heavy student loan debt (Carnevale et. al, 2011; Shapiro, Dundar, Wakhungu, Yuan, Nathan & Hwang, 2015). Due to the rising rate of college costs, the residential college experience is percieved as out of reach for those with lower socio-economic means (Christensen & Eyring, 2011).

Higher Education has turned to online learning to allow those without other options to pursue a college degree. One variable, that may impact an individual's pursuit of higher education, is the student's geographic proximity to a post-secondary institution (Hillman, 2014). Time is another variable that can limit educational access, as non-traditional students may not be able to commit to a traditional educational timeframe (Croft, Dalton, & Grant, 2011; Mossberger, Tolbert & Franko, 2012). While the mounting expenditures of higher education cannot be ignored, we must also scrutinize the system that allows for the college experience to be available only to those with the resources to attend a residential college. Is it fair to ask if the

residential campus experience will be only for those who can afford the costs? If so, is online learning by default, college-lite?

Purpose of the Study

The intent of the study is to understand the online learning experience from the student's perspective. The study is not designed to investigate the quality of instruction nor the sophistication of the technology that delivers the learning. This qualitative study is designed to listen to the students' success stories with online programs. The strategy is to identify the barriers to online learning and understand how online students overcome these barriers. Additionally, this study will analyze the support systems utilized by these successful students. Only through a phenomenological study can we adequately investigate the lived experience of online students.

Statement of the Problem

The question "why are some online students successful while others are not" is universally broad and personally inestimable. Online student success is a broad issue because it holds wide-reaching implications for society as well as for institutions of higher education. The question is inestimable because an individual student's success in their pursuit of higher education is inherently invaluable to that student. Understanding those keys to online student success is arguably one of the cornerstone issues facing the field. The purpose of this research is to identify the factors that influence online student success.

Significance of the Study

Online learning has become an acceptable alternative to traditional education. However, there is an ongoing debate about the effectiveness of this alternative. While many argue about the disruptive effects of the online learning business model, others see a delivery system that meets the needs of students (Christensen & Eyring, 2011; McKeown, 2012). During the 2015 Western

New York Blackboard Users Group (WNY-BUG) one of the participants, an online instructor, felt it was important to ask the panel of online students whether they felt online learning met their needs or if they "felt cheated." While the student participants responded favorably, the fact that an online educator posed the question suggests that online learning continues to be viewed as less legitimate when compared to traditional education. For twenty years, research in online education has focused on improving the effectiveness of online learning, rarely, is the research focused on the students' perspective.

During the panel session at Blackboard World 2015, four educational student activists discussed "the problem with higher education today". These students described a disconnect between what a learner expects and what colleges offer. The panelists remarked during their live presentation that "today's students value flexibility and successful universities will understand that they are professionals by day and students by night" (Mulamed, Strangler, Wagner, & Bhadane, 2015). These students identified affordability as a core issue of higher education. This affordability not only pertains to tuition cost but also affordability in regard to time, flexibility and employability. They implored upon higher education institutions to view the issues through the lens of the student not just the through the lens of the educator or administrator. While many studies have empircally tested online success interventions from a quantitative perspective, few have asked the students what their online learning experience was like. The voice of the students has been missing from the body of research.

> The worst thing in the world is educators deciding on the educational experiences in an educational world they no longer live in. The future of higher education must include student voices. (Mulamed, et al., 2015)

Current research does not address the question why some online students persist while other students do not.The issue of student success and retention is not only isolated to online learning but also to all types of learning (Doherty, 2006). However, the attrition rates of online learning are greater than the attrition rates from students who enroll in traditional education (Angelino, Williams, & Natvig, 2007; Boton & Gregory, 2015; Van Doorn & Van Doorn, 2014; Wojciechowski & Palmer, 2005). The rate of attrition in which online students withdrawal from their course before the course is complete, have become the focus for improving online students success (Berge & Huang, 2004). However, few qualitative studies have been conducted specifically asking why online students succeed (Angelino et al., 2007). When attempting to understand the online learning phenomenon, there are a few factors to consider. A successful study must (a) consider who the online learners are, (b) the system that delivers the education and (c) the variables that impact the educational system.

The Paradox of Online Learning

As more students pursue online education, a tale of two different types of online students appears, the traditional residential student who takes one or two online courses versus the non-traditional 100% online student (Allen & Seaman, 2013; Van Doorn & Van Doorn, 2014). However, the greatest population of online learners are comprised of non-traditional students who requires the convenience of online learning in order to fulfill their academic schedules while meeting professional and personal obligations (Allen & Seaman, 2016). The National Center for Education Statistics (2014) reports that 42 percent of all college students will be 25 or older by 2020 (Weise & Christensen, 2014). Today's students who enroll in 100% online programs are older, work part-time and start their course work at community colleges and for-profit institutions (Shapiro, et al., 2015).

Another dichotomy is that online students value their education greater than employers or the institutions from which they obtained their degree (Macon, 2012). According to Christensen and Eyring (2011), there are three types of higher education students. First, are the students who are paying more than they would like for a traditional university experience. Second, are potential students who are educationally qualified, yet cannot afford to attend a traditional university and would embrace a less expensive alternative. And third, are less academically prepared students who could succeed with special help. As online learning becomes more widely adopted by students, it will be seen as a viable alternative to employers and higher education institutions (p. 205). Traditional universities need to shift their focus from serving the most educationally and economically advantaged students and concentrate on the needs of the ordinary student (Christensen and Eyring, 2011). Higher education must adapt their business model to meet the needs of these different student populations.

Higher Education Under Scrutiny

While the pursuit of higher education is a grand goal within society, it comes with an expensive pricetag. Increased public scrutiny of the institutional costs of delivering a degree comes at a historic time when federal and state financial support is declining (Christensen & Eyring, 2011; Selingo, 2013; Tinto, 2006; Carnevale et al., 2011). College students are questioning their return on investment as the cost of a college degree continues to rise while the likelihood of gainful employment continues to fall (Weise & Christensen, 2014; Johnson, Adams, Becker, Estrada & Freeman, 2015; Shapiro, et al., 2015).

Current societal shifts indicate a public who is no longer satisfied with the wage premium that a college degree affords (Doyle & Skinner, 2016; Selingo, 2013; Stone, 2015). Online programs have the benefit of reduced operating costs as it does not require a physical facility;

while also providing a competitive advantage of focusing solely on student instruction (Shea & Bidjerano, 2008; Christensen & Eyring, 2011). However, campus-based faculty members may see online courses as a competitive threat. Thomason's (2015) article highlighted this issue when reporting about the University of Florida canceling its partnership with Pearson Consulting since their online enrollments did not increase as planned (Thomason, 2015). Comments to the article suggested this event was a sign that online education was not fulfilling its promises and students would soon return to traditional education.

> [This is] another healthy indicator for higher education - the growing momentum toward shifting real professional teaching and utilitarian learning back to its citadel - the American campus. The brighter the students, the lower the enrollment in online degree programs. Those who really want quality, validity, and reliability for their educational investment will consistently choose campus-based programs. Those who want an easy ride will be looking for the rigor-free online programs - the ones that lack congruity, coherency, and reliability after completion. I t's a nice easy ride to a weak degree for these folks, but when one follows their progression afterward, one will find quite a high crash rate. Keep watching; we are sure to see many more institutions pulling back and away from online degree programs. (Willy Nilly, 2015)

This comment strikes at the difference between those with less favorable opinions of online learning to students who have pursued their education online despite opposition from family, friends, and educational advisors (Macon, 2012). For many students who choose to continue their studies, they may have no other choice other than online programming. Approximately 10% of the U.S. population lives in 'educational deserts,' described by Hillman (2014) as communities that have few (or no) public alternatives for college. The lack of

availability of relevant coursework near the home location of students is a factor leading to the decision to enroll in a distance learning program (Croft et al., 2011; Hillman & Weichman, 2016).

Greater Acceptance of Online Courses

While the viability of online education receives significant scrutiny in literature, online enrollments tell a different story. The growth rate of student enrollments in online courses is outpacing the growth rate of the traditional, face-to-face higher education (Atchley, Wingenbach, & Akers, 2013; Gray, 2014; Shea et al., 2012). Online learning growth has been influenced by three factors (a) increased Internet speed which allows the implementation of audio and video to enhance online instruction, (b) empirically demonstrated learning outcomes that are equal to or exceeds those of classroom instruction and (c) the financial edge online education provides to traditional universities (Christensen & Eyring, 2011). "Simply capitalizing on new technology is not enough; higher education institutions must develop new models to engage students on a deeper level" (Johnson et al., 2015, p. 30). The cost of delivering high-quality content online is dropping and both formal and informal online learning is becoming increasingly widespread. There is fear that traditional methods of higher education must adopt this model or risk obsolesce.

Student success is a paramount concern of online institutions and their instructors. Online students are motivated to achieve success in order to attain the tangible rewards from their hard work. The pursuit of education can equate to increased salary, more responsibility and better job prospects for students (Croft et al., 2011; Shapiro, et al., 2015). Students are motivated to enroll in online programs to improve their knowledge and skills, achieve potential financial gains and to be eligible for possible professional advancement (Holder, 2007; Ke & Carr-Chellman, 2006).

However, too much focus on potential employment encourages students, as well educational institutions, to lose sight of the overarching purpose of higher education. (Keeling, 2012).

Theoretical Lens

No single technology or intervention has proven to be a panacea that offers a solution to student persistence in online courses. Online learning is a multifaceted complex study involving a multitude of factors. The basis of effective online learning is comparable to the foundation of effective learning in general (Smart & Cappel, 2006). To investigate the learners' lived experience requires a theoretical foundation with a holistic viewpoint. The learning environment, the instructor and the students must be considered systematically.

Online learning and its successful adoption are as complex a field as learning in and of itself. A broad-based theoretical model focused on online learning is required not only to provide a scaffolding structure to the research but also identifying its constraints and limitations. With online enrollments increasing for almost two decades, the Community of Inquiry Model has provided a substantial theoretical rationale for designing learning environments that help describe, explain and predict how people learn online (Allen & Seaman, 2011; 2013; 2015; Miller, 2014; Shea et al., 2013).

Although theoretical models can be chosen *post-priori* to the qualitative data collection process, Creswell (2009) recommends that a theoretical framework be chosen *a priori* for phenomenological research. The Community of Inquiry is a theoretical model that represents a multitude of factors the students will encounter in a learning environment. The model is represented as a three-part Venn diagram (See Figure 1). The Community of Inquiry Model (COI) provides a framework to determine which factors were most influential to online students' success. COI is made up of three presences (Garrison, Anderson & Archer, 2001). The cognitive

knowledge developed throughout the online course called cognitive presence (Garrison & Cleveland-Innes, 2005; Shea & Bidjerano, 2009). Social presence, is the influence of the students' and the instructor's interaction on the overall learning environment (Conrad, 2009; Swan & Richardson, 2003). The third presence is the teaching presence which is the development, design, and delivery of an online course (Arbaugh, et al., 2008; Boston, et al., 2014; Garrison & Arbaugh, 2007; Garrison & Cleveland-Innes, 2005; Lee & Faulkner, 2011; Rouke, Anderson & Garrison, 2007; Shea, et al., 2003). This model has been chosen as the theoretical framework for this research since it provides a synoptic model of factors that contribute to online student success.

Figure 1. The Community of Inquiry model. Adapted from "Community of Inquiry Model, Communication Medium: Elements of an educational experience. Garrison, Anderson & Archer 2001 Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer. *American Journal of Distance Education*, *15*(1), 7-23

Applying the Community of Inquiry theory creates a framework for the development of research questions to determine which factors most affect online student success. The primary research questions generated for this study are:

RQ1: What are the barriers to online graduate student success?

RQ2: What are the critical factors of online learning that lead to online graduate student success?

RQ3: Is instructor support more important to the online graduate student success than peer support?

RQ4: What types of social supports do successful online graduate students use?

Methods Summary

To seek meaning and understanding about the lived experience of online graduate students, this study used a qualitative method using transcendental phenomenology (Moustakas, 1994). This study utilized a non-homogenous purposive sample. Twelve participants who graduated from 100% online graduate programs from both for-profit and non-profit post-secondary institutions participated in the interviews. The fact that the participants completed the academic program they started is the measure of success for this study. For this research study, graduation is the ultimate measure of persistence.

Conclusion

While online learning's legitimacy remains questionable by employers, faculty and even institutions of higher education, its steady upward enrollment trends indicates that it is meeting an access need for students. Online education has grown or may have recently leveled out but it has not declined (Allen, Seaman, Poulin, & Taylor Straut, 2016). Although online delivery is

deemed the educational "medium of the future," it cannot be taken for granted that "if they build it, students will come" (Peltier, Schibrowsky & Drago, 2007, p.140).

The trifecta of economic, quality and completion issues at a time when government funding and public support for higher education in the United States are receding has forced higher education to look at online learning as a viable, accessible alternative to education. These factors are aligning to form a "perfect storm of financial, political, demographic and technical forces" (Selingo, 2013, p. 4). Higher education is self-reflective about the economic issues that it faces and is concerned with the impact on students. It struggles with the best way to educate its students. Christensen and Erying (2011), the authors of *The Intuitive University,* suggest higher education must develop strategies that transcend imitation and master the disruptive technology of online learning.

Ultimately, it does not matter how affordable or accessible an education program is if the student does not complete it. The purpose of this research is to ask the students themselves what they attribute to their successful completion of the online program to. By providing a voice for the learner, knowledge can be gleaned which will provide better insights in order improve the success for online students.

Definition of Terms

Online learning contains definitions that must be addressed to understand the field. Student success measurements contain various definitions that often measure the same outcome. Many definitions for both fields are often used interchangeably. The following definitions are used:

Asynchronous Learning: Asynchronous communication tools (e.g., e-mail, threaded discussion boards, blogs, and wikis) to allow users to contribute at their convenience (Means, Bakia, & Murphy, 2014).

Attrition: The decline in the number of students from the beginning to the end of the course program execution or system under review (Berge & Huang, 2004).

Blended Learning: Blended learning is a hybrid instructional approach that combines elements of online learning with the traditional classroom environment. It starts with learning objectives and then selecting the best combination of delivery methods to meet those objectives. (Smart & Cappel, 2006)

Distance Learning: The term "distance learning" has been used to describe programs that are based online but that also include face-to-face contact sessions. (Croft et al., 2011). Although distance education and distance learning are different terms, the terms are often used synonymously due to the lack of agreement about the definitions. (Macon, 2012).

E-Learning: E-learning is defined as "instruction delivered electronically via the Internet, intranets, or multimedia platforms such as CD-ROM or DVD" (Smart & Cappel, 2006, p.1). Since most people today have access to the Internet, e-learning is identified with web-based learning and can be used interchangeably with online learning (Gilbert, Morton & Rowley, 2007; Smart & Cappel, 2006). For the purpose of this study, e-learning is self-contained modular multimedia instruction delivered electronically (Gilbert et al., 2007)

Learning Management System: The term "Learning Management System" (LMS) refers to "server-based software that controls access to and delivery of online learning resources through a standard web-browser" (Wichadee, 2014, p.4).

Online Learning: Online learning overlaps with the broader category of distance learning that encompasses preceding technologies such as correspondence courses, educational television and video conferencing (Means, et al., 2014).

Persistence: The result of student's decision to continue participating in the learning event (Berge & Huang, 2004).

Retention: The continued student participation in a learning event to completion (Berge & Huang, 2004).

Self-efficacy: Bandura (1997) defines self-efficacy as personal judgments made about the students' performance capabilities in a given domain of activity whether that is cognitive, social, emotional or behavioral.It is not a measure of the skills one has but a belief about what one can do under different sets of conditions with whatever skills one possesses (p.37).

Self-regulation: Self-regulation is described by Barnard, Paton and Lan (2008) as the ability to control one's behavior. The self-analysis of one's behavior and its influence on the individual's cognitive ability is defined as part of the role of metacognition (Garrison & Akyol, 2013).

Synchronous Learning: Synchronous technologies such as webcasting, chat rooms and audio/video technology are used to "approximate face-to-face teaching strategies such as delivering lectures and holding meetings with groups of students" (Means, et al., 2014, p.1).

Traditional Learning: "Traditional learning is the process in that instruction is provided in a physical setting, where learners and instructors engage in direct, face-to-face teaching and learning interaction" (Macon, 2012, p. 3).

Organization of the Study

The organization of the chapters for this study follows: Chapter Two contains a broad overview of distance learners, who they are and how they learn. The Community of Inquiry (COI) theory provides the foundational framework throughout the literature view which examines the confluence of factors impacting the online learning environment. Additionally, the literature review explores factors of online student success as well as barriers to achieving that success.

Chapter Three provides the procedures followed by the study which begins with a discussion of the qualitative research post-positivist worldview and includes justification of the use of the transcendental phenomenological process. An overview of the role of the researcher begins with the bracketing of the researcher bias as part of the phenomenological reduction process. Chapter Three also includes discussion of sample selection, the interview protocol, and the theoretical justification used for the development of the open-ended questions. The data collection process is outlined and includes quality control measures used in qualitative research.

Chapter Four provides an introduction to each of the co-researchers and their narratives. These steps are part of the transcendental phenomenology analysis process (Moustakas, 1994). The data for this study was analyzed with Nvivo Pro 11 using a modified Stevick-Colaizzi-Keen Method of Analysis of Phenomenological Data (Mousakas, 1994). Thematic development using intuitive integration is part of the transcendental phenomenology process which allows for stories to be told from the participants' perspective using their own voice.

Chapter Five examines the thematic findings found in Chapter 4, using the Community of Inquiry as a theoretical lens to describe the essence of the lived experience of study participants. Additionally, Chapter Five examines the advantages and constraints of the

Community of Inquiry and provides an overview of the limitations faced by the research study. The study concludes with suggestions for future research and recommendations for the field of online learning.

CHAPTER TWO

LITERATURE REVIEW

A community of support can aid learners in overcoming the isolation of online learning.The goal of quality online programs is to overcome a sense of isolation and create a communal learning experience. To accomplish this task, online programs must understand the online learning environment, recognize the characteristics and needs of students at a distance, and facilitate the development of online communities. Chapter 2 includes a review of the literature including a synopsis of the online students and their needs, and, empirical research on the Community of Inquiry theory (COI).

The Online Learning Environment

> *"Everyone has the right to education…and higher education shall be equally accessible to all on the basis of merit."*
>
> Article 26 (1), Universal Declaration of Human Rights, United Nations, 12/10/1948

The idea of offering education on the basis of merit is a noble goal. There are logistical challenges in offering education to everyone with the capacity and willingness to complete a postsecondary degree (Carey, 2015, McNamee & Miller, 2014; Day, 2014). "When we are speaking about education, we are speaking about a fundamental human right. To deny a person that right is to commit a crime against humanity" (Randel, as cited by Day, 2014, para 13). Unfortunately, geography can pose a barrier to those who wish to pursue their educational goals (Hillman, 2016; Hillman & Weischman, 2016; Sponsler & Hillman, 2016). Online learning has a unique ability to make geography seem irrelevant, however, there is a cost to its convenience. The effectiveness and legitimacy are fundamental to online learning acceptance by institutions of higher education, employers and the students themselves.

Today's college students are electing to take online classes in record numbers, yet the efficacy of the online learning environment continues to be critiqued (Allen, et. al., 2016; Swan, 2003). Unless online learning is effective, all other critical issues such as access, student and faculty satisfaction, and cost effectiveness are irrelevant (Swan, 2003)."If we can't learn as well online as in the traditional classroom, the online education itself is suspect" (Swan, 2003, p.1). The purpose of any educational experience is to achieve learning outcomes, regardless of the medium. Being able to achieve educational goals they have established for themselves is a fundamental premise for students who embark on online programs.

Studies over the past two decades have concluded that the online environment produces similar learning outcomes when compared to traditional methods of instruction. These findings support the argument that online learning has neither advantages nor disadvantages over traditional methods (Anderson, 2008; Means, Toyama, Murphy, Bakia, & Jones, 2009; McKeown, 2012). Thomas Russell (2001) collected nearly 400 studies to support his notion that online learning is as effective as traditional learning on his "nosignificantdifference.org" website. Russell's (2001) collection of studies supported the viewpoint that when the online instruction is of the same quality as traditional instruction, there should be no significant difference between the two learning modalities. Clark (1983) and Swan (2003) support the argument media delivers the content but does not make a difference in the learning as it is the quality of the instruction, not the delivery, which matters. Recognizing that online learning can be as effective as the traditional brick and mortar classroom, consideration must be given to the credence of the online degree.

Online learning retains a stigma of being lesser than traditional learning methods. Online degrees are still considered less ligitimate by employers, instructors and institutions of higher

education when compared to those obtained from a traditional on-campus experience (Macon, 2012; Weber & Lennon, 2007). Macon's (2012) phenomenological study found although students may have initially faced opposition from friends, family and employers about the legitimacy of their online degree, seventy percent of the respondents reported positive outcomes in their careers as a direct result of obtaining a online degree. Her findings indicate that their online graduate degree was not a hindrance but a catalyst to furthering their career opportunities (Macon, 2012).

While the enrollment numbers indicate that online learning has become more acceptable to students, faculty, employers and higher education, institutions remain critical of the delivery method. Allen and Seaman (2011, 2013, 2015) have been the primary researchers of an industry report which tracks the number of online learners, the demographics and the trendline changes on an annual basis. Their 2016 report concluded that although enrollments have increased and the field itself appears to have matured, the one factor that has remained steadfast is the lack of faculty acceptance of the value and legitimacy of online education (Allen, et. al., 2016).

In contrast, the acceptance of online learning by faculty is less than the traditional classroom model but the acceptance of the online degree by students is much greater. For students, online learning is fulfilling a need which traditional education does not fulfill. Students expect that their higher education achievements will correlate to improved economic and intellectual circumstances (Glazer & Murphy, 2015; Lin, 2008; Macon, 2012). Online enrollments in excess of 6.1 million is evidence of this growth and student acceptance (Allen & Seaman, 2011).

Critics suggest that the delivery of class materials online is merely a replication of face-to-face courses (Peltier, et al., 2007). Conversely, other studies find online courses increase

student interaction, instructor interaction, critical thinking and student satisfaction (Lee & Faulkner, 2011; Mentzer, Cryan & Teclehaimanot, 2007). Proponents of online learning argue it has neither advantages nor disadvantages over traditional methods of learning, however, it does provide expanded learning opportunities by offering greater access (Anderson, 2008; Means et al., 2009; Weber & Lennon, 2007). Some researchers celebrate the online learning environment, while others relay concern. The lack of attention and participation among students, as well as, faculty reluctance are at the forefront of unease associated with the online learning experience (Anderson, 2008; Bikowski, 2007; Croft et al., 2011). While students acknowledge acceptance through continued enrollment growth, it is imperative to explore the advantages and disadvantages of online learning.

Advantages and Disadvantages of Online Learning

The primary advantage of online learning is its ability to provide opportunities for students who would not be able to pursue education through traditional means. Flexibility and convenience are at the forefront because students can meet the competing demands of school, work and family (El Mansour & Mupinga, 2007; Knightly, 2007; Shea & Bidjerano, 2008). Learners appreciate that the online environment allows for flexibility and consideration of factors associated with life situations and personal motivations by allowing them to balance or synchronize their living, learning and earning roles (Appana, 2008; Glazer & Murphy, 2015; Holder, 2007). Online learning has the potential to create environments where the students actively engage, with the material and each other to refine their understanding as they build new knowledge (Smart & Cappel, 2006; Yang, Cho, Mathew, & Worth, 2011).

Online learning is also lauded for removing barriers for students. Many students, as well as educators, perceive the anonymity of online learning as being more equitable and democratic

than the traditional classroom environment wherein participation and belonging is valued first and foremost (Garrison & Cleveland-Innes, 2005; Swan, 2003).While online delivery is considered the educational medium of the future, it cannot be taken for granted as many students also report dissatisfaction with their online learning experience (Peltier et al., 2007).

Educational technologists argue that instruction should be designed to take advantage of the unique characteristics afforded by online learning (Means et al., 2009; Swan, 2003; Ward, Peters, & Shelley, 2010).Smart and Cappel's study in 2006 found that barriers to learning are attributed to learner isolation and frustration due to their anxiety and confusion about learning online. To overcome these feelings of inadequacy, students are required to demonstrate greater discipline, greater self-motivation levels, improved writing skills and a commitment of time specifically devoted to learning (Smart & Cappel, 2006).

Online Learners

Few people would argue the primary advantages of online education are its flexibility and convenience. However, fewer people are familiar with the challenges faced by online students unless they are an online student. To employ the best methods for supporting student success, an understanding of the online learner is necessary.

Distance learning has attracted older, nontraditional students, resulting in a demographic shift away from the campus-based, traditional-aged, residential student. Nontraditional online students are place-bound and goal-oriented with full-time jobs and family obligations (Dabbaugh, 2007; Lehman & Concecao, 2013). The non-traditional online learners are motivated by professional advancement, external expectations, the development of social relationships, and pure interest in the subject (Holder, 2007). Their impetus for online enrollment includes rewards from degree completion including increased salaries, more responsibilities, and better job

prospects (Croft et al., 2011). The challenge for educational institutions is to identify and meet the needs of online cohorts while recognizing these needs are likely not consistent with those of the more familiar traditional, residential, undergraduate student.

Who are online learners? Research indicates that online students fall into two different categories. The first category fits the classic view of the older students with conflicting life responsibilities such as balancing a career and family responsibilities. The majority of online students are likely to be older than the campus-based, traditional-aged, residential student. Online students are classified as nontraditional, older, place-bound, goal-oriented, with full-time jobs and family obligations (Dabbaugh, 2007; Lehman & Conceicao, 2013). Non-traditional students are motivated to complete their degree by focusing on the rewards of their degree including increased salary, more responsibility and better job prospects (Croft et al., 2011). Graduate level students are also overwhelmingly non-traditional students (Van Doorn & Van Doorn, 2014; Allen & Seaman, 2013).

An additional dichotomy exists between the preferences of students in the online learning environment based on whether they are undergraduate students or graduate students. Graduate students appreciate the increased flexibility of the asynchronous learning environment while online undergraduate students learn better in a synchronous environment (Arbaugh, 2010). For graduate students, networking is just as important as coursework (Mulamed et al., 2015). In contrast to undergraduate students who view course management systems as content repositories rather than a means to facilitate interaction (Arbaugh, 2010). The second category of online learners are younger, traditional-aged, residential, college students (Allen & Seaman, 2011). Undergraduate students are a growing segment of online learners; however, these students may be taking one or two online courses to create a full schedule at their brick and mortar institutions.

The modern online learner is younger and computer-savvy as opposed to the older, technologically-adverse, non-traditional working students who are also parents (Brown, Keppell, Hughes, Hard & Smith, 2013; Dabbaugh, 2007). Online students view their learning environment with a different lens depending on their life experiences and learning needs. The traditional-aged, online learners are more interested in taking individual online courses while the non-traditional online learner are the ones who complete 100% online programs (Allen & Seaman, 2011; 2013; Shea & Bidjerano, 2014). Armed with an understanding that nontraditional, online students view their learning environment through a different lens, there is a need to explore options for empowering these students to be successful in the endeavor to pursue an online degree.

Course Completion

While more students are choosing to start an online class finishing the class has proven to be challenging for many students. Students who do well online are considered well-prepared, able to demonstrate high cognitive abilities and have high levels of self-motivation (Bambara, Harbour, Davies, & Athey, 2009; Eom, et al., 2006). However, it is the under-prepared and over-worked students who are attracted to online learning (Shea & Bidjerano, 2014). Online researchers cite Russell's (2001) *No Significant Difference* study when determining the effectiveness of online learning as compared to face-to-face courses (Arbaugh, et al., 2008; Swan, 2003). Yet, an inconsistent phenomenon has been reported in recent years. While student learning outcomes may be similar between online and traditional courses, course completion is not (Atchley et al., 2013; Massey, 2011; Rovai, 2003; Xu & Jaggars, 2011) On average, online course completion is 10% to 20% lower than traditional courses (Herbert, 2006; Xu & Jaggars, 2011; Wojciechowski & Palmer, 2005).

The problem with looking at the retention issue with course completion as the sole outcome is it does not provide enough insight into the challenges and ultimately the success of online students (Adkins & Nitsch, 2009; Doherty, 2006). Shea & Bidjerano (2014) demonstrated although attrition in individual online courses may be lower, the overall persistence of students to degree completion is greater, especially for students who have taken at least one online course throughout their career. Shea and Bidjerano's (2014) research used a longitudinal study of over 18,000 students collected data for their first, third and sixth years of study, indicated under-prepared students are attracted to online learning to overcome time and location constraints. Their findings found a paradox within the online community which showed students who performed worse in their online course ended up performing better in overall academic achievement, either by graduating from an academic program or transferring to a four-year institution.

When comparing Shea and Bidjerano's (2014) research to the findings of state studies in the community college systems of Washington and Virginia, that included data from over 24,000 students at 23 different institutions, the findings were not consistent (Jaggars & Xu, 2010; Xu & Jaggars, 2011). The lower performance rate in online courses is not keeping students away from online courses. Xu & Jaggars's (2011) longitudinal study of over 50,000 community college students found over time, students were increasingly likely to try an online course. Students who were already taking an online course increased the number of credits taken online over the rest of their college careers.

The issue of student success and retention is not just isolated to online learning but to all types of learning. However, the attrition rates of online learning is greater (Atkins & Nitsch, 2009; Angelino et al., 2007; Van Doorn & Van Doorn, 2014; Wojciechowski & Palmer,

2005).Online students have been robustly studied since Garrison's (1989) book *Understanding Distance Education*, however, current research does not adequately answer why some students persist in online programs while other students do not. With online students dropping out at greater rates than their traditional counterparts, the question remains: what factors encourage students to succeed and how can these factors be applied to all online students?

Factors of Online Student Success

Online students face both internal and external challenges. These intrinsic and extrinsic factors must be carefully balanced to equate success. Educators and institutions need to identify elements crucial to successful and effective online learning (Lee & Faulkner, 2011). Understanding the factors that separate those learners who are successful from those who are not, can help lead to interventions that may help other students to succeed (Atchley et al., 2013; Levitin, 2014).

A student's individual characteristics have a significant impact on a student's overall satisfaction with the online program and their learning gains. Shea and Bijerano (2010) found that internal factors such as self-direction, self-motivation, self-regulation and self-efficacy are intrinsic. Arbaugh (2010) discovered that the success of online courses is measured by the student's ease with external factors such as the design of the learning environment and the technology used to the deliver the online course. Other external factors such as technical preparedness, personal and family support, freedom from financial and work concerns, and the necessary time to dedicate to online learning, are influential to the success of online students (Croft et al., 2011; Hart, 2012; Holder, 2007). Determining the correct balance between external and internal factors is challenging due to the individual learner needs.

Internal Factors of Online Student Success

Intrinsic or internal factors are unique characteristics of the learners that include academic preparedness, self-motivation, self-regulation and self-efficacy levels.Many online students come to the institutions underprepared for learning in an electronic medium (Lehman & Conceicao, 2013). Researchers believe that to be successful, online students must be self-motivated, self-disciplined and self-directed learners who are technically proficient and academically prepared (Holder, 2007; Kuo, 2010). The ability to self-motivate, self-regulate and self-direct one's own learning are inherent qualities students bring with them into the learning environment. However, these skills may be cultivated by external elements (Bembenutty & Karabenick, 2004; Lee & Faulkner, 2011; Locke, 1968).

Grit and the growth mindset. Many students succeed because failure is not an option for them and attribute their success simply to their will to succeed. Levitin (2014) describes this "industriousness, self-control and stick-to-itiveness" as one of the best predictors of educational attainment and career success (p. 329). "Grit", as a self-regulation factor is an important indicator of online student success (Duckworth, 2012; Duckworth et al., 2013; Duckworth & Gross, 2014; Hochanadel & Finamore, 2015). Student success is not simply a question of nature versus nurture. A growth mindset is what a student adopts when they realize intellectual abilities can be cultivated through hard work (Dweck, 2008). Although genetic endowments are unique to each person, it is experience, training and a student's personal effort that drives success (Dweck, 2008; Duckworth et al., 2013; Mishel & Staub, 1965; Mischel, et al., 2010).

While few studies have found a single variable directly correlates with student online achievement and persistence rates, there are statistically significant findings between self-regulation and self-efficacy as being predictors of online student success (Gaythwaite, 2006;

Loomis, 2000; Shea & Bidjerano, 2010; Whipp & Chiarelli, 2004; Zariski & Styles, 2000). By providing opportunities to practice self-regulation, online programs can assist students in the development of these strategies on their own (Bandura, 1991).These grit and growth mindsets are at the heart of self-motivation, self-regulation and self-efficacy as internal factors to student success.

The importance of self-motivation. There is a clear argument the single most important contributing factor to student success is the online learner's own intrinsic motivation. A student's level of self-motivation contributes to online student success (Lehman & Conceicao, 2013; Wichadee, 2014). Abraham Maslow (1943) described motivation as a set of behaviors to fulfill various needs. In the realm of online learning, students are motivated to succeed to achieve educational goals to fulfill an esteem need for success.

Student motivation can come from both internal and external sources. Motivation is difficult to instill into students. However, external factors, such as the design of the learning environment and positive encouragement from instructors and classmates can influence motivation (Gilbert, 2007). Wichadee (2014) found instructors can play a role in increasing student motivation by informing students of the benefits they will receive such as increased grades or course completion which increases feelings of autonomy and empowerment on behalf of the student. Student perception and attitude are critical to levels of motivation and learning outcomes (Smart & Cappel, 2006). Wlodkowski (1985) found the level of motivation increases when "the adult has experienced learning as pleasurable and intrinsically motivating" (p. 101, as cited by Conrad, 2009).

Motivation is not a simple concept to understand. Self-regulation influences self-motivation as it is a proactive process in which the students develop strategies to improve their

learning (Eom et al., 2006; Zimmerman, 2008). “Neither intention nor desire alone has much effect if people lack the capability for exercising influence over their own motivation and behavior” (Bandura & Simon, 1977, p. 23). Student’s motivation is an intrinsic factor that depends solely on the student, however, a learning environment that influences student’s motivation can be designed, developed and delivered online.

Creating a positive online learning environment where students feel empowered and connected is one of the ways an external factor can influence student motivation. While online programs and instructors should make every attempt to increase student motivation, students’ levels of self-motivation remain internal to them. However, if a student’s intrinsic levels of motivation are high that internal factor will be enough to overcome the limitations of a less than optimal, online learning environment (Eom et al., 2006). Student motivation must be monitored and encouraged throughout the learning experience. If encouragement does not come from outside sources, student success is entirely dependent on their own self-efficacy and self-regulation skills.

The role of student self-efficacy. Self-efficacy is the student’s belief they have the skills necessary to be successful. The student’s degree of confidence in their ability to successfully complete a task is defined as self-efficacy (Bandura, 1997; Solberg et al., 1993). Both internal and external factors can affect a student’s level of self-efficacy. A combination of the environment, personal characteristics and behavior create an interrelationship in the development of self-efficacy (Bandura, 1997; Bandura & Locke, 2003).

Self-efficacy skills help learners to determine actions and adopt behaviors that lead to greater degrees of success (Williams & Hellman, 2004). Bates and Khasawneh (2007) found the relationship between self-efficacy beliefs and online learning outcomes are more complex than

originally anticipated. Their qualitative research found training could help students to learn self-efficacy strategies and by providing this training early in the course; the student can practice these behaviors (Bates & Khasawneh, 2007). Self-efficacy expectations are related to performance and persistence. However, self-efficacy research has primarily studied upper-level or graduate students, a population with inherently higher levels of self-efficacy (Antoine, 2011; DeTure, 2004; Lin, 2008; Loomis, 2000; Puzziferro, 2008; Zariski & Styles 2000; Whipp & Chiarelli, 2004).

Technology itself can influence a student's feeling of self-efficacy. Comfort with technology is a variable that can help to determine the level of student success in an online course (Joo, Bong & Choi, 2000; Wang & Newlin, 2002). Puzziferro (2008) determined students with high self-efficacy and high technology comfort levels prefer taking online courses. Students with low self-efficacy and low technology comfort levels only took the online course because the class was available and fit their schedules. Few empirical studies focus on the effectiveness of technology interventions to improve self-efficacy for online learners (Atchley et al., 2013; DeTure, 2004; Puzziferro, 2008).

Because students have little to no choice in the use of technology to complete online coursework, perceptions about their personal locus of control, or lack thereof, can be influenced. A student's lack of technological expertise can be a deterrent to success in online courses (Smart & Cappel, 2006). Researchers agree successful online learners need to be computer-savvy (Bates & Khasawneh, 2007). Technophobia, a fear of computers and technology, is a critical issue negatively affecting online student's self-efficacy (Irizarry, 2002).

While learning management systems (LMS) are designed to be user-friendly, not all students begin their coursework with the technology skills required to be successful (DeTure,

2004). By practicing self-efficacy, online learners develop behaviors to be successful. Learning to use technology is referred to as technological self-efficacy (Puzziferro, 2008). Bates and Khasawneh (2007) suggest applying instructional strategies fosters positive expectations and encourages the use of technology for learning. By providing a positive learning experience in which students can practice their technology skills and the online learner's self-efficacy behaviors increase.

The impact of self-regulation. While self-efficacy is the belief in one's ability to succeed, self-regulation describes the ability to perform the steps one takes to be successful. Self-regulation is what bridges the gap between intention or motivation (e.g., having the desire to complete a post-secondary degree) and actions (e.g., engaging in learning behavior) that are required to be successful. Self-motivation occurs when learners identify specific goals they want to meet. Self-efficacy is the belief that they can meet those goals and self-regulation is the specific steps learners take to accomplish their goals (Bandura, Social cognitive theory of self-regulation, 1991). Together with self-motivation, self-regulation and self-efficacy are important internal factors that drive student success.

Both self-motivation and self-efficacy comprise self-regulation. Self-regulation is the perception of one's individual abilities, internal motivation and self-belief can contribute to students completing an online degree and is a central concept of Bandura's (1997) social cognitive theory. Successful self-regulators set specific goals, desire to learn instead of just perform well, are not paralyzed by failure and possess intrinsic motivation as well as high self-efficacy beliefs (Williams & Hellman (2004). Of all the self-regulation strategies, goal setting and study skills are the most highly significant (Bandura, 1991).

Self-regulation is an internal factor influenced by external factors. Self-regulation may be more important in the online learning environment than traditional learning environment because the role of the teacher shifts to being a facilitator of learning (Jonassen et al., 1995, as cited in Puzziferro, 2008). Other students also play a role in the self-regulation abilities of individual students. The high level of interaction in teamwork activities, such as discussion boards and other student-to-student communication makes self-regulation strategies a necessity (Puzziferro, 2008).

Courses which allow for more learner control can help cultivate successful self-regulators by integrating active student participation in their learning process using meta-cognitive skills that include planning, organizing and evaluating (Puzziferro, 2008; Williams & Hellman, 2004). However, when students are required to complete learning activities that require collaboration, the successful completion of activity is dependent upon the quality of work from team members. This type of activity is now outside of the student's locus of control and beyond the ability of the student to self-regulate. Decades of research indicate learner self-regulation is an important predictor of learning, but self-regulated learning in an online environment presents a gap in the research (Gaythwaite, 2006; Shea & Bidjerano, 2010; Shea et al., 2013; Whipp & Chiarelli, 2004).

External Factors of Online Student Success

Extrinsic or external factors include the institution's specific initiatives in the retention and persistence of online students, the development of the course material and the support networks available to online students. For decades, online learning research has focused on the instructional design of online learning environments, preparation of students, development of screening tools and identification of barriers to successful completion (Holder, 2007; Russell,

2001; Swan, 2003; Xu & Jaggars, 2011). Concern for the quality of instruction, learning and student interaction have made some faculty reluctant to offer online courses as educators do not know what types of interaction students need, want or expect in a face-to-face classroom let alone in an online one (Ward, et al., 2010; Swan, 2003). Previous research in online courses has focused primarily on the technology or interface design and course delivery rather than the internal predictors of online course success (Means et al., 2009). Little is understood about the correct combination of external factors that can guarantee student success.

Design, development and delivery. External factors are the design, development and delivery of the course itself by instructors and the community comprised of both the instructor and the learners (Arbaugh, et al., 2008; Boston, et al., 2014; Garrison & Arbaugh, 2007; Garrison & Cleveland-Innes, 2005; Lee & Faulkner, 2011; Rouke, Anderson & Garrison, 2007; Shea, et al., 2003). Arbaugh (2010) stated student's ease with external factors such as the design of the learning environment and the technology used to deliver the online course is a measurement of online student success. The appropriate design of the learning environment and the targeted support available for the online student also lead to increased student satisfaction (Palmer & Holt, 2009). External factors such as technical preparation with regards to instructor training and online course development are considered vital, however, they may not be the single most contributing factor to online learning success.

Student success is a balance of intrinsic and extrinsic factors. The students bring their intrinsic characteristics with them to the classroom, and the classroom is designed to encourage success. The balance of internal factors with an external learning environment is the informal contract of education.Online learning adds additional and confounding element of technology to deliver education which can upset this delicate balance. While the use of technology can enrich

the learning experience, it does not necessarily ensure academic success (Croft et al, 2011; DeTure, 2004). As the No Significant Difference studies suggest, technology does not necessarily impede the learning experience either (Russell, 2001, Swan, 2003, Shea, 2006).

A robust learning environment built on a technological platform is not enough to ensure online student success. Online students need support as well. Understanding emotional connections and importance of academic and personal support may be a more accurate predictor of online course success (Means et al., 2009). While some online learners cite personal issues as a contributing factor in the inability to complete an online program, they cite support as critical to their success (Conrad, 2009). Academic support can come from multiple sources but the most influential are instructor and peer support.

Instructional support. Supportive feedback from the instructor about academic performance can lead to increased self-efficacy levels. Instructor feedback is one of the most powerful components in the learning process with the capability to improve student performance (Arbaugh, 2010; Eom et al., 2006; Swan, 2003). Research indicates an instructor who has a strong presence and who communicates effectively is a determining factor in online student satisfaction (Akyol & Garrison, 2008). Bates and Khasawneh (2007) found students who received prompt and regular feedback felt more positive about their performance reported greater levels of mastery and spent more time in the course.

A well-designed course may limit or negate the need for an instructor. However, COI research has found instructor presence is the most critical element in an online learning environment (Arbaugh, 2008, Boston, et al., 2014; Hart, 2012; Herbert, 2006; Yukselturk & Bulut, 2007). Eom, Wen and Ashill's (2006) quantitative survey with 397 responses, analyzed six variables that attributed to student perceived learning outcomes and satisfaction including (a)

course structure, (b) self-motivation, (c) learning styles, (d) interaction, (e) instructor knowledge and (f) instructor feedback. Only two factors, learning styles and instructor feedback were found to be statistically significant. Online students feel so strongly about the value of regular and sustained contact with their instructor that it is more important to them than contact with the other students (Lehman & Conceicao, 2013). Online learning relies on technology as a delivery mechanism but the fundamentals of learning remain the same. Students need quality instruction from an engaging instructor and collaboration with their peers to construct new knowledge.

Peer support. The community of learners found within online courses is also considered a part of the external factors that can be influenced by the course instructor to a certain degree. Proactive student interventions from the institution, such as encouraging interaction among online learners, can impact the retention of online learners (Boston et al., 2014; Lehman & Conceicao, 2013). The Community College Survey of Student Engagement (CCSSE) has consistently found student engagement, with faculty, other students and the course materials, is one of the leading factors of student persistence (Roman, Taylor & Hahs-Vaughn, 2010). The social connection is one factor many find to be lacking in the online learning model.

Online learning can succeed by using a constructivist approach that requires a collaborative environment (Conrad, 2009). Online course communication and collaboration encourages students to feel they are an active part of an online learning community that leads to a greater chance of success (Bikowski, 2007; Croft et al., 2011; Garrison & Cleveland-Innes, 2005; Swan, 2003; Shea, 2006; Yang, et al., 2011). Bikowski's (2007) qualitative case study using a social presence theory framework found students who felt a sense of community in their online courses valued the friendship they felt with their peers. She identified three key components to the development of friendships (a) individual learner factors such as their

personality traits, (b) a willingness to share and (c) a willingness to offer support.Bikowski's (2007) study also found some face-to-face contact, even within online programs, is essential to deepening friendships to develop a sense of trust and group identity.

The idea of virtual community development is prevalent within the field of online education. Many researchers have found a sense of belonging to a larger community is one of the attributes of student success and this includes online student success (Bikowski, 2007; Brown et al., 2013; Tinto, 1975;1982). Steinman (2007) references Socrates, who believed knowledge emerges during the interaction of individuals within a community. The building of online communities may encourage persistence but does not equate into increased learning gains. A sense of community can encourage students to persist in their online endeavors, however, it does not always lead to higher levels of learning. A learner's feeling of separation from other learners and a lack of a sense of community can weaken the student's level of motivation and feeling of being included (Wlodkowski, 1985). Group work is successful at influencing the way students interact but not the amount they learn (Means et al., 2009). If the learning outcome is to encourage interaction, then encouraging virtual communities can be used, however, if increased knowledge is what is desired, group work and peer collaboration may not be the appropriate strategy.

Regarding student satisfaction, some learners are attracted to the online learning model because it allows them to be autonomous and responsible for their own learning. Ke and Carr-Chellman (2006) found different personality types, such as introverts, prefer a learning environment that promotes autonomous learning environment where discussions are used for formal learning rather than informal or social activities.The students in Ke and Carr-Chellman's

(2006) study preferred individual interaction with their instructors, an environment in that online learning is uniquely adept at creating.

Students have different personality traits and learning is not a one size fits all model. Students who are less outgoing in a traditional classroom may feel more comfortable participating in an online format (Heindel, 2014). To overcome isolation, virtual cohorts are used, however, the students' satisfaction levels with the cohort models are often mixed (Holder, 2007). Holder's (2007) study found learners who scored high in learner autonomy or independent learners, did not persist online. Other researchers' findings revealed being an independent learner working in isolation or a 'lone wolf' does not lead to success for online students (Baptiste, 2001; Piskurich, 2004). Croft, Dalton, and Grant's (2011) research recognized addressing negative feelings towards isolation is a challenge as not all students felt isolation was a problem. These individuals had self-selected an online program with the expectation of studying alone.

Belonging to a learning community can bring mixed results to both student satisfaction and student achievement. A sense of community can overcome feelings of remoteness and isolation, however, it may have little effect on learning outcomes (Croft et al., 2011; Ke & Carr-Chellman, 2006). Online students need connection with both the instructor and other students to be successful as suggested by Tinto's Model of Student Engagement (1975; 1982; 2006). Communities encourage the students to persist, but does it help them learn? If they do not remain in their online classes, it would be impossible to find out.

Theoretical Foundation

Online learning and its successful adoption is a complex field and there are many interrelated components to be studied. Therefore, a broad-based theoretical model focused on

online learning is required to provide a scaffolding structure to the research and to identify its constraints and limitations. With increasing online enrollments, it is clear a comprehensive model is needed to describe, explain and predict how people learn online (Allen & Seaman, 2011). The investigation of the online learners lived experience requires a theoretical foundation with a holistic viewpoint which considers the learning environment, the role of the instructor, the role of the student and the role of the peers. The Community of Inquiry is a model that attempts to explain the interrelationships between these trifecta of factors. Creswell (2009) recommends that a theoretical framework be chosen *a priori* for phenomenological studies to provide such a foundation prior to the data collection process.

The Community of Inquiry

Community of Inquiry is a model that contains three core components (a) cognitive presence, (b) teaching presence and (c) social presence (Akyol & Garrison, 2008; Mossberger, et al., 2012). According to Hayes, Smith and Shea (2015), teaching presence is the design and facilitation of learning components and their assessments; social presence refers to behaviors on behalf of both students and instructors that enhance rapport, trust and collegiality; and cognitive presence refers to shared meaning developed through knowledge construction. "The Community of Inquiry Model (COI) is one of the few theoretical frameworks to systematically describe and explain the processes and dynamics of student engagement within online learning environments" (Shea & Bidjerano, 2008, p.340).

History of COI. COI is founded upon the work of Dewey's practical inquiry theory introduced in 1933 (Lee & Faulkner, 2011). Dewey believed inquiry was a social activity and considered it essential for an educational experience (Wenger, 2000; Garrison et al., 2010). The COI framework was initially intended to offer a new theoretical perspective to address computer

conferencing technology and drew upon insights from the fields of linguistics and communications (Garrison, Anderson & Archer, 2000; 2001; 2010). The framework's application emphasizes its use in an asynchronous, text-based, discussion-heavy learning environment rather than a distance-learning environment assumes that students work independently from one another (Garrison et al., 2010). In other words, the strength of COI as a theoretical model for online learning environments is collaboration is emphasized and independent, autonomous, and self-directed learning is minimized. As Garrison and Akyol (2013) suggest within the COI framework learners do not learn in isolation and participants are not solely responsible for their own learning.

COI became known as a theoretical framework in 2001 (Garrison, Anderson & Archer, 2001). Six years later, the original author's review of literature about studies conducted using the model to further develop a research agenda (Garrison & Arbaugh, 2007). COI has been tested and refined with new additions proposed over the last fifteen years (Akyol & Garrision, 2008; Arbaugh et al., 2008; Garrison et al., 2010, Akyol & Garrison, 2011; Anderson, 2016; Garrison & Akyol, 2013; Hayes, Smith, & Shea, 2015; Shea & Bidjerano, 2010; Shea , et al., 2012). COI has a robust research strain housed at the University of Athabasca website (The Community of Inquiry, n.d.) with the stated purpose of creating a "community of inquiry about the Community of Inquiry framework" (para 1). The COI theoretical framework represents a process of creating a deep and meaningful (collaborative–constructivist) learning experience through the development of three interdependent elements – (a) social presence, (b) cognitive presence and (c) teaching presence (Garrison, 2011).

Teaching presence. Teaching presence is established through the building of curriculum materials and creation of course content. Instructional design and organization involves the (a)

planning and design of the structure, (b) processes of course development and delivery, and (c) interaction and evaluational aspects of an online course as completed by the instructor as part of the teaching presence (Boston et al., 2014). Teaching presence itself has three components as defined by Shea, Fredericksen, Pickett and Pelz (2003) (a) instructional design and organization, (b) facilitating discourse and (c) direct instruction. In order to effectively move students through the three different COI phases, a strong teaching presence is required (Akyol & Garrision, 2008).

The instructor's role as a facilitator of learning also attributes to the teaching presence. When the instructor is an active and vocal part of the course, this role is considered part of social presence within the COI (Boston et al., 2014; Wise, Chang, Duffy & Del Valle, 2004). Instructor feedback is an important component to online student success that cannot be discounted. In fact, it is of greater importance to students' perceived levels of satisfaction than peer support (Swan, 2003; Paz & Pereira, 2015).

Akyol and Garrison (2011) clarify the realm of teaching presence is not solely regulated to those with the official title of instructor. The authors propose that the students themselves are also responsible for maintaining a teaching presence within the online course.

> Each participant in a community of inquiry is expected to assume teaching presence responsibilities and those responsibilities include contributing knowledge, monitoring the inquiry process and actively regulating the progress of the inquiry. It is the teaching presence construct that participants become metacognitively aware and assume the regulatory responsibilities for successfully completing the inquiry process. (Akyol & Garrison, 2011, p.187).

Cognitive presence. Cognitive presence is the heart of the COI framework, however, out of the three presences it may be the most challenging to develop in online courses (Akyol &

Garrision, 2008; Arbaugh, 2007). Cognitive presence focuses on higher order thinking processes rather than individual learning outcomes by using the Practical Inquiry Process developed by Dewey in 1938 (Garrison, Anderson & Archer, 2001).

COI has its primary roots in constructivism (Akyol, 2013). Constructivists promote that all knowledge is constructed from previous knowledge irrespective of how one is taught (Vygotsky, 1978). If a student is provided direct instruction during a lecture from a teacher that student is using their prior knowledge to construct new meaning (Oriogun, Ravenscroft & Cook, 2005). This technique allows for a scaffolding of new knowledge on to prior knowledge that is part of an inquiry-based process and is reflected in the COI model as cognitive presence (Akyol & Garrison, 2011; Bransford et al., 2000; Daniels, 2005; Vygotsky, 1978).

Cognitive presence is developed as a result of a four-phase process as displayed in Figure 2 (Arbaugh, 2007, p. 74, para 2). Per Garrison, Anderson, and Archer (2001) the first phase is a triggering event which is identified by some issue or problem that requires further inquiry while the second phase is exploration, where students explore the issue through critical reflection and discourse. They further content that the third phase is integration, where learners construct meaning from the ideas developed during exploration. This phase typically requires enhanced teaching presence to probe and diagnose ideas so that learners will move to higher level thinking in developing their ideas. Finally, the authors state the resolution is the fourth phase where learners apply the newly gained knowledge to educational contexts or workplace settings.

Initiation phase (triggering event)	Exploration phase	Integration phase	Resolution phase
An issue, dilemma, or problem that emerges from experience is identified or recognized. The teacher often explicitly communicates learning challenges or tasks that become triggering events Examples of indicators: recognizing the problem; sense of puzzlement.	Participants shift between the private, reflective world of the individual and the social exploration of ideas. Reflects an inquisitive and divergent process in the search for ideas to help make sense of a problem or issue. Examples of indicators: information exchange, brainstorming, questioning.	Constructing meaning from the ideas generated in the exploratory phase. Represents the construction of a possible solution. Tentative conversation or connecting of relevant ideas capable of providing insight into the dilemma (convergent phase). Examples of indicators: connecting ideas, synthesis; creating solutions.	Process of critically assessing the concepts, representing a commitment to a solution (resolution of the problem created by the triggering event). Consensus building within the community of inquiry. It requires clear expectations and opportunities to apply newly created knowledge. Examples of indicators: vicariously apply new ideas, critically assess solutions.

Figure 2. Four phases of cognitive presence. Adapted from "Descriptors and Indicators of Cognitive Presence" by Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, 42(2), 233-250.)

Cognitive presence allows for the understanding of intrinsic self-motivation, self-regulation, and self-efficacy techniques that students can apply to their learning. Teaching presence is attributed to technology support and the learning environment. However, it is the student-to-student presence and social presence which may have the greatest impact in overcoming barriers to student success. The understanding of how students create new knowledge and utilize support resources is critical to understanding online learning success.

Social presence. Students need some form of socialization to feel part of an institution, even if they will never step foot on the physical campus. Social presence is defined as the ability of students to project themselves as "real people" socially and effectively into a Community of Inquiry (Boston et al., 2014; Shea, et al., 2003). This definition appears to place the burden of being socially present with the students. "The Community of Inquiry model focuses on these

processes and articulates social presence not as a function of the medium of delivery but through the capacity of participants to establish satisfying relationships" (Shea & Bidjerano, 2009, p. 343).

The interrelationship between both cognitive and social presence is the application of constructivist theory indicating students rely on one another to develop and construct knowledge (Arbaugh, 2007; 2008). A high level of social presence can lead to high levels of student satisfaction with their online courses; greater satisfaction can lead to greater persistence. Richardson and Swan's (2003) correlational study (n=97) found high social presence positively correlated with high student satisfaction with both the instructor as well as their perceived learning levels.

While social presence may create a sense of engagement it is not a guarantee that students are cognitively engaged in an educationally meaningful manner (Garrison & Cleveland-Innes, 2005, p. 135, para 2). Garrison and Cleveland-Innes (2005) quantitative study of 75 online students who completed the study process questionnaire, found that high levels of interaction may be reflective of group cohesion. It does not, however, directly create cognitive development or facilitate meaningful learning and understanding. This is because technology itself can create a barrier to the building of the social networks required in the online learning environment. Other studies found the face-to-face dynamic is missing and students need to learn how to be online learners (Angelino et al., 2007; Bambara et al., 2009; Bikowski, 2007; Croft et al., 2011). However, once they were comfortable with the technology, their quality of interaction improved (Stodel, Thompson, & MacDonald, 2006).

Shea and Bidjerano (2009) suggest that social presence analyis should focus on the underlying social and cognitive process which occur within the online learning environment

rather than on the technologies used to conduct online social activities. The researchers found while social presence does not affect learner outcomes, such as learner satisfaction or final grades, it does affect the learners' interactions with each other and their perception of their instructor (Shea & Bidjerano, 2008). Although social presence may not directly lead to higher learning outcomes, by feeling part of a larger learning community online students report greater satisfaction with their course which leads to increased persistence. However, learner satisfaction and connection to a learning community do not necessarily equate to increased learning outcomes.

COI research. COI has been studied both quantitatively and qualitatively since its inception in 2001. It has undergone what John Stewart Mill (1884) recommends as a falsification process as part of the scientific method. "When a theory is not falsified but fails to be a successful guide in research, scientists begin to search for a new theory" (Kricheldorf, 2016, p. 79, para. 2). The process of developing a model then testing the model under a variety of conditions to see where its weaknesses and its strengths lie is the theory falsification process (Popper, 1957). Finally, reporting and collecting those studies is all part of the scholarly work must be done for a theory to have validity and become widely adopted (Javis, Holford & Griffin, 2003).

By 2010, the original COI researchers conducted a review of the COI and found that research in the field indicates that COI is a viable and reliable theory for use in the study of online learning (Garrison, Anderson & Archer, 2010). Other researchers continued to study the COI model research agenda using quantitative content analysis and qualitative social network analysis (Swan, et al., 2008; Shea & Bidjerano, 2010).

COI has undergone a robust research agenda beginning with qualitative exploratory studies and moving towards large-scale multi-university adoption during its fifteen years as a theoretical model (Akyol, Arbaugh, Cleveland-Innes, Garrison, Ice, Richardson & Swan, 2009). After testing each individual presence, other research studies began to study all three presences simultaneously (Annand, 2011). Arbaugh's (2007) content analysis was one of the first studies to test all three presences by testing the generalizability of COI and recommended the COI survey was reliable for distinct measures of all three elements of COI. His recommendation at the time was to move COI past exploratory studies. Conrad's (2009) conducted a qualitative study on 18 master's level students who were absent during some part of their online program. Conrad's identified themes include (a) the validation of the interconnectedness of cognitive, social and instructional presence, (b) the importance of learners' self-knowledge and the (c) impact of external and circumstantial life-situations on adult learners' ability to engage in learning (2009). Akyol and Garrison (2008) followed this study with a mixed methods study and found that social presence equates to student satisfaction but has no impact on learning. However, they found that teaching and cognitive presences did increase perceived learning gains.

As of 2008, (Arbaugh et al., 2008) found 356 citations of the COI. There is a collection of empirical research on the COI Webside that is divided into categories including (a) COI papers, (b) Cognitive Presence papers, (c) Social Presence papers, (d) Teaching Presence papers, (e) Methodology Papers, (f) Critiques and Responses, (g) COI in e-zines and news and (h) COI in Dissertations (The Community of Inquiry, n.d.). Many learning theories seem to elicit few criticisms in the literature; however, COI has enjoyed both wide adoption and broad criticism. Garrison and other COI researchers offered responses to these critiques (Akyol et al., 2009).

These defenses provide a rationale and clearer perspective on the application of the COI as a theoretical model.

Larger multi-institutional studies which developed a 34-item COI survey instrument was tested at four different institutions determining the survey instrument was a valid measure of teaching, social and cognitive presences (Arbaugh et al., 2008; Swan et al., 2008). The researchers found construct validity across all three presences, yet also identified the possible inclusion of a fourth presence.

The addition of a fourth presence has been debated in the COI research since 2010 (Akyol, 2013; Akyol & Garrison, 2011; Anderson, 2016; Hayes et al., 2015; Shea, 2010, Shea & Bidjerano, 2010; Shea, et al., 2012; Shea & Bidjerano, 2012; Shea, et al., 2013). An additional suggestion for the fourth presence is entitled "emotional presence" as it studies the impact emotion has on learning (Cleveland-Innes & Campbell, 2012; Rienties & Rivers, 2014).Others such as Lam (2015) recommended "autonomy presence" which attempts to recognize times when "students experienced learning without a teaching presence but with intrinsic drive from individuals" (para 1). Shea et. al has recommended an extended COI model called learning presence that focuses on the self-regulation and self-efficacy development required by online students (Hayes et al., 2015; Shea & Bijerano, 2010; Shea , et al., 2012; Shea, et al., 2013).Additional studies on the learning presence suggested an examination of meta-cognitive, motivation and behavior traits under the control of successful online learners (Shea & Bijerano, 2010; Shea & Bijerano, 2012; Shea et al., 2013). These studies have been countered by Garrison and Akyol (2011, 2013, 2015) who argued the inclusion of the learner presence represented a "conceptual leap" and performed a qualitative study on metacognition that accounted for self-regulation but not co-regulation, within the existing COI model under cognitive presence.

Evolution of the COI model. The COI method provides a comprehensive theory began its research through the qualitative tradition in its early inceptions yet later studies have focused primarily on quantitative analysis (Arbaugh, 2008). COI's primary focus is on the extrinsic factors impact students' success. These external factors include the instructional delivery platform, the content being delivered, or the virtual community built by the instructor on behalf of the students (Lee & Faulkner, 2011). COI does not account for intrinsic factors as well as extrinsic factors.

The cognitive presence, social presence and teaching presence explain the interaction of the external factors in an online learning environment. Intrinsic factors such as self-regulation, self-motivation and self-efficacy were left out until an article by Akyol and Garrison (2011). These authors proposed using COI to develop and validate a metacognitive construct as metacognition allows for an awareness and ability for learners to take responsibility and control to construct meaning and confirm knowledge is important for student self-regulation and ultimately success in the online learning environment.Akyol and Garrison's (2011) article could be viewed as an alternative to Shea's (2010, June 22) online presentation which identified internal factors such as self-regulation as a missing component to the COI and offered an additional fourth presence called the learning presence.

Both Garrison's et al. (2011, 2013, 2015) and Shea's et al. (2012, 2013, 2014, 2015) research identified a missing component within the COI research. The importance of the internal factors such as self-motivation, self-efficacy and self-regulation the students bring with them into the collaborative online environment are now being included. However, in analyzing both models, either meta-cognition or the learning presence, it appears both are addressing the same

issue being modeled in different manners. However, this dual approach represents a divergence within the COI.

Conclusion

Student success is of paramount concern by the institutions and the instructors who teach online. In reviewing the body of literature, online student success appears to be derived from a combination of both external and internal factors.The external factors include: (a) the learning environment and the technology used to the deliver the class, (b) the institutional supports such as instructional design, tutoring, orientation, and mentorship program and (c) the virtual community created by the instructor and contributed to by both the instructor and online students within the course.Internal factors of success include the student's levels of (a) self-motivation (b) self-regulation, (c) self-efficacy and (d) grit. These personal characteristics cannot be overlooked when seeking to determine what factors are important to the success and degree completion of online students.

Educators strive to improve the quality of the educational experience. Determining whether the external factors can influence internal factors has been the focus of education since its inception. However, research has found motivated students will succeed despite poor course design and few require the feeling of community that the institutions, the instructors and the instructional designers work so hard to create (Eom et al., 2006). Therefore, online students may attribute their success more towards their self-motivation, self-regulation and self-efficacy skills than they do towards extrinsic factors such as course design and delivery of the online course.

Constructivism is a theory that states that learners construct knowledge together (Vygotsky, 1978). The COI theoretical model has built upon this foundational work through the use of three different presences, (a) teaching presence, (b) cognitive presence and (c) social

presence (Ward, et al., 2010). COI researchers believe the development of a learning community is pivotal to a successful learning experience (Boston et al., 2014; Croft et al., 2011; Eom et al., 2006). Community is the keystone within COI. Therefore, social presence is an important consideration when analyzing whether external factors influence internal factors such as a student's level of motivation and thereby their persistence in an online course.

Instructors and institutions take great care in developing learning communities.The design of effective online courses is multifaceted and there are conflicting findings of whether community participation is a contributing factor to student success (Anderson, 2008; Bikowski, 2007; Bambara et al., 2009; Garrison & Cleveland-Innes, 2005; Holder, 2007; Means et al., 2009; Shea, 2006). Some researchers have found online students did not mind the isolating nature of online learning and, in fact, choose to learn online because it allowed for self-directed, autonomous learning (Ke & Carr-Chellman, 2006). Others researchers found having a connection and feeling part of a learning community is paramount to the success of the online student (Boston et al., 2014; Garrison & Cleveland-Innes, 2005; Kuo, 2010; Tinto, 2006). Although the feeling of community may lead to higher levels of satisfaction, it does not always equate to greater learning gains (Garrison & Arbaugh, 2007; Shea, 2006; Palloff & Pratt, 2007).

The review of the literature has raised several questions regarding the importance of the online learning community, the development of this community and whether these communities help online students be successful. From these initial questions, a grand research question was developed that reflects the *a priori* choice of the COI theoretical framework."What are the lived experiences of successful graduate students who have graduated from online programs as viewed through the theoretical lens of the Community of Inquiry framework?" From this grand research question, four research questions were developed.

RQ1: What are the barriers to online graduate student success?

RQ2: What are the critical factors of online learning that lead to online graduate student success?

RQ3: Is instructor support more important to the online graduate student success than peer support?

RQ4: What types of social supports do successful online graduate students use?

Social presence focuses on the creation of a community which leads to greater sense of satisfaction but not to increased learning outcomes as COI researchers suggest (Garrison & Cleveland-Innes, 2005, 2008; Shea & Bijerano, 2008; Stodel, et al., 2006). Through the development of online communities, online learning is not as isolating as it is purported to be, yet the community of learners may not be the one created by the instructor. Successful students may develop their own support system outside of the boundaries of the course. Social and academic support may come from outside sources. By looking to the successful online students in this study as co-researchers, the data will answer the research questions.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

In simplest terms, this study seeks to understand what it is like to be a successful online graduate student. What challenges do online graduate students face and what strategies do they use to overcome challenges? This study's focus is the lived experience of online students and whether they felt learning communities, both formal and informal, contributed to their success. The purpose of this research is to understand what it is like to be an online student who is pursuing education at a distance from the university. The grand research question is: What are the lived experiences of successful graduate students who have graduated from online programs as viewed through the theoretical lens of the Community of Inquiry framework?" This theoretical foundation informed four research questions.

RQ1: What are the barriers to online graduate student success?

RQ2: What are the critical factors of online learning that lead to online graduate student success?

RQ3: Is instructor support more important to the online graduate student success than peer support?

RQ4: What types of social supports do successful online graduate students use?

This dissertation uses a phenomenological study to understand strategies are utilized by successful online students. The data was collected using twelve in-depth interviews conducted during the spring of 2016. In the words of phenomenological researchers, to understand the phenomenon requires an examination of the lived experience of the subjects (Creswell, 2009; Creswell, 2013; Moustakas, 1994; Van Manen, 2003). Since each student experiences learning differently, it is important to explore commonalities to determine how best to identify features

that impact a student's learning experience. Qualitative research allows for an in-depth exploration of the co-researchers' experiences and thus the perceptions of those individuals as they lived the experience.

Qualitative Research

In qualitative research, it is important to address the qualitative paradigm before addressing the questions the research is seeking to answer (Lincoln & Guba, 1994). Creswell (2009, 2013) describes the qualitative approach as a constructivist viewpoint that is naturalistic, interpretive and post-positivist. Lincoln and Guba (1994) describe a paradigm as a basic belief system or worldview that guides the investigator. It is the constructivist paradigm that guides this investigation. By clearly articulating the researcher's worldview, research can address the precision and dependability of social science being "soft", a criticism recognized by Lincoln and Guba (1994).

Qualitative analysis can provide contextual information that is often stripped out of quantitative analysis to limit relevant variables and increase generalizability (Lincoln & Guba, 1994).Hypothesis-driven, replicable research used in quanitative analysis is considered more generalizable to the population, however, some qualitative research may also be considered generalizable (Hicks, 2015, November 21). Within this context, qualitative research can be considered replicable if not generalizable.

Both qualitative and quantitative research use their own approach, either deductive or inductive (Gabriel, 2013). The quantitative approach utilizes a deductive approach that is aimed at testing a theory and begins with a hypothesis. The inductive approach is used in qualitative research and uses research questions to narrow the scope of the study (McKeown, 2012). Patton (2002) states inductive analysis starts with "specific observations and builds toward general

patterns" (p. 56). To answer the question about the research method which best answers the problem, the grand research question must first be identified. Online learning is a large subject to undertake. Understanding why online students are successful is subjective and requires an intimate understanding of why the individual was successful (Bianco & Carr-Chellman, 2007). It is important to this study to gain a perspective of the lived experience of online graduate students regardless of their enrolled program or the institution.

Phenomenology

A phenomenology is a qualitative approach which allows the participants to share their stories, with their own voices. "We conduct qualitative research when we want to empower individuals to share their stories with their voices, and minimize the power relationships that often exist between a researcher and the study's participants" (Creswell, 2009, p. 36). Creswell (2013) suggests this form of research is best used when it is important to understand the common or shared experiences. The purpose of phenomenological research is to discover the existential experience of what is it like for those who lived through the experience (Lin, 2008). A phenomenon may provide a common context because it may be experienced by a variety of people with similar backgrounds.

There are two major phenomenology approaches (Moerer-Urdahl & Creswell, 2004; para 1). The first is hermeneutic phenomenology that was developed by Heidegger and who's modern day advocate is Van Manen (2003). "Heuristic research as a "process of internal search through which one discovers the nature and meaning of experience and develops methods and procedures for further investigation and study" (Moustakas, 1994, p. 17). Since heuristic research does not examine cause and effect relationships, it is unlike traditional empirical research (Patton, 2002). Heuristic research strives to discover the nature and essence of a phenomenon and uses first

person reports from individuals who have experienced it to provide in-depth detail (Moustakas, 1994). The intent of phenomenological research according to Moustakas (1994, p 18, para 2) is to: "Confirm what is known about the phenomenon, to discover misconceptions about the phenomenon and highlight significant elements about the phenomenon that were unknown prior to the investigation".

The second major phenomenological approach is transcendental phenomenology, developed by Husserl (1931) with Moustakas (1994) being the current proponent of the approach. The value of the transcendental phenomenological approach is it has a more systematic approach than hermeneutical researchers (Moerer-Urdahl & Creswell, 2004). It is an appropriate approach when an understanding of the meaning of the participant's experience is what is sought.

Transcendental Phenomenological Process

Phenomenological research contains three research processes described by Lin (2008, p. 133)as "the investigation of the phenomena, the identification of general themes and the comprehension of the essential relationships among the themes". Phenomenology researchers use an inductive approach by first providing details from the co-participants' statements about their experiences with the phenomenon (Lin, 2008).Moustakas (1994) describes the phenomenological approach as "a return to experience to obtain comprehensive descriptions that provide the basis for reflective, structural analysis that portrays the essence of the experience" (p. 13). The transcendental phenomenological analysis model includes four elements: (a) phenomenological reduction, (b) imaginative variation, (c) synthesis of meanings and essences and (d) intuitive integration (Antoine, 2011; Moustakas, 1994). It is the transcendental phenomenological process provides the methodological foundation for this study.

Bracketing Process

The first step to the transcendental phenomenological process is phenomenological reduction that begins with Husserl's (1931) epoche` that is the suspension of judgment. To properly suspend judgment, researchers must acknowledge their personal bias derived from their prior experience. This acknowledgment of bias is a process called *bracketing* (Moustakas, 1994). Bracketing was used in this study to identify and describe the researcher's background and bias.By adding my story to this research, I hope to provide insight into my motivations for researching this phenomenon. As Creswell (2009) says "our readers have a right to know about us. They want to know what prompts our interest in the topics we investigate, to whom we are reporting, and what we personally stand to gain from our study" (p. 36).

The primary researcher of this study has a 25-year career in the distance-learning field. Although I have supported numerous faculty and students over the years, I have not received any credited educational opportunities online. Although Moustakas (1994) recommends that the researcher experiences that same phenomenon as the participants, I am unable to do that because I have never been an online student. My perspective of online learning has always been in a support role. My responsibility as an instructional designer has been to train faculty to teach online, to administer the learning management system and to support online students. Designing quality online learning environments is my job. However, this study seeks to understand the process of learning online from a student's perspective. Therefore, I must suspend all my judgments and preconceived notions about what it is like to be an online student and look at their experience through fresh eyes (Moustakas, 1994).

To suspend my judgement, I must acknowledge my personal belief over my years of supporting online learning is that I feel online learning provides a valuable learning opportunity

that is at least equal to online learning and when designed properly, can leverage educational technology to provide an optimal learning environment. However, I feel that it takes a special type of learner to benefit from this type of learning. Online learners must be extremely motivated and disciplined to succeed in online courses. I do have reservations that online learners are missing the social experience that is a cornerstone to the traditional college experience. Overall, I feel that online learning offers more than convenience for many students, it provides the only option to pursuing higher education.

Outlining my experience and the identification of my bias is part of the bracketing process that is an important component to the epoché described by Husserl (1931). Bias should be avoided in quantitative research; however, in qualitative research, it can become a strength. While I have a bias towards the effectiveness of online learning due to my career endeavors, I also have a bias towards the COI, as this is the theory which set the standards of the training program for the state system where I am employed. Open SUNY (formerly the SUNY Learning Network) felt the theory encompasses the components comprise effective learning and has chose COI as its primary theory in which to conduct its research into the effectiveness of online teaching and learning (Shea, 2006; Shea & Bidjerano, 2014; Shea, et al., 2003).

A third bias I have is towards public higher education. I am a product of public, state education from undergraduate degree through terminal degree and have been employed exclusively in public institutes of higher education at both university and community colleges. Being from an educational desert (Hillman, 2014; Hillman & Weichman, 2016) my options for pursuing my Ph.D. were limited. As a full-time employed, single parent, a residential Ph.D. program was not an option for me. If I had not been able to attend a university with a weekend

program, my only other option would be online. To increase my choice of available programs, I would have likely considered for-profit institutions.

It was during this Ph.D. program I developed close relationships with a few of my classmates that I believe were integral to my success. For myself, I wanted to know if other students developed the types of relationships that I experienced during my doctoral work; and, if they did, do they feel that those relationships contributed to their success.

Theoretical Lens

Theories are used to form research questions. The COI was used to form both the grand research question as well as the development of the specific research questions. Theoretical analysis will be used throughout this study to provide a framework for how to look at the experience of online student success (model), to design the problem and utilize specific techniques (methods) and to design the description of how the phenomenon will be studied (methodology). For this study, COI is utilized with a focusing specifically on the impact of the social presence within theory.

The review of the literature indicates internal factors may be of greater consequence than external factors. Although COI provides the theoretical basis from which to study the success of online students, its strength lies in addressing the external factors may lead to student success. The location of the internal factors is currently under debate by several COI researchers. An effective online learning model would need to address the balance of both internal and external factors to promote online student success.

Foundational Dissertations

For the literature review the four similar dissertation studies were used to provide examples of phenomenological research into the lived experience of online students (see Table

1) (Antoine, 2011; Bond, 2014; Heindel, 2014; Macon, 2012). Three of the four foundational studies utilized a homogeneous sample, meaning the participants represented the same online class, were all enrolled in the same program or they all graduated from the same university. The benefits of homogeneous sampling is to reduce the number of variables. Since they are qualitative, the sample size is not large. However, as a homogenous sample they provide the unique experiences of online students in a single program or single course rather than the lived experience of online students regardless of location, university, program or course.

Table 1

Four Foundational Dissertations

Author	Study	Sample Size	Themes	Finding
Antoine, 2011	e-Learning: A Student's Perspective: A Phenomenological Investigation.	Four non-traditional Undergraduate students who dropped out of a traditional college and completed bachelor's degree online.	1. Flexibility 2. Academic Integrity 3. Satisfaction 4. Importance of the Teacher 5. Diminishing need for support and learner proceeds through eLearning process.	Flexibility is the primary factor. No perceived increase in ethical problems or academic integrity. Satisfied with quality of e-Learning experience. Teachers play a critical role in student success.
Bond, 2014	The lived experience of being an online learner in a graduate program.	Homogeneous sample of 10 graduate students recruited through *LinkedIn*	1. Ambition 2. Responsibility 3. Learner Rapport 4. Accessibility	Online learning allowed for individual learning styles, motivational factors and personality traits.
Heindel, 2014	A phenomenological study of the experiences of higher education students with disabilities with	A purposive sample of 12 students with disabilities enrolled in one or more online course at large university.	1. Flexibility 2. Privacy Concerns 3. Lack of Interaction in Online Classes 4. Instructors lack understanding	Used COI theory Learner satisfaction was mixed. Preferred blended course to online.

	online coursework.		of students with disabilities 5. Students not informed of accommodation options 6. Online allows more time to process information to gain understanding	Support and interaction were lacking.
Macon, 2012	Is my online degree worth anything?	10 graduate adult learners who received opposition from colleagues about attending online institution from two different universities	1. Convenience 2. Self-Directed Learning 3. Skepticism about quality of learning platform 4. Career advancement as a result of online degree	Acceptance of online degree has not kept pace with demands of receiving a degree online. Co-researchers are able to refute claims and dispel preconceived notions about online learning.

This dissertation uses a similar non-homogeneous sample similar to Macon's (2012) phenomenological research with participants from a variety of online educational programs. Macon's (2012) study used *LinkedIn* to recruit from a single online, for-profit university. This is different from other phenomenological studies using a homogeneous sample of online students which focuses on the students from a single university or course of study. Macon (2012) concluded meaningful learning occurred for her co-participants, and, long-lasting relationships were established because of their interaction in the course. This dissertation will carry on with Macon's recommendations of areas for further research.

This research study also builds upon the four themes identified within Bond's (2014) research on online graduate students. These internal factors include (a) ambition (opportunity, determination and uncertainty), (b) responsibility (identity and self-reliance), (c) learner rapport

(dichotomous: isolation versus feeling of belonging) and (d) accessibility (convenience and flexibility). These themes align with new additions proposed by Garrison (2011, 2013, 2015) regarding the addition of the metacognitive construct to COI. Bond's themes also align with Shea et al. (2010, 2012, 2014) suggestion of the addition of the learning presence to COI.

Research regarding internal and external factors impacting online student success found within the review of the literature reinforces the themes identified by the four foundational dissertations. In fact, Garrison (n.d.) addresses this dichotomy within the field of online education with an article critique blog post. "The reality is the COI theoretical framework is essentially incompatible with traditional distance education approaches which value independence and autonomy over collaborative discourse in purposeful communities of inquiry," further addressing the dichotomy faced in this dissertation (para. 3). By studying the lived experience of online students we can understand if they attribute their success to their own independence and autonomy. If online student attribute their success to internal factors, this would reflect the application of additional COI constructions suggested by Shea & Bidjeramo (2010, 2012, 2014) as the learning presence to include self-regulation and shared-regulation. Internal factors such as co-regulation as supported by the metacognitive construct or learning presence could be an addition to the orginal COI model as suggested by Garrison & Akyol (2011, 2013, 2015).

The patterns identified by Bond's (2014) and Macon's (2012) studies also align with the COI. This research seeks to expand on the earlier research and help to understand how successful students overcome barriers to learning online and whether their for-profit or non-profit, online education led to gainful employment. Through the *a priori* application of the COI, this study will be focused in a direction different from Bond's (2014) and Macon's (2012) dissertations by

continuing to add to the body of knowledge about the lived experience of online graduate students.

Research Design and Procedures

This qualitative study used a purposive, convenience sample of twelve alumni from both for-profit and non-profit graduate programs. The subjects were collected through both personal and professional networking over a twenty-year career in distance education. Participants were graduates from their 100% online program and were asked to reflect on their experiences and share their narratives. The selected co-researchers provide their perspective of their lived experience as online students, therefore they are more than subjects but are considered co-investigators who contribute to the research process (Creswell, 2013).

Qualitative research includes a storytelling component and conducting these interviews in-person allows for the research participant to tell their story (Silverman, 2000). Therefore, every effort was made to conduct face-to-face interviews with the study participants in a time and place of their convenience. However, limiting interviews to just face-to-face would have excluded participants who live a great distance away. In instances where distance precluded a face-to-face interview, webinar technology, such as Skype or FaceTime, was used. All interviews were audio recorded and transcribed.

Phenomenological methods were used to understand individuals' "field of perception to see life as these individuals see it" (Van Manen, 2003, p. 23). The phenomenological method is composed of three processes (a) the investigation of the phenomenon, (b) the identification of general themes/essence of the phenomena and (c) the comprehension of the essential relationship among themes (Lin, 2008). The data collection issues covered are (a) the selection of

participants, (b) the number of participants in a study, (c) the interviewer and the questions, and (d) the data collection procedures (Englander, 2012).

This study's focus is the lived experience of online students and whether they felt those learning communities, both formal and informal, contributed to their success. This research will provide insight as to whether online students attribute their success to a sense of community found within the formal online class. In contrast, do they turn to informal sources of support such as friends or family, which creates an informal learning community. It will also provide insight into whether the students felt individual characteristics such as self-motivation, self-regulation and self-efficacy played a more important role in their persistence.By understanding the internal and external factors, suggestions can be made that may improve the learning experiences for other online students.

Study Sample

This study used a purposive, non-homogenous sample generated from fieldwork in the primary researcher's career in distance education. In interview-based qualitative research, participants are usually pre-recruited for interviews in a process called fieldwork or backyard research (Englander, 2012; Keegan, 2009). Sample participants graduated from a for-profit or non-profit, 100% online program with either a master's or a doctoral degree.

According to Creswell (2013), sample size of 5 to 25 participants is appropriate for a phenomenology. This study utilized a sample of twelve graduates from eleven different for-profit and non-profit institutions (See Table 2).Their only similarity is they all graduated from a 100% online graduate degree program. As Creswell (2013) states, the participants may be located at a single site but, they need not be. To be included in a study, all the individuals must have experienced the phenomenon and can articulate their lived experiences (Creswell, 2009, 2013;

Van Manen, 2003). This study utilizes Creswell's (2013) guidelines and refers to participants who experienced the phenomenon as co-researchers. Unlike traditional research, which presents the researcher as the authority figure, this qualitative approach validates the participants' experiences by viewing them as experts and collaborators in the process of gathering and interpreting data (Boylorn, 2008).

Table 2

Sample Tracking Table

Sample No.	Institution Name	Online Program	Graduate Level	For Profit/ Non-Profit	Year of Graduation	Pseudonym
1	A University	Instructional Technology	Master's	Non-Profit	2007	Courtney
2	B University	Criminal Justice	Master's	For-Profit	2014	Gary
3	N University	Health Science	Doctoral	Non-Profit	2009	Helen
4	C University	Instructional Design	Doctoral	For-Profit	2009	Jack
5	D University	Educational Technology	Master's	For-Profit	2015	John
6	F University	Health Care Management	Master's	Non-Profit	2015	Julie
7	P University	Criminal Justice	Master's	For-Profit	2008	Kevin
8	L University	Education Learning and Change	Doctoral	Non-Profit	2011	Laurel
9	M University	Educational Management	Doctoral	Non-Profit	2013	Logan
10	E University	Reading Specialist	Master's	Non-Profit	2006	Paula
11	N University	Educational Technology	Master's	Non-Profit	2013	Steve
12	I University	Instructional Technology	Master's	Non-Profit	2013	Valerie

Graduate level students were used for this study because they are experienced with success (Colorado & Eberle, 2010). Due to their prior educational experiences, graduates of master's or doctoral programs are better acquainted with the intrinsic factors such as monitoring

their learning outcomes and making adjustments to their learning processes. Their prior success as undergraduates, their lived experiences, assist with their ability to reflect on the factors required to be successful online students.

A secondary reason for choosing alumni from graduate level programs is while graduate students make up just 14% of the total post-secondary enrollments, they constitute 25% of enrollments exclusively in distance education (NCES, 2014). The third reason for choosing graduate level students was their availability to the primary researcher's fieldwork.

The co-participants are considered successful online learners due to the fact they have graduated from a 100% online, graduate-level program. While the length of time post-graduation may be a maturation error, for the purposes of this research, this time allowed the co-researchers an opportunity to reflect upon the strongest experiences they attributed to their success. As such, the co-researchers for this study were as little as three-months to 15 years post-graduation. Determining gender differences in online learning is not the purpose of this study. Therefore, every effort was made to include an even distribution of male and female participants, resulting in six male and six female co-researchers. Table Two contains a list of co-researchers, their pseudonyms and a basic background.

The co-researchers represent both master's and doctoral degree programs, at both for-profit and non-profit institutions. They represent three primary fields of study: education, health care and criminal justice. These three fields align with the top three graduate level programs for online student enrollment (Allen & Seaman, 2013). Since the co-researchers are generated from the fieldwork of the instructor, many are already familiar with online learning, as they are either also online instructors or are employed within the field of education. This level of experience in the field of online learning represents a bias the co-researchers bring with them into the study.

Role of the Researcher

The role of the researcher in this study is to conduct the interviews with the twelve co-researchers who are part of the researcher's own physical, social network. The co-researchers includes friends, co-workers, and colleagues collected from twenty years of fieldwork in instructional design and online learner support. The challenge to the researcher was to balance these relationships while conducting academic research to understand the lived experience of the co-researchers, not as faculty or friends, but as online students. To successfully set aside preconceived notions or prejudices as much as possible, the researcher underwent Husserl's (1931) bracketing process to acknowledge the bias the researcher was bringing to the research process. As Moustakas (1994) suggests, this heuristic process of understanding the role of the researcher increases an understanding regarding the depth of the phenomenon on behalf of the primary researcher.

Setting of the Study

Individuals choose online education for a variety of reasons. The members of the sample primarily represent a population of online students who hail from what Hillman (2014) described as "educational deserts." Hillman has taken the phrase "food desert," as a metaphor to describe the lack of access to healthy food due to geographic constraints and socio-economic indicators, and applied it to the lack of access to education (Sadler, 2016). Ten of the twelve co-researchers lived over 90 minutes driving distance from the closest university that could offer an appropriate educational experience. Eleven of the twelve co-researchers were employed full-time and all twelve participants fulfilled familial responsibilities during the time of their graduate program. Eight of the twelve co-researchers are in the southwestern counties in NY and northwestern counties in Pennsylvania and hail from "educational deserts" as highlighted on the National

Geographic map shown in Figure 3. A subject-tracking sheet is included which provides the pseudonyms for the co-researchers, and the university and major they attended (See Appendix B).

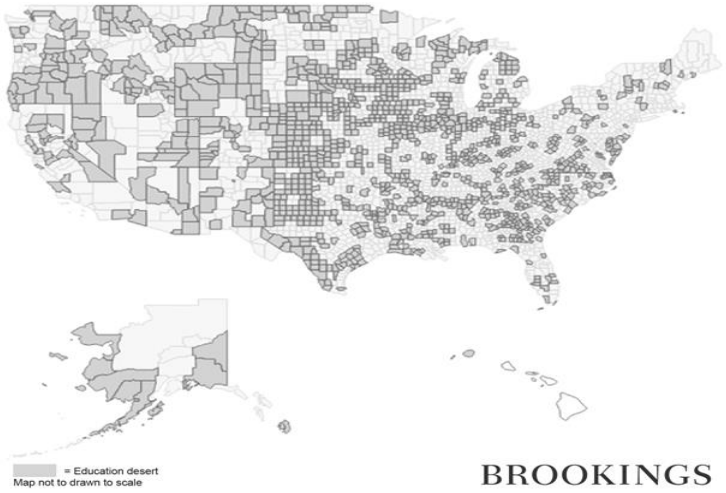

Figure 3. Educational deserts in the United States. Adapted from **"**All education deserts in the United States (metropolitan, micropolitan, or community zones) by geographic region**" by** Sponsler, B. A., & Hillman, N. (2016, April 11). Where you live rather than what you know? The problem with education deserts. [Blog post]. *Brown Center Chalkboard.* Retrieved from https://www.brookings.edu/blog/brown-center-chalkboard/2016/04/11/where-you-live-rather-than-what-you-know-the-problem-with-education-deserts/**).**

Ethical Considerations

Although participants may be employed at education institutions, any affiliation with a college or university was due to their employment status. Since the participants have graduated from their online programs, Institutional Review Board (IRB) approval from the colleges or universites where the participant attended was not necessary. The IRB for Indiana University of Pennsylvania (IUP) provided the ethical oversight for this research (see Appendix F).

The interview questions were submitted to IUP's IRB for the Protection of Human Subjects within the School of Graduate Studies, and Research and approval was granted December 2015 (See Appendix F). Co-researchers were informed participation was voluntary, a pseudonym would replace their identifying information, and they could withdraw from the study

at any time. This information was provided to the co-researchers through an informed consent form which was emailed to the co-researchers prior to scheduling of the interview. A copy was brought to the face-to-face interviews and was signed by the participants prior to the start of the interview. A statement regarding the informed consent and voluntary participation was read once the voice recording began and prior to the first interview question. Following government regulation, the researcher will securely store data from the study for no more than three years.

While the expected risks were minimal, obtaining an educational goal can be emotional. Therefore, counseling options were provided as part of the Informed Consent Form (Appendix F). Subjects were asked to recall information about factors that contributed to success in their online studies. The confidentiality of all responses was preserved by removal of all identifying information and the use of pseudonyms.

When scheduling the interviews, each co-researcher was contacted by email (See Appendix H) and an electronic copy of the informed consent form was sent. For the co-researchers who lived within the nearby vicinity of the primary researcher, a face-to-face interview was conducted. For those whose geographic distance was greater than two hours, Skype or Facetime was used depending on the co-participants' preferences. Since the co-researchers were online students, they had a high comfort level with these technologies; and, it did not appear to impact the quality of the interviews conducted at a distance. For electronic interviews, the co-researchers were asked to print, sign, scan and return the informed consent form by email to the primary researcher. For interviews conducted face-to-face, a printed copy of the informed consent form was provided to the co-researchers, who signed the form and returned to the primary researcher before the interview began.

Method of Obtaining Data

Open-ended interviews were used to capture the data for this study. Capturing the lived experience of participants requires interaction between the interviewer and the interviewee and is the primary data collection procedure used with qualitative research (Almeida, 2012; Englander, 2012). For the interview-based qualitative study, the researcher develops a discussion guide or interview protocol and outlines the key areas; however, it is often amended and refined over the course of the interview as part of the inductive logic process (Keegan, 2009; Lin, 2008; Macon, 2012). While the questions were similar in the beginning, the interview questions were changed and refined over the course of this study. The interviews started out with a basic guideline or interview protocol evolved until the depth of the online learning experience was accounted for and data saturation was reached (Creswell, 2013).

Interview Protocol

The interview protocol was developed with ten interview questions, including follow-ups and examples that are rooted in COI while also considering Bandura's (2001) social cognitive theory and Kavanaugh's (1999) social capital theory. The interview protocol starts with asking basic demographic data about the participants (see Appendix A). Collecting demographic data was important to understanding the background of the participants before pursuing more in-depth interview questions. The demographic data began by first asking about degree information followed by questions on age and professional status. Additional questions about small business and volunteer activity were asked in case the co-researchers were not employed in their field of study but active in the field through entrepreneurship or volunteering.

The interview protocol developed for this study followed the advice of Creswell (2009) who recommends that interview questions include three distinct elements (a) Draw on a common

theme, (b) Questions ask participants to identify the effect the phenomenon had on their lives and (c) Questions seek to identify the importance of interpreting the experience in a unique way. Creswell (2009) also recommends using a focused question to begin the interview by simply asking the co-participants what they have experienced regarding the phenomenon. For this study, the focused question asked the co-researchers why they choose to get an online degree. This question also addressed whether they had any other options, as well as, identifying the most important factors they considered when pursuing their online degree.

The review of the literature indicated online student success could be attributed to both extrinsic and intrinsic factors. The interview protocol includes questions asked the participants to reflect upon a challenge they experienced during the program and who they turned to for personal and academic support. Generating questions of this nature also helps to address research question 1: *What are the barriers to online graduate student success?* By keeping the questions open-ended, students could reflect on what they believe are the most important factors they contributed to their success.

The literature review indicates that for students to persist in their online courses, they need both informal and formal connections with instructors and other students (Tinto, 2006). Therefore, this open-ended question addressed the students' support networks as well as intrinsic and extrinsic factors. Additional interview questions were developed to encourage the participants to open up about the relationships the co-participants developed with both their instructors and their classmates. Additional questions were developed that utilized self-regulation skills including, self-efficacy and self-motivation. Social capital theory was also considered when developing the interview protocol (Kavanaugh, 1999; Kavanaugh, Carrol et al., 2005; Kavanaugh, Reese et al., 2005). Responses to the questions about the instructor and student

relationships, as well as, whom they turned to for personal and academic support will be used to answer RQ 3 and RQ 4.

RQ 3. Is instructor support more important to the online graduate student success than peer support?

RQ 4. What types of social supports do successful online graduate students use?

The interview protocol delved into the type of learning environment the students' experienced. Co-participants were asked if they felt their online learning programs were an isolating experience along with additional details about how coursework was delivered. The participants were also asked about situations that positively or negatively affected the learning, a process recommended by Creswell (2013). The questions forced the co-participants to use imaginative variation and reflect on their online learning experience as if they were a first-time student again (Moustakas, 1994). Knowing what they know upon the completion of the program, would they take the same program, would they make any changes? The follow-up questions also asked what recommendations the co-researchers would have for new online students and online programs. The responses to those questions will be used to answer research question 2: What are the critical factors of online learning that lead to online student success?

Study Methodology

Twelve in-depth interviews were conducted during the months of April - June 2016. Each interview was recorded using an Olympus VN-7200 Digital Voice Recorder. Prior to each interview, the researcher read the following statement "Before we begin, I would like to remind you that this interview will be audio-recorded and I will be taking notes as well." Reciept of the informed consent forms was verified and participants were reminded about their informed consent rights, voluntary participation and process for ending the interview at any time. The

researcher then informed the participants the research was a phenomenology, and as such, they were considered co-researchers and they would be contacted for any further questions, clarification and follow-up.

After the interview, the audio recordings were uploaded into Audacity. This served three purposes (a) to create a backup of the audio files, (b) to control the playback functions during the transcription process and (c) to save the audio file in a common digitial audio file format, mp3. Once the audio files were created, the .mp3 files were uploaded into a Cloud platform called *Voicebase which* uses neural networks and machine learning technology to transcribe audio files (Voicebase, n.d.). The *Voicebase* program generated auto-transcriptions that were approximately 50-60 percent accurate when transcribing a conversation with two people, perhaps greater when transcribing an individual voice. However, there is no format or logical progression of the conversation which is needed for proper coding and for understanding the interview in its context. While *Voicebase* provided a baseline machine transcription, each word was reviewed, edited and formatted by the primary researcher into a Google document which contained a matrix with hyperlinks to each audio file. This was transcribed into a Google document referenced by the co-researcher's pseudonym.

Voicebase may have provided a baseline for the transcription. However, accuracy must be assured. The total transcription process using this technology averaged four to six hours of transcription time per one hour of audio recording. Personal information and references were removed during the transcription process thereby maintaining the co-researchers privacy. Once the baseline transcription was made in *Google Docs* the transcription file was copied into *Microsoft Word* to ensure the accuracy of the transcription.The transcription to *Voicebase*,

Google Docs, and *Microsoft Word* combined to make a three-pass-per-recording policy to ensure accuracy (McLellan, MacQueen, & Neidig, 2003).

Once the transcription process was complete, the twelve interviews were added to Nvivo 11 Pro and a coding structure was created (See Appendix C). The twelve transcriptions were then coded by each of the ten interview questions. The interviews were further coded by the three COI presences, teaching presence, social presence, and cognitive presence as outlined by the theoretical framework.

Verification Process

Validation strategies were implemented to triangulate data from several sources (Creswell, 2009, 2013). These strategies include having participants or co-researchers review the themes generated by the research and corroborate the findings such as member-checking as well as a review by other researchers serving as a peer or external auditor. Performing the interview in a face-to-face environment, when possible, and using video conferencing technology such as Skype or Facetime when not, allowed for observations of the co-researchers to occur. In addition, the researcher to co-participant interactions along with physical setting were observed and recorded in a field journal (Denzin & Lincoln, 2011; Almeida, 2012). Since observations are key to the triangulation of qualitative data, non-verbal communication was recorded. These observations included facial expressions, and other forms of communication such as: laughter, emotional disclosure, and sarcasm. Nvivo also contributed to the qualitative validity by maintaining data integrity, including the coding structure and interview transcriptions.

Summary

Chapter Three describe methodology used to conduct the research for this dissertation. The subjects were collected using purposive sampling through both personal and professional

networking over a twenty-year career in distance education. The twelve participants were selected with the requirement that they have graduated from their 100% online graduate program and can reflect on experiences and share their narratives. Chapter Three describes the primary researchers and outlines preconceived assumptions and biases as part of the phenomenological reduction process of bracketing (Almeida, 2012; Antoine, 2011; Husserl, 1931; Moustakas, 1994). Chapter Three provides an overview of the data collection process including sample selection and the logical and theoretical frameworks used to design the interview protocol.

Chapter Four contains the findings from the interviews and provides the investigation of the phenomenon with structural and textual narratives including a thick and rich description of the phenomenon by the co-researchers. The chapter includes the identification of general themes and essence of the phenomena and it then uses those themes to answer the study's research questions while providing comprehension of the essential relationship among themes done through the transcendental phenomenology process (Lin, 2008; Moustakas, 1994). Chapter Five includes discussion of the findings, conclusions and ideas for future recommendations.

CHAPTER FOUR

RESULTS

Qualitative research has a storytelling tradition (Silverman, 2000). Chapter Four contains stories of co-participants in their own voices and own words recorded using both digital and analog methods. This study used an interview protocol comprised of ten interview questions, including follow-ups and examples. The literature review included COI, Bandura's (2001) social cognitive theory, and Kavanaugh's (1999) social capital theory, which influenced the development of the interview protocol. Additionally, interview questions were generated to identify barriers faced by online students as well as the strategies they employed to be successful.

Data Collection and Analysis

Chapter Four uses Moustakas (1994) transcendental phenomenology process. This process highlights significant elements about phenomenon unknown prior to the investigation. The principle researcher used interpretive integration, a subjective perspective used to analyze the lived experience of the twelve participants who were the co-researchers (Creswell, 2013; Given, 2008). Unlike traditional research that presents the researcher as the authority figure, this qualitative approach validates the participants' experiences by viewing them as experts and collaborators in the process of gathering and interpreting data (Boylorn, 2008; Moustakas, 1994).

Conducting the Interview

Due to geographic distances of over two hours, four of the twelve interviews were conducted online using either Skype or FaceTime. Web conferencing technology was appropriate for this group because as former online students, they are familiar with these types of technologies as a means of overcoming distance constraints. An example of technological effectiveness occurred when a co-researcher, who recently completed a move, completed the

interview from a parking lot after shopping. Although the interview was scheduled in advance, this demonstrates the comfort level online students have not only with the technology itself but also with using it as a tool to accomplish what they wanted to do, when they wanted to do it.

Each of the twelve co-participants signed an informed consent form. If the interview was conducted online, the signed informed consent was received ahead of time. If the interview was conducted face-to-face, a printed copy of the informed consent was brought to the interview and signed by the co-participant before the interview began. Prior to the start of the interviews a statement was read aloud to the participants stating the interviews were audio-recorded and a short consent notice was read co-participants. This consent notice served as a reminder that this was a volunteer study and they could end the interview at any time. Co-participants were also told that notes would be taken in a field journal during the interviews. These notes served two purposes: first, they served as a backup to the audio recording in case of technical failure and secondly, the notes provided an outline of the interview and insights to the primary researcher to ask additional follow-up questions to check for meaning and clarification. Immediately following the interviews, follow-up notes were added to the field journal with the interviewer's initial thoughts regarding the process and possible findings. Co-researchers then verified the information obtained during their interviews.

Interviews averaged 45 minutes with the longest being over two hours. Once the interviews were conducted, they were transcribed using *Voicebase*, a cloud-based transcription service. *Voicebase* had approximately 60% transcription accuracy. While the wording was appropriate, phrasing and sentence structure were not in a readable format following machine transcription. The initial *Voicebase* transcriptions were copied and pasted into Microsoft Word and corrected for sentencing and phrasing to ensure accuracy. The transcriptions were cleaned to

remove phrases such as “um” and “you know” that occur during normal speech. This process took approximately one hour per 15 minutes of speech. Therefore, a 45-minute interview took three hours to listen and correct in *Microsoft Word*. The process of transcribing in *Voicebase* and correcting in *Microsoft Word* took well over sixty hours for all twelve co-researcher interviews.

Data Analysis

Data analysis within phenomenological research varies greatly from study to study. Unlike other methodologies, “phenomenology cannot be reduced to a ‘cookbook’ set of instructions as it is more of an approach, an attitude, an investigative posture with a set of goals” (Keen, 1975, p. 41). The data analysis was conducted using Nvivo, a qualitative data software package that combines data management analysis used for open coding (Nvivo, 2016). Data developed from the twelve individual transcripts were analyzed in two different ways. The first data analysis as recommended by Bernard and Ryan (2010) was conducted through the development of word lists and Key-Words-In-Context (KWIC). The second data analysis was done by cutting and sorting interview questions and coding the responses within Nvivo. The interview questions were driven by research questions influenced by COI. Transcripts were coded according to suggested COI presences in addition to Hillman and Weichman’s (2016) findings on educational deserts and using Bernard and Ryan’s (2010) suggestion to code by theory-related material.

Word Lists and Node Generation

Data analysis began with a Nvivo word frequency query. Word frequency count was limited to 100 words with a minimum of three letters to help identify the most common words spoken by co-researchers in order to identify patterns and to assist with coding process. This word count showed elemental words such as ‘like’, ‘you know’, and other colloquialisms

commonly recorded during the interview process. A second word-query was run with 500 words and a minimum limit of six letters. The words corresponding to the researcher or co-researchers' pseudonyms as well as information regarding their specific program or institution were added to the stop word list to remove from the word cloud. Themes from interviews began to emerge and were added to the Node list. After this process, a word cloud was generated (see Figure 4).

Figure 4. Word cloud created with Nvivo Pro 11.

Once the word map was created and primary words added to the nodes list for later coding, a tree map image was created as shown below in Figure 5.

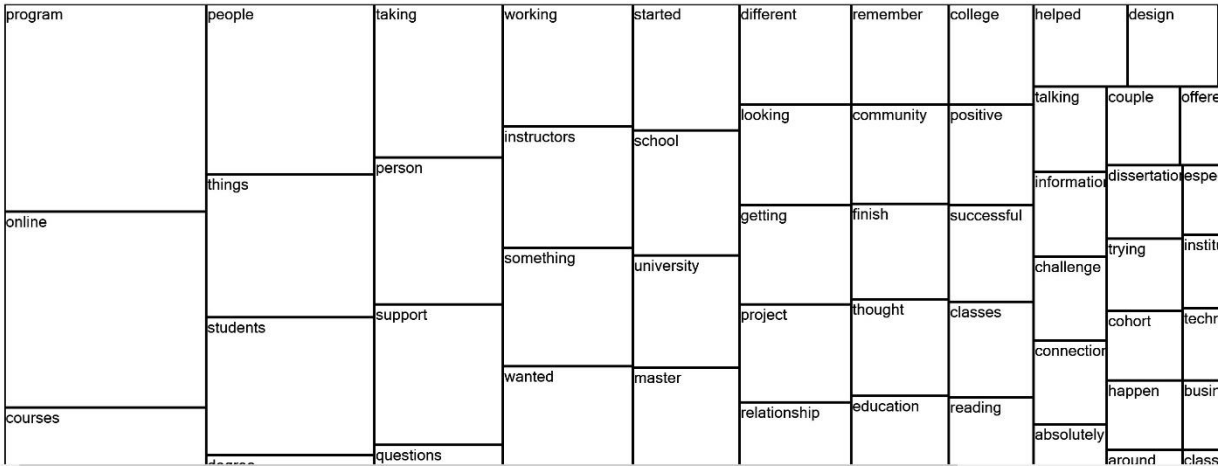

*Figure 5***.** Word tree created with Nvivo Pro 11.

Once the word map and tree map were created, the nodes were automatically generated from the list of words most often referenced by the co-researchers. A total of 37 nodes or categories were created by the word map and the common word process in Nvivo (see Table 3).

Table 3

Nvivo Codes Generated by Word Frequency Query

Name	Sources	References
Support	17	577
Learning	17	217
University	17	201
Community	17	143
Institution	17	133
Relationships	17	130
Connection	17	122
Discussion	16	115
Successful	17	110
Challenge	17	80
Involved	16	78
Instructional	13	73
Residency	15	72
Cohort	15	68
Technology	15	61
Classroom	14	56
Administration	13	47
Emotional	13	45
Interact	10	42
Undergrad	15	38
Isolating	17	37
Husband	10	35
Opportunities	12	35
Happy	14	32
Struggle	11	31
Balance	12	31
Collegues	10	30
Facebook	12	28
Fabulous	10	27
Traditional	8	26
bachelor	12	24
Network	8	23
Learners	8	16

The word frequency count was exported into Microsoft Excel and a graphical representation was created as a pie chart of words with over 100 mentions throughout the 12 interviews. The top four most frequent words were (a) support, (b) online program, (c) degree and (d) learning as shown in Figure 6.

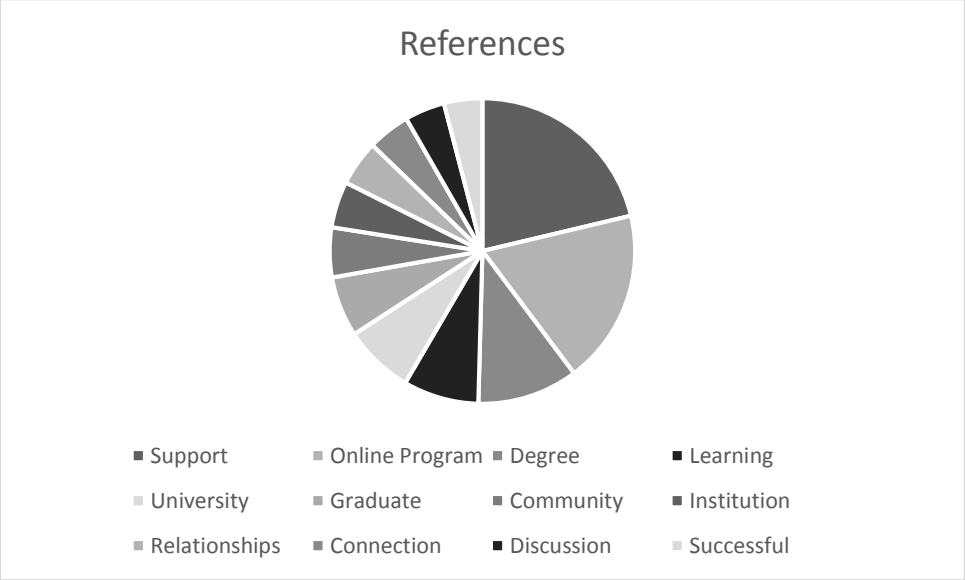

Figure 6. Word frequency count with over 100 references created with Nvivo Pro 11.

Upon removing common elements such as online program, degree, institution, graduate, and university, common words used as part of the interview questions, the word frequency count shows the remaining words from the top twelve items align with the COI themes including (a) support, (b) learning, (c) community, (d) relationships, (e) connections, (f) discussion and (g) successful. Once the word frequency analysis was complete, the interview protocol (See Appendix A) was added into Nvivo under nodes for coding purposes.

Once the initial Nvivo analysis was complete, the remaining data was organized using a modification of the Stevick (1971)-Colizzi (1973)-Keen (1975) Method of Analysis of Phenomenological Data (Moustakas, 1994, p. 121-122). The epoche` process began by bracketing the researcher's prior experience by setting aside judgment, prejudice and viewing the

phenomenon with a fresh eye. This process is the cornerstone of transcendental phenomenology (Moustakas, 1994). The overview of this process was completed within Chapter Three. The next step in the process was to create a verbatim transcript of each participant and record all relevant statements. The word count frequencies revealed that the themes generated by research were preliminarily aligning with COI which was used to develop the interview protocol. Once these basic Nvivo queries were completed, the interviews were coded to questions contained within the interview protocol (See Appendix C).

Co-Researchers' Narratives

Before continuing to the next steps within the transcendental phenomenology process the co-researchers will be introduced. Questions regarding demographic information were asked of co-researchers to increase comfort levels and to learn more about their history and expertise. The following narratives contain the background information of each of the twelve co-participants using their assigned pseudonyms (Appendix B).

Courtney is between fifty-five to sixty-four and is employed in academic technology at a small (>3,000 students) community college in rural, southwestern New York. Courtney completed her master's degree in Curriculum Development and Instructional Technology in 2005 through A University. She is an active volunteer in her local community and participates in an educational, philanthropic sorority, the American Cancer Society, and church. Courtney is also an adjunct instructor at her community college and is committed to her students. Courtney tries very hard to attend every one of the graduation ceremonies because "as an instructor, I need to be there to celebrate my students' successes." Courtney's interview was conducted face-to-face at her place of employment.

Gary is currently employed as a campus police officer at a small (<2,500 students) private college in south-central Pennsylvania. Prior to his recent move, Gary was employed as an assistant warden of a county jail in northwestern Pennsylvania and an adjunct professor at a small (<3,000 FTE) community college in southwestern New York. Gary received his masters of science in Criminal Justice Administration in April 2014 from B University in Orange Beach, Alabama. Gary's interview was conducted using Skype from his home. Gary is sixty-four.

Helen is "forty-eight and looking lovely." Helen is employed as a director at a small community college in rural southwestern New York with a large teaching load. Helen received her Doctorate in Health Sciences in October 2009 from Nova Southeastern University. Helen's interview was conducted face-to-face from her office.

Jack received his doctoral degree in Instructional Design for Online Learning in October of 2009. Jack is fifty-six and has been employed for over fourteen years at a large university (>15,000 students) in central Pennsylvania. Jack has prior experience in video production for a large media market in southwestern Pennsylvania. He began his career at his university as a master's student, still maintains strong ties with the faculty and teaches as an adjunct. Jack's interview was conducted face-to-face in his office.

John who is between fifty-five and sixty-five years old, has recently graduated from his online program. He received his master's degree in December 2015. He is employed as an adjunct computer science professor at a small (<3,000 students) community college in rural southwestern New York and as a full-time computer programmer for over twenty-one years. In addition, John builds websites for businesses by request as he does not advertise his services. John's interview was conducted in a library at the college where he is an adjunct professor.

Julie is and is one of the few students who had multiple options to attend a local university for her master's degree program as she hails from a large metropolitan city in northeastern Florida. Instead of choosing a local university, Julie returned to her alma mater in central Pennsylvania to complete her online master's degree in Health Science in May 2015. Julie is forty eight years old and has been a registered nurse for the past twenty-six years and in her words, "I love being a nurse." Julie has gone through quite a few major life milestones including her recent marriage and a job promotion as Director of Quality, Risk, and Safety. Julie's interview was conducted using Skype from her home.

Kevin, resides in North Carolina, and has recently remarried. Due to a recent move and subsequent time constraints, Kevin's interview was conducted using FaceTime from the parking lot at a shopping center. Kevin is in the 35 to 44 age bracket and received his master's in Criminal Justice in Public Administration in 2008. He is currently employed with a federal criminal investigation unit and credits his online degree with helping him to achieve this goal despite the age restrictions.

Laurel began her coursework with a certificate of online teaching and continued on to receive her doctorate in Education, Learning, and Change in 2011. Laurel is a project manager in continuing education for a small (<3,000 students) community college in rural southwestern New York where she is also an online adjunct instructor. Laurel has pursued her education beginning with her bachelor's degree which she obtained while raising children and working full-time. She can remember her youngest child sitting on her lap while she completed her homework. Her son is currently enrolled in a doctoral program as well. Laurel's interview was conducted face-to-face from a conference room at her place of employment. Laurel is sixty years old

Logan is fifty-six and received his doctorate in Management, Community College Policy and Administration in May of 2013. He is the Director of Online Learning at a large (>15,000 students) community college in Western New York and is also an adjunct instructor at another community college. Logan's interview was conducted from his office using Skype.

Paula is in the thirty-five to forty-four age bracket and recently returned to the workforce full-time as a reading specialist for her local school district in northwestern Pennsylvania. Paula received her master's in Reading in 2006.Paula began the program to fulfill her Act 48 credits as required by Pennsylvania for all K-12 instructors. She continued past the ACT 48 certification to complete her master's degree while raising twin daughters and welcoming two additional daughters to her family. Paula's interview was conducted at the home of the primary researcher.

Steve is in the 45-54 age range and is a veteran of the United States Air Force. He completed two of his three online degrees while serving active duty, earning his bachelor's in Information Systems Management while stationed overseas. His doctoral degree was completed after his retirement from the Air Force. Steve's "side-hustle," as he describes his consulting company, helps small business owners leverage social media to increase business opportunities. Steve is the director of technology enhanced instruction at a small (<3,000 students) community college in southwestern New York. Steve's interview was conducted face-to-face at his office.

Valerie completed three degrees online at three different universities. Valerie is is a thirty-four year old and completed all three of her degrees while raising two sons during which time she was a graduate assistant for her master's program serving as a teaching assistant for undergraduate hybrid courses. She describes the experience as "probably the best experience I had." She continued noting, "When I was doing my graduate assistant work and being a teacher's assistant, I fell in love with teaching, but the thing that I struggle with is that I fell in

love with online teaching." Valerie is employed part-time in technology and marketing for a higher education council in northwestern Pennsylvania and also teaches technology and marketing in their adult education classes. Valerie owns a small business that is half freelance, half consulting where she provides web development, web content writing, and marketing strategies. Valerie and her interview was conducted in person at her home.

The following tables provide a demographic background, the degrees pursued by the co-researchers and type of institutions from which they graduated. A more in-depth analysis of the co-participants can be found in Appendix B. The sample is evenly distributed with 50% men and 50% women (Table 4). Fifty percent of the co-researchers were in the 55-64 age bracket indicating for this sample that participants were not only non-traditional but also decided to further their education later in life (Table 4). The co-researchers represented three primary areas of study (a) education, (b) criminal justice and (c) health care (Table 5). The overwhelming majority of participants (67%) obtained their master's degree online through a non-profit institution (Table 5).

Table 4

Participant Demographics

Characteristic		**N**	**%**
Gender			
	Female	6	50%
	Male	6	50%
Age			
	25-34	1	8%
	35-44	2	17%
	45-54	3	25%
	55-64	6	50%

Table 5

Academic Degree and Area of Study of the Co-Researchers

Characteristic		N	%
Program			
	Education	7	67%
	Criminal Justice	2	17%
	Health Care	2	17%
Degree			
	Masters	8	67%
	Doctoral	4	33%
Institution Type			
	Non-Profit	8	67%
	For-Profit	4	33%

Table 6

Co-Researchers Graduation Year and Time to Study

Co-Participant	Graduation Year	# of Years since Graduation
Courtney	2007	9
Gary	2014	2
Helen	2009	7
Jack	2009	7
John	2015	1
Julie	2001	1
Kevin	2008	8
Laurel	2011	5
Logan	2013	3
Paula	2006	10
Steve	2013	3
Valerie	2013	3

Table **7**

Number of Years Between Graduation and Time of the Study

# of Years	# of Participants
3 years and less	6
4 to 7 years	3
8 years and more	3

Theme Development

Once learning about co-researchers' backgrounds, narratives containing their thick, rich descriptions were used to create structural and textual themes as indicated within the next step of the transcendental phenomenology process (Moustakas, 1994). The strength of transcendental phenomenology is the systematic approach that can be followed by inexperienced researchers (Moerer-Urdahl & Creswell, 2004). This approach relies on individual experiences to provide stories told from the participants' voices (Moerer-Urdahl & Creswell, 2004). Hearing the stories of their experiences from the voice of the co-researchers is the goal of this study.

Significant Statements

The first step in phenomenological variation uses horizontalization to identify units of meaning. Horizontalization encourages each response to be treated equally, with none receiving greater weight compared to others (Moustakas, 1994). Horizontal statements represent non-repetitive, non-overlapping, significant statements (Moerer-Urdahl & Creswell, 2004). During this phase of analysis, the goal is simply to learn how individuals viewed their online learning experience. The prevailing view of online learning is that the experience as a solo activity. The literature review, however, suggests that to be successful, online learning communities should be employed. The example below of horizontalization of selected statements was generated from

question two of the interview protocol. This horizontalization process indicates that while the students did not feel isolated during online studies, the relationships developed did not indicate strong bonds with other students. This developed into a theme to be further addressed.

Question 2: Please tell me about your online learning experience. For example: Do you feel it was an isolating experience or do you feel you were part of the class even though you were separated from your classmates and instructor?

Selective significant statements about the type of online learning environment

- You would see many of the same names in the classes. So you developed a sort of a symbiotic relationship with those people, you know. It is funny because even though you don't have a face to put to them, you know, you still feel a kinship.
- Well, the school I went to, you were required to get on their (LMS) system and interact with other students. You had to answer; you had to critique other people's work and respond to their input. I felt like I was part of the class and I learned a lot actually from the other students. They get a different take on the material that you're reading or that you're researching here. You're able to use that input, just like you would in regular classroom, so I enjoyed it.
- One of them is organizing, he's almost a friend of mine, and he's organizing some sort of a panel discussion and of course the subject I'm talking about in about three weeks. It was a panel discussion about online technology in the classroom. So where we're staying…we're not in constant touch now, but we are keeping in touch.
- Researcher: So you said he was almost a friend for you, was he a friend, colleague? John: Colleague's a great word but you know a friend you have to your house for dinner, he's not going to pop up from Florida for a meal.

- A couple of them. We've stayed in touch we offered e-mails in our last five weeks …let's see if we can keep in touch. I heard back from one or two others but it's really been [everyone] kind of goes off into their own world, almost like real college.
- No, I would say definitely not (isolated) … a couple of things [one] is the structure of the classes were critical to communicate, to encouraging communication between the students. [Two]is when you got stuck, or are in a bind, or I don't know what I'm doing here because of those discussions that were, of course, they're asynchronous online. You got to know people, and you felt comfortable contacting them through the email and structure that the college provided. So you build a little bit more of a relationship that way. I also have very good relationships with several instructors.
- We had to do a program evaluation and one of my biggest criticisms is that it wasn't a community. I had one professor in particular that did that very well. Most of them were pretty much here's the discussion boards, here's your assignment, get 'er done. So it was isolating unless you got brave enough to email people privately. Yeah, it was isolating in that respect.
- You know they, they were able to give you that realistic look at what you were doing. Sometimes doing things online can be very isolated because it is just you, and to not everybody should do online.

From the selected statements above and additional statements generated from the co-researchers' transcriptions, themes began to emerge that represented the essence of the co-researcher's lived experience:

1. Online students feel the impact of educational deserts when making a choice about enrolling in an online university or online program.

2. Online students do not feel isolated. They believe that the community of learners is temporary. This sense of community lasts the length of the course or program and is often assignment-based such as participation through a discussion board or chat room.
3. Online students do not turn to instructors or their peers for academic support, nor are they using their institutions academic support resources.
4. Online learner success is a primarily a product of intrinsic factors.

These themes found from co-researchers' thick textual descriptions aligned with the meaning units used to answer the study's original research questions as listed in Table 8: meaning units and research questions.

Table 8

Meaning Units and Research Questions

MEANING UNITS	**RESEARCH QUESTIONS**
Barriers to Success	RQ1: What are the barriers to online graduate student success?
Critical Factors of Success	RQ2: What are the critical factors of online learning that lead to online graduate student success?
Importance of Teaching Presence vs. Social Presence	RQ3: Is instructor support more important to the online graduate student success than peer support?
Sources of Personal and Academic Support	RQ4: What types of social supports do successful online graduate students use?

Once themes are identified, a synthesis of meanings and essences is conducted through intuitive integration and is the last step in the phenomenological analysis. The results of intuitive integration process correspond with each of the four research questions identified in Chapter 3. Moustakas (1994) recommends using interpretive integration to generate themes to understand the essence of co-researchers' lived experiences with the phenomenon of online education. By

completing intuitive integration, “the textual structure synthesis represents the essence” of co-researcher’s experience (Moustakas, 1994, p.100).This process is complete when the individual textual discussion is integrated with descriptions (Antoine, 2011).

The final step in transcendental phenomenology process is to use imaginative variation to shift various aspects of comprehensive descriptions to complete a thematic analysis and provide a vivid picture of the experience (Patton, 2002). From the thematic analysis, the researcher then provides a description of “what” was experienced in textural descriptions, and “how” it was experienced in structural descriptions (Patton, 2002; Moustakas, 1994). Four themes emerged from data. The phenomenon of the lived experience of successful online learners’ essential structures include (a) barriers to success, (b) factors of success, (c) importance of community and (d) sources of personal and academic support. These four themes were then used to answer the study’s research questions.

Barriers to Success

Students use online learning to overcome the barriers imposed by traditional education. By overcoming geographic barriers and time constraints, online learning helps the learner succeed by providing access to programs and educational institutions which would otherwise be unavailable to the non-traditional learner who must also provide for their families by working full-time jobs while pursuing educational goals.

One of the themes generated during the course of the study is the identification of barriers to online learning success. In other words, what stopped online students from being successful? These themes were used to answer RQ1: What are the barriers to online graduate student success?

The themes were generated by asking co-participants to answer questions about their online learning experience, how their online program was delivered, and why they chose to receive their degree online (see Appendix A). The common barriers identified with online learning include convenience, cost, efficiency and time. Additional themes included availability of the programs and whether the institution was accredited and reputable.

These themes address a multitude of barriers that online students must overcome to be successful in their educational endeavors. However, these barriers are also the same ones all students must overcome to complete traditional degrees. The co-participants in this study chose online learning to overcome barriers to completing a post-secondary graduate education. While learning online creates its own barriers, the online learning modality is used to overcome barriers imposed by traditional education.

> Courtney: To just fit everything in at the time. Time would probably be the biggest challenge because as we all know online courses are very work intensive. Lots and lots of limited hours of sleep.

Two themes arose in regards to convenience. The first convenience theme centered on the ability to work while pursuing their education. The second was the ability to balance family needs. The two different needs were often dependent upon co-researchers' age and family dynamics at the time of enrollment. Courtney, Julie, Jack, and Laurel said online learning was convenient for them because it allows them to pursue their education while continuing to work full-time. Kevin, Paula, and Valerie mentioned online learning allowed them to balance family needs.

> Laurel: For me, it just made the most sense because I couldn't, I couldn't leave my job. You know, I had to find a way that worked. It just seemed to be the best route for me.

Kevin: At the time, I was a single parent, working a full-time job, working fifty hours a week and it was just more convenient to be able to do it online. You know, not have to travel to a physical brick and mortar building at a certain time, on a certain day every week. Online gives you a lot of flexibility with your time.

Hillman (2016) used the metaphor for educational deserts as a way of illustrating the lack of available educational opportunities in an area. Non-traditional, graduate-level, online students are often impacted by two educational deserts: one is a lack of educational institutions, and the other is the lack of educational programs. Ten of the co-researchers indicated hailing from and educational desert affected their choice in selecting both educational institutions as well as educational programs. Only two co-researchers, Julie and Logan, mentioned they had other options for pursuing a graduate degree because of their proximity to larger cities with the more traditional educational offering.

Of the barriers identified by the co-researchers, time and energy were a critical factor faced by the online students:

Helen: Living without balance. I think that was the biggest challenge. I didn't have five minutes. No balance, just all work for how many years in a row and it's tiring, and it's very taxing I think emotionally and physically and I never, I was so tired.

Others such as Julie and Logan described facing academic challenges.

Julie: I wasn't a very good writer at first. I hadn't been to school since 1990, and now it's 2013, and they're telling me to write papers in APA format and I didn't have a clue what APA meant. We had typewriters, like real typewriters. So I felt that I…it was a real

struggle at first to clean out the cobwebs. You're 46 years old and you had to learn how to write papers. It was a challenge for me.

Logan: I have some writing issues. I am not the greatest writer in the academic world, and I had to overcome that. Fortunately, the program had that you had to take and pass a library course, a research course, before you were officially admitted into the program. That course really helped a lot.

In describing online experiences, the co-researchers talked about a level of rigor demanded of students of any graduate degree program. The co-researchers shared examples of a global learning experience that brick and mortar graduate programs would be hard-pressed to provide:

Kevin: Some of the classes, some of the students were in California. I have one that was in the military and she was stationed in Guam. And there are some like in Alabama and other states. You had to participate with everybody, but you actually get to meet a lot of different people, from a lot of different areas, that I don't really think you get to do if you're in a brick and mortar setting.

Overall, the co-researchers shared positive aspects of meeting face-to-face, the sense of community that it created and strength of the relationships that developed. In hearing about some of the students' doctoral experiences, they are being exposed to international viewpoints and were gaining access to the leading experts in the field.

Logan: Our instructors were particularly impressive. There were a lot of people involved with the federal government. We had a particular instructor that had a program with the higher education commission that kind of drove policy for all Community Colleges.

Face-to-face meeting times were influential to the participants in feeling a connection to the learning community. While it would appear that meeting face-to-face would negate the convenience of online learning, co-researchers for this study did not mention its inconvenience. For those attending institutions that had a residential component, they did not mention the difficulty in arranging cross-country travel or other logistical concerns. Only Paula mentioned the difficulty in arranging child care for her week-long residency.

> Paula: Probably being away from the kiddos for the week was a challenge [for me]. Yeah, the clinical, that was a challenge. It was very busy because they were packing, like. I think maybe on campus that might be a three-week experience and they were like compacting it into one.

Critical Factors of Success

Themes describing the essence of online students' success were generated by asking co-participants to describe challenges they had to overcame to be successful and what factors they felt contributed to their success (Appendix A).Their responses were used to answer RQ2: "What are the critical factors that lead to online graduate student success?"

The literature review contained in Chapter Two reviewed factors of success as a product of both intrinsic and extrinsic factors.In order to delve deeper into this intrinsic motivation and level of support that students receive in their online course, co-researchers were asked what challenge they had to overcome and whom they turned to for both academic and personal support. Few co-researchers described facing a challenge that was similar to other co-researchers. Each challenge was individual and unique just like the students themselves.The academic and personal support were quite varied with an interesting variables that began to show itself in regards to whom online students turned to for academic support.

The results indicate the critical factor to online student success is the students themselves. Ultimately, students' inherent characteristics such as intrinsic resilience, grit, and will to succeed are what lead to success. This finding, however, does not negate the responsibility of the institution nor instructor. In fact, building an online learning environment that encourages students' success is paramount. Institutions and instructors should present and provide a quality product which encourages students to succeed.

Online students are successful because intrinsic factors such as self-regulation, self-efficacy skills, and self-motivation. These self-regulation factors include goal-setting, not allowing themselves to be paralyzed by failure and remaining confident in the ability to be successful (Williams & Hellman, 2004). Motivation and self-efficacy are considered parts of the self-regulated learning skills (Bandura, 1997). Intrinsic factors that contribute to self-regulation include self-motivation and self-reflection. Many of the co-researchers reflected that their undergraduate experience tempered the intrinsic factor since they already experienced being asuccessful student.

Courtney, Gary, and Paula mentioned their internal drives as a major factor in their academic success. However, they were concentrating on the bigger picture regarding employment opportunities.

> Gary: I think it is up to you individually to make it what you want it to be. I was very serious when I went into it. I spent a lot of time on it, a lot of energy, and a lot of money, so it was important to me to get the most I could get out of it. When I went into it, I really wanted to do it. That was a driving thing. I wanted that education and I thought it would help my career and it did. And I just wanted to do it for me; it was something that I wanted to achieve.

Paula: I did know that I wanted to be a reading specialist down the road and my master's is what got me this job now. If I didn't have my Reading degree, I wouldn't have the reading specialist job, obviously, so when that was the foot in the door. It was necessary and I love my job now, so it's great.

John and Julie mentioned additional external motivators such as financial incentives and student supports established by the institution:

John: [The university] sent a warning out that if you continue, your program will keep the price. If you drop out for a period of time, the new price is…and it wasn't a lot, it was just an offer of a little pinch, say, "Ok. Keep going". I don't like leaving things undone and that happens every now and then but this was structured in such a way that it encourages you to keep going. You had that connection.

Julie: And externally, the factors for me were that I had the support of people at [the university]. I had this connection with professors and I believe, for me, being an undergrad from [the university], I believe that helped me as well. That pushed me also.

Other's such as Helen and Jack, showed characteristics that Angela Duckworth (Duckworth & Gross, 2014) would describe as "grit":

Helen: I had the intellect. Not that I'm brilliant, but I was a scrapper and I'm the persevering type of person that stuck it out. But you see people just evaporate. I just don't quit… sometimes to my detriment. But I just won't quit something very easily.

Jack: I mean it's one of those things where you have to be self-motivated. You have to have the ability to go in and know what has to be done and get it done and move forward.

Valerie: Since you're not in a face-to-face environment, you have to rely a lot on yourself for a lot of things. If you feel comfortable with going out and finding the answer for

yourself, I think that's a big asset to have. So, it's made me be a lot more resilient and problem-solving and it's also given me the opportunity to know that I can have that determination to follow through on things.

For Paula, one of the factors of her success was the ability to work ahead in online classes as it fit with her learning style:

Paula: You could read ahead or, you know, depending on what you have going on [at the time] you could work ahead and post things in advance. Then you have to wait for people to respond so that you could respond, you know, there is that hang up where it's like, "Oh. what are you talking about," like, because they're slow pokes at that eleventh hour. There was an option to work ahead that was nice if you foresaw that you had other things going on.

The sub-themes generated from external factors of success include financial incentives, student supports, course design, as well as connection within the learning community:

Julie: Externally, the factors for me were that I had the support people at F University. I had this connection with professors and I believe, for me, being an undergrad from F. University, I believe that helped me as well. That pushed me also. And also, having support people around you is important. My husband was incredibly supportive, my parents were amazing, and my co-workers and friends, they knew this was really, really important to me and they knew they weren't going to see me for about two years. But, they understood that there was a light at the end of the tunnel and that I would be great on the other end. I do, I think it is internal/external.

Logan: The library and research department there was phenomenal. There was a concierge, that's what they called it. It was a single point of contact for our online

programs. There weren't any actual academic support services. That is probably the nature of it being a doctoral program.

For the purpose of this research, the cognitive presence question (Appendix B-Question 9) was developed to investigate the knowledge the learner gained by the learner and how it applied to their field of study. The co-participants were asked to reflect upon how online learning helped them become more knowledgeable about the field. There were as many different answers as there were co-researchers. However, some common themes were identified (e.g. an altered thinking process, researching skills and increased global perspective). The co-researchers talked at length about how online studies helped prepare them not only for employment but also to be better thinkers, better scholars and better problem solvers:

Julie: It has impacted (me) in so many ways. My husband would be the first one to tell you; I am light years ahead of …of how I am. The way I think. I think more strategically. He was already proud of me, but I can have a conversation and I can give him some pointers, and he learned things from the program from when I was in school. And even today I'll tell him, what do you think about this, maybe that will help. So I think I have developed and matured. I'm smarter. I feel more confident with myself.

Helen**:** I think I learned more global things and I didn't want my doctorate in O.T. just for that reason I wanted to. Ok, how else does everything work and how can I look at health care policy and use it to my profession's advantage?

Completing an online degree has allowed the co-researchers to achieve academic goals they would not have otherwise been able to achieve, to build confidence and to improve employment opportunities.

Julie: I think I have developed and matured. I'm smarter. I feel more confident with myself. And going into a new role, I was able to increase my salary. That is fantastic. I am always the person to think, I love just to work, I don't work for money, I don't want to ever think that way. I just think that if you go down that road, it's just bad for me. So, I don't think of it that way. But that is a great by-product that I am making a little bit more money that helps pay the bill for F University.

Gary: It was a big deal for me, personally, just to get it and I have some resumes out, and I think that it helps open doors to have it on your CV or resume and you are able to say you have that graduate degree. I think it's closed some doors too. This job at [college] that I have, I think they thought I was over-qualified and they didn't want to hire me at first.

Kevin: D.O.J. actually sees the value of getting a degree online and what it means for educating their employees and making them better employees. But I do know there's definitely places that I've interviewed in the past that look at it as well, you didn't sit in a classroom, so you really didn't learn anything, so that degree doesn't mean anything. But that was also probably a decade ago, so a lot changed. I think a lot of places are going more to an online system just because it's more convenient. But I also think it helps people if (they are) on the fence about whether they want to stick with it or not it makes it a little easier for them to commit. Whether it's a bachelor, or masters, or a Ph D., having the option of online makes a big difference.

The co-researchers recommendations for other online students centered on improving self-regulation skills such as communicating with instructors, time-management skills and work ethic.

Logan: The best advice I can give any student that is pursuing this (online degree) is to communicate, communicate, and communicate. Make sure that you are constantly in touch with both your colleagues and your professors, so they know what's going on and can help you.

Paula: Just to stay on top of, like, timelines, where, like, even the suggested timelines, like, you don't want to fall behind because then it gets overwhelming but that's in any class. You've kept up with the material, and all of that, or you just dig yourself in a hole. So, keep up with the timelines, so you don't get overwhelmed.

Julie: I think it's really important to make sure you are ready, mentally ready. You have a good setup, your desk and a real computer, and have your notebooks and little post-its and tabs and get yourself ready. Make sure you have adequate time to read over the syllabus; get yourself a calendar. Make sure you are so organized, and that certain days of the week you are going to be super busy.

The co-researchers also recommended online students manage extrinsic factors by researching the school prior to enrollment, taking a trial course to make sure online learning is really going to fit their learning style and to enjoy the experience:

Jack: You know, for the most part, you do have to do your research and when you're looking for an online school, do the research and look at the university. Look at what people are saying and look at that as "Where's it coming from." I understand that not everybody has a good experience in any, I mean there are people who come here to [brick and mortar university] they don't have that good experience, and they're going to complain about it, so I mean I did the research.

John: Online education is going to be anyplace, anytime, anywhere, anybody. And that's where it's going to end up. [Students are] always going to be learning things so you better get good at it and here's your opportunity.

Kevin: I guess the other the other piece, I would say is, enjoy it while you're there. Don't take it for granted. You're taking online classes. Actually, enjoy the time you have and learn as much you can while you have got those people at your disposal.

Logan: They really did a good job. This sounds as corny as hell, but making us feel special. Constantly following up with us, making sure our textbooks were taken care of and delivered. It was really a high-end customer service model that really did inspire me to write what I wrote, how I wrote it, based upon the program I was in. I think that was the best part of it, was the customer service model they had. And again, only 14 out of 25 students got through it, but I think the problems they had to overcome were insurmountable with their personal lives that we see in every other program.

The co-researcher's textual descriptions above have unusual recommendations. While improving access to technology and providing quality training programs are common recommendations to online learning. A face-to-face support system with local mentors is a new recommendation; and, it is supported by two of the co-researchers within this study, Helen and Valerie. Logan's recognition of his university's customer-service model is also unusual; however, he recognizes student persistence remains a problem even when providing a multitude of student supports.

Julie's recommendation for improving online programs harkened back to her experience with meeting her instructors in person and the lifelong connection she feels she has to them. She

suggests all online institutions find a way to make a face-to-face connection or at least a live, online connection with their instructors.

> Julie: I really think that it's important if you can make it happen because I know that students are from all over the United States, that if there is a way to meet them face to face, the professors, I think that really helps. And if you can't meet face to face, at least do a Skype, or FaceTime, or something like that.

All of the co-researchers mentioned they attributed success to intrinsic factors while a few, such as Julie and Laurel, also acquiesced that external factors contributed as well. Online student success is a balance and successful navigation of both extrinsic and intrinsic factors.

> Julie: I believe it is external and internal for students. You have to have your internal drive. You have to want to do this. You have to do it, even if you were in a classroom. Nobody is making you want to do this. It's something that you want to. So you have to be internally driven to complete the program. And externally, the factors for me were that I had the support people from my alma mater.

While these findings may be applied to any student, it is magnified in an online learning environment where persistence and success are dependent upon students being self-directed, self-regulating and self-motivating. What has been effectively addressed by COI is the interrelationship between students, instructors and shared cognition developed within the online learning environment. These are the extrinsic factors that affect online student success. Overarchingly, thematic analysis conducted in this study indicates that something is missing from COI. What has been missing is the intrinsic characteristics of the students themselves. Therefore, it is important to return to the research on the original theory to address this missing component.

Importance of teaching presence vs. social presence. The research garnered throughout this study found both instructor support and peer support is important to online students. Tinto's Model of Student Success (2006) suggests both formal support systems offered by instructors and institutions, and informal support systems offered by other students impact student success. The findings from the literature review led to the development of research question three: "Is instructor support more important to the online student success than peer support?" The themes were developed from the co-researcher's response to questions about the relationships developed with both their online instructors and classmates (Appendix A-Questions 4 and 5) which were developed to address the importance of teacher and social presences from COI.

Teaching presence is an important component of COI. Teaching presence occurs through the course and course facilitation by an instructor (Garrison, Anderson, & Archer, 2000). Examples of teaching presence are (a) the design and organization or setting of the curriculum, (b) facilitation of discourse-sharing personal information and (c) direct instruction-focusing discussions. The types of relationships developed over the course of the online program became another theme. Co-researchers were asked whether they still communicate with their instructors, attributing to the strength of the relationships, and results were coded as to whether said relationships were positive or negative .

All of the co-researchers mentioned a positive relationship with instructors overall. Often, they would recall the name of specific instructors with whom they made a particularly strong connection. Other co-researchers would mention the quality of the instructors who were available to them in their programs:

> Julie: I felt straight away, you know, I was very, very nervous, I am older. I felt, not having been in school for a very, very long time. I was 46 years old; I felt that I was

really alone. But quite honestly, my first class was with Dr. Bestik who absolutely just made me feel so comfortable; I would ask: Do you think I will be able to handle this program? Will I be able to do this work? Would I be able full-time work and be able to take two classes at a time?

Courtney: To sustain relationships and to make it more of a personal experience for the student. That makes the students want to work harder and be more successful because they will know [the instructor] is not just a figurehead. This is someone who really cares whether you do well or not.

The doctoral students attributed stronger connections with advisors as expected for those programs. However, what is interesting to note is the strength of those relationships across great geographic distances and time zones:

Jack: You know, he'd send you a little Christmas card. It was a kangaroo with like a Christmas hat on or something like that… "I hope you're having a good holiday". But, I mean, I had a really good experience.

The co-researchers also talked about developing strong relationships when their input was valued. The others who cited strong relationships referenced the instructor's availability and a personal connection influenced the student's positive experience in the online program.

John: [It was] very, very rare that you would have a situation that you didn't hear back within four or five hours and occasionally there was one or two that might take a day or two, but that was the exception, not the rule. They really did make themselves available.

Kevin: I can definitely say I met a lot of interesting instructors, their backgrounds... some were attorneys, some work for the D.O.J. (Department of Justice), some are retired. You know, military and law enforcement. A lot of different backgrounds that for me were

very interesting. I haven't [kept in touch] in a long time. There was one who worked for the D.O.J. that for a while I talked to him a couple of times, even after class, about different subjects and interpretation to laws. But I really didn't stay in touch with many of them.

Julie: Absolutely, 100% I felt that if I had a question, I felt more connected to reach out and ask questions. I understood what they were looking for, more so, because I had taken other classes previously and also, because of the relationship I understood what they were asking for in the assignments that they were giving us.

Julie's success story describes an unusual relationship with two of her instructors. While she felt comfortable with the university as it was her undergraduate alma mater, she was quite anxious to be an online student at the age of 46. She describes one instructor putting her at ease and reassuring her about her online program and shared a story regarding the opportunity to meet two of her instructors face-to-face in her home state.

Julie**:** I loved that I was able to meet them face-to-face in Orlando. I didn't even know how to say their names correctly until I met them in Orlando. I never knew them, but, I felt you could chat with them. They were available, but it wasn't that connection that I had with Dr. Bestik and Dr. Realnice.

While co-researchers in this study value peer-relations they developed with their classmates, they felt that instructor support was of greater value in educational endeavors. The doctoral students, Jack and Laurel, talked in depth about the close relationship they developed with advisors even though they were at the other end of the country in Laurel's case (California) and on the other side of the globe in Jack's (Australia). According to the co-researchers' narratives, instructor support is more important than peer support for two reasons. First, students

often enroll in online programs to meet a personal or professional goal. They may consider themselves to be autonomous learners with a singular focus on their own success. Secondly, the online instructor helps them to achieve that goal while the online classmate can either help or hinder the goal achievement.

Social presence is an important component to COI representing one of three quadrants that interrelate to form the online learning environment. Social presence is the rapport, trust, collegiality, and inter-personal relationships that are developed through scope of an online course (Garrison, et al., 2000). For the purpose of this study, social presence was recognized as being developed over the scope of an online program. Social presence is categorized as three parts (a) affective expression or emotions, (b) open communication, risk-free expression and (c) group cohesion-encourage collaboration (Akyol & Garrision, 2008; Richardson & Swan, 2003).

Social presence is viewed within literature as communication that occurs during an active online classroom (Akyol & Garrison, 2008; Garrison & Cleveland-Innes, 2005; Palloff & Pratt, 2007; Richardson & Swan, 2003; Rouke, Anderson, & Garrison, 2007; Shea, 2006). This study occurs, in some cases, many years after the end of class. Therefore, social presence was determined by asking the co-researcher about relationships they developed with their classmates and whether they attributed success as an online student to these relationships. Feeling a sense of connection to a larger learning community is what Tinto suggests leads to student persistence (Tinto, 1975, 1982, 1993, 2006). The elements of social presence include rapport, trust, collegiality and inter-personal relationships including examples of group cohesion.

Many online programs have instituted a face-to-face component in order to overcome a lack of connection experienced by online students (Stodel, et al., 2006). The co-researchers for this study mentioned being asked to meet face-to-face at varying times of their program for

either an on-campus residency program like Helen, Logan and Laurel attended, a colloquium in Jack's experience or clinical residency like Paula completed.

> Jack: [The] colloquiums that were week-long. I call them conferences, seminars where you would go to wherever I did. I did two in Atlanta and one in Virginia. But you spend a week there. They'd rent out a hotel. It would be like a conference, you'd have a list of different presentations,. The ones I found really good for me were the ones they did on qualitative and quantitative research, and then they had this really good guy, and I can't remember his name that did mixed methods. And I sat there and I was just like really enthralled with what he was presenting. I'm like, wow, this is really cool.
>
> [For my defense] I was actually in this room where I did a conference call with them. And because the chair was in Australia, one committee member was in Portugal, and the other one was in Alabama on our conference call, I believe was like seven o'clock in the evening.

A couple of co-researchers felt discussion boards did create a sense of community and helped them get to know fellow classmates. However, these relationships were temporary and often assignment-based but they did help students to become part of the learning community.

> Gary: The school I went to, you were required to get on their system and interact with your students.[There were] questions that you had the answer; then you had to critique other people's work and respond to their input. So, I felt like I was part of the class and I learned a lot actually from the other students.
>
> Julie: I did. You know, while you were in that class, whether it was for seven weeks or 15 weeks, you did sort of gravitate towards some classmates more than others. I was lucky

to have a few that I followed from class to class to class, and there was one student I became close with. I think we had maybe four classes together.

Developing online programs through use of cohort models is a way that online programs generate community. Although only three out of the 12 respondents specifically answered that they were part of a cohort and they did talk about getting to know other students who were enrolled in the program:

John: You had a group, a core group, and there were other individuals jumping in and out of other programs. So, there was probably 25 to 30 of the classmates [that] were people you'd see on a regular basis.

Logan: I really enjoy the cohort model, I'm not sure it would work on undergrads anywhere near as well as it did for our program just because of the maturity level.So I think it was targeted for our demographic so I couldn't take a lot away and apply it as far as a cohort model for online. But, it did give a lot of stories to tell people about how they should be replying to their students and the speed that they should reply to their students. I mean I would often get replies in an hour usually.

John: You would have five weeks going crazy, a one-week break and then [move onto] the next program where the next class would begin. So, they gave you just enough time to remember where you lived. You know, to sleep for one day, but it didn't let go of you long enough that you turned off and said I'll get to it someday right. And so during those wait weeks, those in-betweeners, I'd use that to just store up energy.

A sense a community developed, in most cases, from the comradery from being in similar situations and backgrounds.

Kevin: A lot of the classes that I took… I have to say a majority of the students were very knowledgeable and a lot of them or were kind of in the same boat that I was. They were older, nontraditional students. We already had experience, we already had a variety of backgrounds and some things. So to be able to share those experiences, and then talk about all the different things we've seen, and then just debate some of the topics that we're going over together.

John: You got to know people and you felt comfortable contacting them through the email and structure that the college provided.

Others felt the development of the social relationships with other students was not as important as the academics:

Kevin: No, for me, not really, I mean, for me, it was more of a professional thing anyway. I wasn't really there to make relationships and make friends. It just felt like a traditional college setting where you're living with people, going to class with them, and you see them every day. But at that point too, I was also much older and had a professional career to deal with anyway on top of going to school. So it was more of you making sure your assignments got done and the work got done, more than you're just hanging out and building friendships.

Steve: In many cases, I felt that there was a lot of great discussion between students and you got to know your fellow students while you were working for the program. But, I wasn't necessarily there for the social experience. I was there for the knowledge experience, to gain knowledge and information.

Helen shared a story of truly connecting with one of her online classmates, a relationship that strengthed once they were able to meet in person. Helen decided to be vulnerable and reach out to one of her classmates whom she remembers from her discussion boards:

> Helen: I remember e-mailing because he seemed like he was very normal and I thought, "Do you know what you're doing?" And he emailed me… "Thank God someone e-mailed me because I'm dying! What the heck's going on?" So we bounce off each other, but we didn't meet each other face-to-face. Now, I had no idea what he looked like or sounded like. Then, oh my gosh, we bumped into each other at one of our residency requirements and he was said, "I'm Mitchell." I said, "You're Mitchel Craig" and he said "Yes! And you're Helen!" And oh my God, we shrieked, we hugged, kissed each other on the cheek because we were like these anchors for each other during this program.

While many of the co-researchers said they did not feel isolated during online studies, Helen did share that she did, at times, feel isolated and she did feel pressure of learning online. She described the pressure of doing well in her doctoral courses that she defined as "weeding" courses. She was one of the few who shared that she used her online community for support. However, she felt although the online students looked out for one another, it "wasn't enough to make you stick with it." Helen's comments helped the primary researcher to understand the type of relationships online students were experiencing in their online classes. While the co-participants did not feel isolated within online courses, the relationships they developed appeared course-based and weak. These weak bonds were strengthened when student's had the opportunity to meet instructor's and classmate's face-to-face. The question remained if students did not turn to one another for academic and personal support, to whom did they turn?

Sources of Academic or Personal Support

Research question three asked, "Is instructor support more important to the online student success than peer support"? In reviewing themes generated from the data collection process, it appeared that co-researchers valued the instructor support more than peer support from their classmates. They did attribute the social presence they felt in classes to helping them feel less isolated. However, the question remains, whom do online students turn to for academic and personal support? This question led to the development of RQ4: "What types of social supports do successful online graduate students use?"

Follow-up questions to questions three, four and five from the interview protocol (Appendix A) generated the themes below. Often students described additional relationships they attributed to their success beyond those anticipated from COI teaching and social presences. These type of bonds represents sources of both academic and personal support that exist within the formal classroom and with sources of informal support that are found within the student's physical, social network.

For doctoral students, the strongest source of academic support was their advisor, which is to be as expected in a doctoral program. What is unexpected is the strength of the relationship that develops across great distances, across entire countries or across the globe.

> Laurel: You really build a bond, for example, I had on my dissertation committee, [Chairperson] was my chair. And he also was my mentor, and he wanted to be that as the chair because it was like, "Well, I can round up the cats to make sure that they're all…to get them together".

For those without a close relationship with a doctoral advisor, few co-researchers could recall an advisory relationship in their programs:

Courtney: I'm not sure I had an advisor. Well, I did have one but those we only got a pin from them to register for classes. Those were, you know, that was still relatively early days of online learning where there wasn't so much there to, so much support as we give them now.

Helen: You know there wasn't that mentorship or advisement component of someone checking in with you. "Are you managing the load or [do you need a different plan]". "Do you need to look at your schedule instead of dropping out". "Should you take a leave?" No one really.

Other co-researchers, primarily from for-profit institutions, described an academic support team.

Jack: Oh yeah, they had a whole academic support team when you were going through your dissertation. There was a whole dissertation thing where you could send your work to them. The editors there would review it, give you suggestions. There they do have a huge support system. I didn't take advantage of it probably as much as others did because, again, online works for me.

John: There was an advisor on campus, on the main campus and I was very impressed because, of course, they were your contact point, prior to beginning the program. And then she called, well, I can't tell you, multiple times, through the course of the whole program to say, you know, "How's it going?" "Are you keeping up?" "Is there any questions, you may have?" "What are your concerns?" "Are you learning?" They really did monitor how things were going.

An interesting phenomenon developed as co-researchers shared it was co-workers and others from their local community they saw in person on a regular basis who became a source of academic support:

> Kevin: Of course the job that I work at, especially for some of the legal aspects of some of the classes I was taking, the resources I had at the courthouse were an immense help.
>
> Jack**:** I had different colleagues from different departments because in the position I'm in, I work with everybody. So, I mean, I know just about everybody in the college. So I was able to just talk to them about, "I'm having this issue, what do you think?"
>
> Laurel: You know, I had to have some friends that are pretty good writers. They kind of helped me through. I'm the type of person that if I don't know how to do something, I'll ask questions if I need help. I'll ask questions, you know, just get me started, to tell me if you can help me, you know, where can I go get it.

Personal support was provided by friends, co-workers, parents, spouses, and children with special acknowledgments reserved for spouses. Gary commented "My wife has been great through all this. She really supported my going back to school." John stated "I am fortunate that my wife was willing to put up with me." And Julie noted, "My husband was incredibly supportive." Often these support networks also were a source of academic support.

> Valerie: I really didn't look too far outside of my husband. I pretty [much] stuck to my husband. We were both going for a couple of years at the same time. Where we had to rely on each other.
>
> Steve: I didn't have somebody except, you know, I had my wife read my dissertation as I was getting ready to see if there were any glaring things, but I didn't use anyone else.

Courtney: Probably some of my friends in the division [at work]. But that is, and even though they were supportive, you know, they couldn't be completely supportive. I mean, this was a degree program that was relatively new at the time, and so, kind of support in an ambivalent sort of a way. So, you can use them as a sounding board but they could not really address specifics.

Julie: My co-workers and friends. They knew this was really, really, important to me and they knew they weren't going to see me for about two years, but they understood that there was a light at the end of the tunnel and that I would be great on the other end.

Kevin: Definitely family. It is one of those, that there are times and again being a parent, if there were deadlines that had to be met, maybe there was a school function or something that had to be done at the same time. You're asking family for help, and even sometimes friends, making sure the personal stuff were taken care of as well as the work stuff as well as the school stuff.

For co-researchers in this study, however, the findings were quite different. The findings, as predicted by social capital theory, which indicates that online relationships form weak bonds (Kavanaugh, Carroll, et al., 2005; Kavanaugh, Reese, et al., 2005). While having a face-to-face component built into the online program helps to generate stronger bonds, this is still not enough for many students to overcome the weak bonds of online relationships. This phenomenon was not just experienced with the student-to-student interaction; it is also evidenced by the lack of use of writing centers, advising, or other formal academic support systems provided on behalf of the online institutions. While the library and research systems were occassionally used by co-researchers in this study, many of the co-researchers used their own academic support system

that was formed from face-to-face social network; what one co-researcher termed a "microcommunity."

Researcher: And who did you turn to for personal support?

Logan: Probably my local contacts, other than my family, my local contacts. They are the best.

Logan: I had a microcommunity.

Researcher: If you had to describe what a microcommunity is, what would you describe it as?

Logan: In a broad-based program like we had, it was a closer geographic community.

A microcommunity is the support network that is local to the online student. The member of an online student's microcommunity would be someone they see face-to-face on a regular basis and have something to offer the student academically.The microcommunity members are often comprised of co-workers and face-to-face colleagues of the online students. Occasionally, family members such as spouses or children can also be members of the student's microcommunity, however, their function is to provide more than just personal support. They fill an academic void as the learner turns to them for their writing skills, editing skills, researching skills, prior experience or knowledge of the field to support the student and increase their chances of success.

The idea of a microcommunity or turning to local resources for support was especially evident in Logan's success story.Logan attended M University with four other colleagues from his local area. Logan shared his biggest challenge was academic writing. He turned to his employer's English department for academic support instead of his online university's resources which he noted were of high quality and readily available. While accessing his local writing resources may have been a matter of convenience, having local support was important to Logan.

An example of strength at the local level was evident though a story Logan's of an intervention he and his colleagues performed on one of their classmates who was struggling and considering dropping the program. His local classmates felt a special bond to one another that was not replicated in the online learning community of his program. Nor did he turn to the institutional support resources that were available to him preferring instead to use local academic support.

What is interesting to note is online students did not turn to learning resources the institutions provide to online learners.In fact, none of the co-researchers used resources that were available beyond the library and research departments. Despite being aware of the services available to them through their institutions, the co-researchers often mentioned they were services they did not need. The participants instead turned to local microcommunities for assistance when they experienced academic challenges.

The findings for research question four "what types of social supports are used by successful online students?" proved insightful. The question debunked the researcher's prior assumption that online students would use informal communication tools built for them by their instructor in their online courses. While the virtual community created in the online courses helped to decrease feelings of loneliness or isolation, the co-researchers did not turn to this curated community for academic support. Instead, they would turn to colleagues, co-workers and occasionally family members to fulfill an academic need.

It appears the co-researchers understood the relationships developed online were not adequate to provide the amount of academic and personal support required of online students. Both Valerie and Helen recommend for online students to turn to the students' local community to build a peer support system.

Valerie: Find a good peer support system whether that be people locally that are also doing online classes or if it's people that are in your classes as well. If you're struggling, it really helps to have somebody who can understand what you're struggling with. If somebody is not going to online college or completing their degree, it's going to be very hard for them to relate to somebody who is trying to find other people to talk to.

Helen: I would say find someone who's gone through it before and have them mentor, to be that support system. Not necessarily one that you're with, but one that has been there and done that and can be that anchor for you and to assist. I thinkit would be a great idea for online programs to have their graduates serve as mentors and have a mentoring program.

While the development of micro-communities may have been seemingly serendipitous to the co-researchers at the time, they are actually a function of perceived self-efficacy that Bandura (1997) describes as a "person's belief in their ability to influence events that affect their lives." (p. 1). As Williams and Hellman (2004) mention successful self-regulators set specific goals, possess high self-efficacy and high-levels in intrinsic motivation. These co-researchers each set a goal for themselves. Part of self-efficacy is being self-aware of both your strengths and your weaknesses. When the co-researchers felt they were weak in certain areas academically, they turned to local resources for assistance. These online students would turn to those with whom they have developed strong offline bonds, with high levels of trust, as a means to increase the chances of success in their educational pursuits.

Conclusion

By using Moustakas (1994) transcendental phenomenology process, Chapter Four highlights significant elements about the unknown phenomenon prior to the investigation from the individual perspective of the principle researcher. The themes generated in chapter four were

analyzed using interpretive integration to understand the essence of the co-researchers lived experiences with the phenomenon of online education. These findings used thematic analysis to answer this study's research questions and ultimately the grand research question, "What are the lived experiences of successful graduate students who have graduated from online programs as viewed through the theoretical lens of the Community of Inquiry framework?" Chapter Five will provide a summary of the findings, a discussion of the results of the study, areas for future research, and recommendations for the field and practitioners of online learning.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

"*Sometimes, a student needs to hear someone else's success story to spark their passion."-Blackboard World, 2014*

Institutions, instructors and other learning support personnel must have a clear understanding of what makes online students successful in order to improve the online learning experience. Learning online is a difficult process and there are many barriers students will face while completing their degrees. To increase persistence and ultimately the success of online students, the strategies employed to overcome these barriers should be understood holistically with an appreciation for their complexity. After completion of the transcendental phenomenology process that focuses on achieving meaning, the strategies used by the co-researchers to achieve success can now be seen clearly (Moustakas, 1994).

When beginning this research, the researcher's prior assumption was students developed their own academic support system. I believed successful students utilized a support system that existed outside of the boundaries set up by the instructor of the course. It is my belief these informal support systems are critical to the students' success. These beliefs and assumptions assisted in developing a direction for the research, the application of the theoretical framework and development of the protocol used to interview the co-researchers. Having spent a career supporting online students and training online faculty, yet not being an online student myself, I wanted to know how online students develop these relationships. I wanted to know if the online students attributed their success to these relationships. It is from this standpoint that I offer a discussion of the research findings as viewed from my perspective.

Convenience and community are common themes within research literature on online learning environments. This is not a novel field in its infancy, rather, it is a well-researched field especially within the COI context (Akyol & Garrison, 2008; Akyol et al., 2009; Arbaugh et al., 2008; Garrison & Arbaugh, 2007; Garrison, Anderson & Archer, 2010; Shea & Bidjerano, 2014). Prior COI research indicated a sense of belonging to a greater learning community leads to higher persistence rates for online students (Angelino et al., 2007; Annand, 2011; Bambara et al., 2009; Bikowski, 2007; Boston et al., 2014; Croft et al., 2011; Garrison et al., 2001; Garrison & Arbaugh, 2007; Lipman, 1997; Palloff & Pratt, 2007; Richardson & Swan, 2003; Rovai, 2003; Shea, 2006; Tinto, 2006). In researching the phenomenon of the lived experience of successful online learners as viewed through COI, this study found a sense of community and academic support comes from unexpected places.

The themes generated below indicate the virtual community built by instructors and supported by institutions helped students feel they were not learning in isolation. However, online students are not turning to online classmates or to institutional resources for academic support.

Themes Identified by the Study

1. Online students feel the impact of educational deserts when making a choice about enrolling in an online university or online program.
2. Online students do not feel isolated. They believe the community of learners is temporary. This sense of community lasts the length of the course or program and is often assignment-based such as participation in a discussion board or chat room.
3. Online students turn to a local, face-to-face 'microcommunity' for academic support.
4. Online learning success is a product of both extrinsic and intrinsic factors.

From the thematic developments found in this study, there are three elements that describe the essence of the lived experience of the co-researchers (a) the factors they attributed to success (b) the importance of face-to-face meetings in an online program and (c) the academic support networks developed to be successful.

Factors of Success

COI was developed to understand the learning community of online courses and programs. COI's strength lies in its ability to provide a model to institutions and instructors to effectively deliver online courses and programs. The design and development of the online learning environment represents external factors that institutions and instructors can influence. COI, however, lacks representation of internal factors such as self-motivation, self-efficacy, self-regulation and grit.

Internal or intrinsic factors are not simply binary elements, either there or not; they are skills that can be developed. Instructors and institutions can help students develop these skills. These internal factors are something that can be cultivated by institutions of higher learning. Elizabethtown College president, Carl Strikwerda described his college's interventions to provide a network to help first-generation students succeed (Fischer, 2016).

> A whole lot of success in college is built on what some people are now calling grit. The myth is, of course, that's just an internal virtue. Grit is something you develop, and you develop it in part by having a community that supports you (Strikwerda, in Fischer, 2016, para 13).

The co-participants for this study were self-aware they had higher levels of self-motivation, self-determination and ability to regulate learning activities. The co-participants transferred the success they experienced in undergraduate programs and utilized those same skills to achieve success in graduate programs. They inherently understood intrinsic factors were

critical to success, but also understood these were skills developed over time. However, higher education has been criticized for being better at selecting talent than developing it (Arum & Roksa, 2001; Bransford et al., 2000; Christensen & Eyring, 2011; Keeling & Hersh, 2012). By cultivating intrinsic academic skills, instructors and institutions can assist online students in persisting towards educational endeavors.

One of the themes recognized in this study is online learning success is a product of intrinsic factors as well as extrinsic factors. The original COI framework primarily covered extrinsic factors such as the instructor and the learning environment. However, the intrinsic factors learners themselves bring into the learning environment are missing from the framework. The intrinsic factors found within the results of the study did not appear to be adequately addressed by the original COI. In other words, COI underrepresents the impact of intrinsic factors the learner brings with them into the online learning environment. This represents an area to explore for future research and an opportunity for institutions and instructors to improve online learning outcomes.

Instructors, in conjunction with instructional designers and online course development teams, can offer learning activities that can be completed autonomously (self-regulation) or in collaboration with others (social-regulation) to both increase student engagement, overall student persistence and a sense of community. Institutions can also play a role in supporting regulation of learning.

Online educators should be encouraged to adopt an autonomous teaching style in which instructors are no longer lecturers focused on direct instruction but facilitators of learning (Reeve, Jang, Carrell, Jeon, & Barch, 2004). They can also promote the adoption of shared learning outcomes that encourage shared-regulation and utilize collaborative activities that move

the online learning environment beyond the discussion board (Lam, 2015; Shea et al. 2010, 2012, 2014).

The Importance of Face-to-Face

Institutions, instructional designers and instructors have spent the last 15 years implementing this sense of community into online courses based on recommendations from the COI (Akyol & Garrison, 2008; Angelino et al., 2007; Croft et al., 2011; Garrison & Cleveland-Innes, 2005; Lehman & Conceicao, 2013; Palloff & Pratt, 2007; Shea & Bidjerano, 2008; Stodel, et al., 2006). Communication tools, including learning management system (LMS) tools such as discussion boards and chat rooms, have been widely adopted as a means of community building (Palloff & Pratt, 2007; Piskurich, 2004). Since the advent of social media, other instructors have adopted the use of these tools to create a sense of connection online (Moran, Seaman & Tinti-Kane, 2011; Dabbagh & Kitsantas, 2012). Little is understood about the extent that online students utilize these communication methods to garner academic or personal support from either the instructor or classmates. While COI was helpful to understand the importance of community in the development of an academic support system used by online students, it did not address the motivation behind the students' utilization of this support system. COI also did not adequately address how online learners use a virtual community.

In addition, the COI theoretical model was helpful in addressing the importance of both teaching and social presence. As mentioned in the literature review in Chapter Two, motivated students will succeed despite poor course design and few will require the feeling of community that instructors and instructional designers work so hard to create (Eom et al., 2006). However, prior research indicates these support systems are critical to the students' success (Akyol & Garrison, 2008; Angelino et al., 2007; Palloff & Pratt, 2007; Stodel, et al., 2006; Tinto, 2006).

The instructor's role as part of a community of learners cannot be underestimated when designing online courses and programs.

Additionally, the COI research has provided empirical evidence that while the application of a community in online learning does not directly lead to student learning gains, it increases the persistence level among online students (Croft et al., 2011; Garrison & Cleveland-Innes, 2005; Lehman & Conceicao, 2013; Shea & Bidjerano, 2008). This result is reinforced by the findings of the co-researchers lived experience as shared in this study. The co-researchers did not feel isolated but they did not feel a strong bond with their classmates; at least not a bond they would attribute as a factor of their success.

The communication tools that are common to online learning may not be providing the strong connections students need to succeed. This finding has implications for the development of online learning environments that rely heavily on discussion boards to create a sense of community. While these strategies are helping learners to not to feel as isolated, they may be giving students a false sense of community and other engagement activities should be promoted to encourage shared cognitive knowledge.

Access to higher education is often highlighted as the primary reason why online learning is so prevalent. However, access is more than just convenience of time and schedule for these students. Online learning can make what was once impossible, possible. However, this access comes at a cost. Technology itself creates barriers to connections as it puts up a false wall between the learner, classmates and instructor.

This virtual barrier must be broken down to create the connections necessary to increase student persistence in online courses. According to Tinto's (1993) model of institutional departure, students need integration into both formal and informal social systems. These systems

include formal support such as academic performance, extracurricular activities and informal connections such as interactions among faculty, staff and peer groups. Developing these types of integrated systems is incredibly difficult in online programs. The technology itself can create a barrier to online student success as the students may not feel isolated but they do not feel a part of the online learning community.

A face-to-face component, either a residency, a colloquium or clinical experience were opportunities they had to develop true relationships with their instructors, advisors and classmates. The co-researchers did not complain about the inconvenience of having to change schedules both for work and for family. They did not mention the strain over the difficulties of making travel arrangements to meet in centralize locations across the United States. What the co-participants did stress was the value received from these experiences.

Online practitioners should look for ways to overcome the false wall of technology and adopt a face-to-face component. This element could be offered as a residency or live orientation session, preferably in the same geographic area. These face-to-face meetings can assist students with getting to know one another offline so they may develop stronger online bonds with classmates and instructors. Synchronous meetings may seem counterintuitive to providing convenience, however, the value in providing these opportunities outweighs cost to both institutions and to students. Online institutions should look for ways to introduce the academic support resources and personnel at these live meetings and provide opportunities for their instructors to meet with online students in convenient regional areas.

Sources of Personal and Academic Support

Sources of personal and academic support proved to be the most insightful findings in answering RQ4, “What types of social supports do successful online graduate students use?”

The question debunked the researcher's prior assumption that online students would utilize informal communication tools built by the online instructor. While the virtual community created in the online courses helped to decrease feelings of loneliness or isolation, the co-researchers did not turn to this curated community for academic support. For this study's participants, they turned to colleagues, co-workers and occasionally family members to fulfill an academic need. This finding suggests the co-researchers are utilizing self-directed learning skills and perhaps consider themselves to be more autonomous learners than a community of learners.

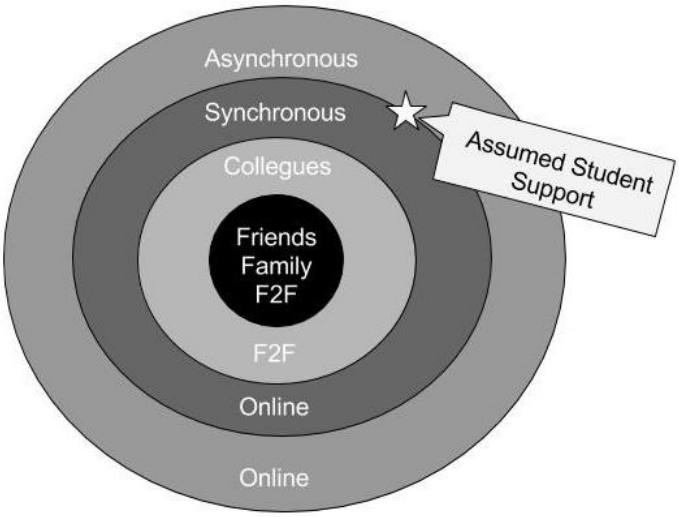

Figure 7. Assumed student support. The levels of support begin in the center of the target with close face-to-face relationships among friends and family. The levels of support in the outer-concentric circles represent weaker social relationships such as colleagues, but are still conducted f2f. The outer circles represent weak relationships conducted online both in real-time (synchronously) as well as non-real-time (asynchronously).

Assumed Student Support, as outlined in Figure 7, represents the prior assumptions held by the primary researcher as a target of whom online students would turn to for academic support. The center of the target represents the relationships closest to the student and how those relationships are conducted. Each level moves further away from the inner circle of support of the student, that is conducted face-to-face with family and friends. As the levels move further from the center, the relationships move from being conducted face-to-face to being conducted

online. The last two circles represent online relationships with classmates and instructors that are conducted with asynchronous and synchronous technology. It was assumed by the primary researcher this would be the level at which online students would support one another.

As mentioned in Chapter Three during the bracketing process, the primary researcher has a twenty-year career of supporting online learning. The current support model is centered on the development of online learning environments that promote use of the virtual communities as a source of support for the online students. It was thereby assumed that the students would use modern social networks or other informal web communications tools to support each other. The assumption was online students would rely on the community of learners within their online courses to support one another, even if it was outside of the instructor's purview.

This assumption was supported by the research in the field. Lam's (2015) autonomous presence study found online learners often do use those methods for peer communication. Other research focused on the use of social media to create a community, such as Tucker's (2012) study on the use of Facebook in a writing course. However, this assumption proved false for the co-researchers in this study. After completing their response for questions four and five of the interview protocol (Appendix A), the respondents were asked about relationships they developed with instructors and with classmates. Follow-up questions asked whether they kept in touch with instructors or classmates, and whether those relationships contributed to their success. These questions were asked to garner the level of strength the relationships held for the online students. Question six reminded the participants that success in an online program is not guaranteed.

> Question 6: Not everyone graduates from an online program. Many factors can delay, stall or stand in the way of completing the degree. What do you think helped you to be successful in completing an online degree?

After reflecting on this question, in ten of the twelve interviews, the co-participants began to share stories of other relationships they came to depend on for their success. This is what one co-researcher, Logan, termed a 'micro-community.' For two of the co-participants, Steve and Valerie, their microcommunity consisted of their spouse. For the other ten co-participants, the microcommunity consisted of co-workers and colleagues. The consistent element that must be present to be in an online student's microcommunity is the person must be someone from their physical social network. They must also offer something academically the student feels they are lacking, such as writing skills, editing, research, expertise in the field, or prior experience.

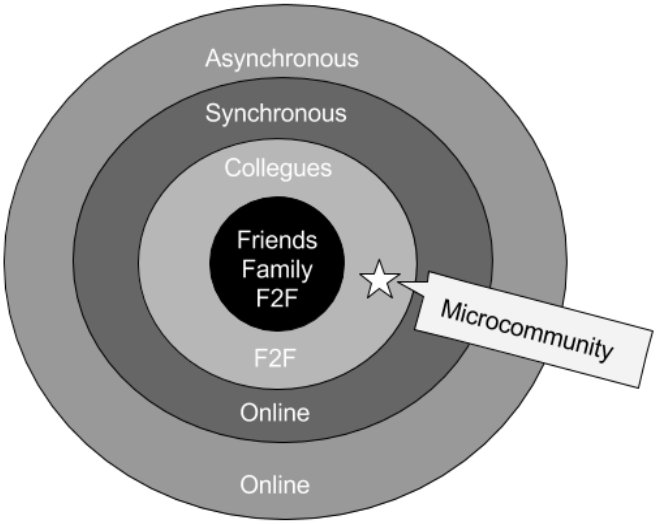

Figure 8. Microcommunities. This figure represents this study's findings that online graduate students to turn close friends and family members in their face-to-face social networks for academic support.

The development of the microcommunity is not happenstance or fate, although it may appear as such to the student. Instead, it is a product of self-regulation. Self-regulation is the process by which students have self-reflected on their strengths and weaknesses. Each of the co-researchers identified a challenge or weakness, and some included academic areas that required improvement. They did not, however, turn to the academic support services provided by the

online university. This is a surprising finding, considering that eight of the twelve co-researchers were in the higher education field as either instructors or support personnel.

Instead, because of the strong bonds predicted by Kavanaugh's (1999) social capital theory, the students turned to those with whom they had trusted relationships. Graduate students, especially older, non-traditional students such as those represented by this study, have generated a vast social network that has been cultivated over many years of working in their careers. Other microcommunity connections were developed through family, friendships and acquaintances.

What would this microcommunity finding represent for undergraduate students without a this lifetime experience and social connections? It would be unlikely that undergraduates or younger students would have access to a social network with a similar amount of wealth of academic resources that older, non-traditional graduates students would have. In light of this finding, institutions should heed the advice of Helen and Valerie to find academic peers that are local to the online student's geographic area as a source of support. Alumni who have graduated from online programs could be a resource that may be tapped to provide this service. Online institutions should match their admitted incoming students with their alumni lists on a geographic basis. The benefits of this practice would be twofold; one is the retention of current online students and the second is strengthened bonds with the university's alumni. Online practitioners should view this finding as an opportunity to assist students with the development of microcommunities to increase their students' chance of success.

Limitations

Since many years have passed from the time the co-researchers graduated from online program until the time of this study, there is a chance that they cannot accurately account for their experiences. The maturation of the sample is an example of a limitation of this study. In

addition to this limitation, there was also a possibility that the co-researchers may also change their narrative to highlight positive self-image or dramatize poor experiences or "war stories." Based upon the depth of the co-researcher's responses, this was an assumption that did not hold true.

At the beginning of the interview, as soon as the digital recording began, the researcher felt the co-researchers would shift or "turn on". The co-researchers appeared to be trying to represent themselves in a professional manner. As the interview progressed, the co-researchers became more comfortable with the questions and more relaxed in the process. A true conversation occurred, and even in the cases where more than six years had passed since their graduation, they were still able to share those experiences. For this study, their ability to reflect on their strongest memories proved to be a benefit instead of a limitation.

The co-researchers overwhelmingly reported positive experiences with their online learning choices. In fact, when asked if they would change anything, most said they would have started earlier or tried to manage the load differently; no one expressed any regrets at their choice. An anonymous interview would have provided a unique opportunity to express grievances or air any negative experiences. However, this did not occur. Instead, criticisms were constructive and meant to improve online learning experiences for other online students.

To be included in this study, the participants must have graduated from a 100 percent online institution thereby limiting students still enrolled in online programs and those from undergraduate or associate degree programs. Students who were enrolled in blended or hybrid online learning programs were not included in this study which is also a limitation in scope by design. In addition to these limitations, the experience and bias of the researcher further limited results of this research.

The prior professional experience of the co-researchers also represents a limitation to the study. Ten out of the twelve participants were online instructors or those involved in supporting online education or education itself. This viewpoint could have biased their answers. Every attempt was made during the interview process to ask them questions that were relevant to their student experience. However, it is recognized that a bias of their experience was brought by the co-researchers to the interview.

Additionally, this research study was conducted via face-to-face interviews either in person or in cases in that the geographic distance was too great, the interviews were conducted using video conferencing technology such as Skype or FaceTime. The utilization of this technology also represents a limitation of this study. Finally, as a qualitative study, this research is inherently limited to the lived experience of the twelve co-researchers interviewed in the study and cannot be generalized to the population. It does, however, provide a starting point for future research.

Areas for Future Research

There are four areas of future research to follow up on the findings from this study, (a) the application of a microcommunity as a means of providing academic support to online students, (b) the importance of face-to-face opportunies as a means to create strong bonded relationships between students, their classmates and their instructor, (c) the implication of educational deserts on the decision of students to choose online learning and (d) missing components of the COI theory in regards to intrisinc factors the learners themselves bring to the online learning environment.

Microcommunity Research

The presence of a microcommunities as a academic support system for online students was a unexpected outcome of this study and an area in which significant research can be developed to increase the success rates in online learning. As a qualitative study, this dissertation identified that the online graduate students in this study performed a self-regulation strategy. By analyzing their strengths and weakness, successful online students found people in their own physical social network to help them to overcome their academic limitations. Instead of using academic resources provided by their online university each of the twelve co-researchers identified someone in their local microcommunity they trusted to provide academic support. This support consisted of writing or editing of academic papers, providing research ideas or expertise within the online student's fields of study. Logan's identified microcommunity were members of his online program's cohort. A case study of this microcommunity could be an additional qualitative study.

Additional microcommunity research can be generated from a larger sample of graduate online students who can be surveyed to investigate whether the development of microcommunities is a resource all online graduate students use. One important variable to be researched in regards to microcommunity is age of the online learner. Graduate students who return to college later in their careers would have had more time to develop a more extensive social network of friends, associates and colleges cultivated through life and career experience.Undergraduate students may have a more limited social network in which they can turn to for academic support. However, this is only an assumption due to age of the learner.

Further research of online graduate students can be conducted to investigate whether they have identified academic support available to them or whether they used the academic supports

provided to them by their online institution.This initial survey would help to identify if microcommunity support can be applied to the general population of online students. A follow-up survey could then be sent to a online graduate student population and used to perform a factorial analysis which identifies the specific self-regulation techniques the online graduate students use which contributes to the development of a microcommunity.A quantitative study could be repeated with undergraduate students who completed online degrees to see whom they turned to for personal and academic support and compare the factors identified between both graduate and undergraduate online students.

From the factorial analysis, variables which constitute a microcommunity can be identified. The variables which constitute a microcommunity can help online student identify resources available to them through their own social networks or provided by the institution. Following this analysis, a microcommunity treatment can be developed and applied to a sample of undergraduate students. The findings from this experiment can help undergraduate online students understand that access to academic supports are important to their success. A follow up quasi-experiment can then be conducted with online undergraduate students who received the treatment and compare their learning outcomes such as grade and course completion to undergraduate online students in a control group. The microcommunity research would provide valuable information to higher educational institutions. Significant funds are often allocated to providing academic resources such as online writing centers and online tutoring options. These resources are often provided by third-party vendors and as the research from this dissertation demonstrates, are often underutilized by online students.

Importance of Face-to-Face Opportunities

The co-researchers in this study turned to a microcommunity as a self-regulation strategy to improve upon their academic weaknesses. They utilized an an existing face-to-face relationship built upon trust and strong bonds with someone whom could provide academic support. Kavanaugh (1999) social capital theory research found offline relationships are stronger than online relationships, however, a face-to-face meeting can strengthen the online relationships.

This bridging process was reinforced by the findings of this dissertation in which Helen described meeting a fellow student during a residency. The opporunity to meet face-to-face strengthened the bond that had intially developed through email. Julie also described meeting her instructor at a conference early in her program that led to a feeling of connection that she contributed to her success in her online program. While Paula found her clinical residency to be valuable, she also recommended synchronous meetings as a way to strengthen the sense of community and connection. Focus-groups generated from a randomized non-homogenious sample could provide additional insights of online students experience of face-to-face or synchronous learning opportunies and sources of academic and personal support. These findings could be followed-up with qualitative case studies to identify additional findings and questions that could be utilized in a large-scale quantiative study.

A quantitative study surveying both graduate and undergraduate online studentscan be conducted to see if they have had any face-to-face meetings while pursuing their online degrees. The variables to be compared include age, gender, program of study, face-to-face or synchronous meetings, feelings of connection or community with instructors and classmates, persistence rates in online courses and learning outcomes such as course grades. Additionally, a quasi-

experimental design study comparing learning outcomes of online programs that include a face-to-face meeting component could be compared to a control group of online programs with no face-to-face meeting requirements.

Impact of Educational Deserts

Hillman (2014) began his research into educational deserts to provide information at a congressional policy briefing to assist with the development of federal policy efforts e.g. College Scorecard, Financial Aid Shopping Sheet, and College Navigator (Hillman, 2014; Hillman & Weichman, 2016). Hillman (2014, p. 1, para 2) states "If federal policymakers assume all students are mobile, that they live in communities with several public alternatives, or that online education is an adequate alternative to place-based education, then the findings reported here do not bear on educational equity or opportunity". This statement is aligned with the criticism referenced earlier in this dissertation under Chapter One. While online learning policymakers, higher educational institutions and online learning research itself lend support to this statement, other research contradict these findings as referenced within Chapter Two that online learning is an effective alternative (Richardson & Swan 2003; Russell, 2001).

In addition to raising important implications for federal ratings policies, Hillman's research into educational deserts makes the case that geography is an understudied area with inferences for the pursuit of higher education. Geography impacts the selection of a college or program and hailing from a geographic area with limited college choices was a issue faced by many of the co-researchers of this study. Two of the twelve co-researchers of this study indicated that they had other options to pursue their graduate degrees in their local area, however they chose to enroll in online programs. The other ten co-researchers stated they pursued online degrees due to lack of local opportunities. All twelve specified they chose an online graduate

program for its convenience. Educational deserts represents an area for future research in regards to online learning choice. This research can be pursued both qualitatively through the use of focus groups or quanitatively from survey's of larger samples which could be generalized to the larger population of online students.

Missing Elements in COI

COI was helpful to analyze interrelationships between various external variables experienced in the online learning environment. However, the model is lacking in representing internal factors, such as the student as an autonomous learner who self-regulates and self-directs his or her own learning. The original COI theory was developed based upon Dewey's (1938) practical inquiry process and focuses on higher order thinking processes rather than individual learning outcomes (Lipman, 1997). The cognitive presence component of COI accounts for what the learners learn together through the discourse process (Garrison, Anderson, & Archer, 2001), however it focuses on the online class as a whole and doesn't account for the learners individually.

Other COI researchers have have noticed that a compenent has been missing from COI and have made other suggestions including emotional presence, agency presence or autonmous presence (Anderson, 2016; Cleveland-Innes & Campbell, 2012; Lam, 2015). Additional COI research recognized this limitation and began to address the addition of regulated learning with Garrison's et al. (2011, 2013, 2015) metacognitive construct to the original COI as well as Shea's et al. (2010, 2012, 2014) proposal of the learning presence COI addition.

The themes generated by this research support the finding that intrinsic factors impacts student achievement and the student's role within the online environment. A factorial analysis of additional variables representing self, social, shared and supported regulation of learning could

be one of the first studies to be conducted to begin addressing this missing element. Since the intrinsic variables such as motivation, regulation of learning and self-effficacy are important contributors to online student success, it would be helpful to determine the missing element in order to achieve a single holistic theoretical model which represents the online learning experience.

Conclusion

Online learning has been in existence in some form since the invention of the Internet. The encouragement of online students to persist in online courses and achieve educational endeavors is paramount to the strategic goals of many universities. Higher educational institutions should heed the suggestions set forth by this study's co-researchers to improve upon the online learning model. Online institutions should work to be accessible while providing high-quality training to online instructors. Online programs should include more face-to-face learning opportunities and more synchronous learning opportunities to strengthen the bonds and develop a feeling of community within their online courses.

Smart institutions should view Christensen's disruption process much like a steel forge, and come out refined and strengthened with a renewed sense of their specific purpose (Christensen & Eyring, 2011; Weber & Monge, 2017; Weise & Christensen, 2014). The importance of community should not be underestimated, for it is the sense of community, that creates the connection with the course and increases student persistence (Tinto, 2006). However, by increasing the sense of a local communities or microcommunities, institutions may have an opportunity to connect new students, especially those who reside in educational deserts with their recent graduates and alumni to create an even greater connection.

An additional recommendation was generated from the co-researchers' response to attendance at the graduation ceremony for their online institution. Of the twelve co-researchers in this study, only four attended their graduation ceremony, Helen, Logan, Paula, and Julie. Graduation is an important time of celebration and an indicator of the strength of the relationship the student has with the institution. Making the commitment to attend the graduation ceremony involved allocating resources in terms of time and money. It involved travel arrangements and costs including airfare, hotels and time off work. To attend the graduation ceremony indicates a level of commitment to the online institution the student attended. The co-researchers who did not attend their college graduation indicated that life events prevented them from attending. While these reasons are valid, they are also an indication of the lack of connection the student has with the institution. Strengthening this bond represents an opportunity for online institutions.Online institutions should consider implementing Helen's suggestion to "make online traditions" beyond just graduation which is the "last goodbye" to its students and introduce the "first hello." This could be an introductory course, a face-to-face orientation conducted regionally, or perhaps a new online student convocation. By introducing these traditions earlier in the online program, the connections necessary for success can be formulated and strengthened, so students feel a strong bond to their learning communities.

While adding a face-to-face requirement to an online program can decrease the amount of flexibility the program offers, the face-to-face meetings can enrich the feeling of being a part of a collective community of learners and therefore increase student engagement and persistence. However, online institutions can not always bring learners to the institution. By doing so, they would lose out of the global experiences these students enjoy, as well as, the convenience of learning asynchronously the online student depends on. However, online institutions should look

for opportunities for instructors, advisors and other members of academic support teams to meet with students in regional areas.They should follow Julie's advice to send online instructors to visit regionally with students or create synchronous meetings within the online course.

In addition, institutions should consider the suggestion by Valerie and Helen and look for ways to connect alumni with current students in a mentorship capacity and meet the online students' need for local microcommunity support. By implementing these components in a way that meets online students' needs, online institutions can overcome the limitations of educational deserts by utilizing microcommunities to create global learning communities.

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Appendix A

Interview Protocol

As we begin, please note that this interview is being audio recorded and I am taking notes as well. You may skip any questions you like and you may end the interview at any time.
I have your signed consent form, that will be kept on file for three years, and you have a paper or electronic copy as well. Let's begin.

Question 0: Warm Up
Where did you receive your graduate degree? What was the program? When did you receive your degree? Please tell me about your professional status, for example: where are you employed, do you own a business, any volunteer work. What is your age or if you prefer age range between 25-34 years old; 35-44 years old; 45-54 years old; 55-64 years old; 65-74 years old; 75 years or older.

Question 1: Educational Deserts
Why did you choose to get your degree online? For example, did you have any alternatives to obtain your degree?

Question 2: Type of learning experience: Social or Isolating-Emotional Presence
Please tell me about your online learning experience? For example: Do you feel it was an isolating experience or do you feel you were part of the class even though you were separated from your classmates and instructor?

Question 3: Course Delivery/Face-To-Face component
How was the online program delivered? For example, were they completely online or was there any face to face or residency requirements? Follow-up: Did your online program follow a cohort model?

Question 4: Community of Inquiry-Teaching Presence
Please tell me about the relationships you developed with your instructors. Follow-up: Do you feel this connection contributed to your success? Follow-up: Do you still communicate with any of your online instructors?

Question 5: Community of Inquiry-Social Presence/Strength of Relationships/Social Capital
Please tell me about the relationships you developed with your classmates? Follow-up: How did a social connection with your classmates contribute to your success in the online program? Follow-up: Do you still communicate with any of your online classmates?

Question 6: Factors of Success-Internal/External
Not everyone graduates from an online program. Many factors can delay, stall or stand in the way of completing the degree. What do you think helped you to be successful in completing an online degree?

Question 7: Intrinsic Motivation-Metacognition-Learning Presence
Can you describe a challenge that you had to overcome to be successful in your online class? Who did you turn to for academic support, for example, your instructor, classmates, institutional resources or friends and family? Who did you turn to for personal support?

Question 8: Community of Inquiry-Cognitive Presence?
Describe how learning online helped you to become knowledgeable about the field.

Question 9: Impact of online learning
Please describe the impact of receiving an online degree had on your life? Follow-up question: If you had to do it over again, what would you change and what would you keep the same? Do you have any suggestions for online students? Do you have any suggestions for online programs?

Question 10: Open Ended Comments/Conclusion
Is there anything else you would like to share or make sure I know about your online learning experience?

This concludes all the questions I have for you, I would like to thank you for your time.

Appendix B

Subject Tracking Table

Sample No.	Institution Name	Online Program	Graduate Level	For Profit/ Non-Profit	Year of Graduation	Pseudonym
1	A University	Instructional Technology	Master's	Non-Profit	2007	Courtney
2	B University	Criminal Justice	Master's	For-Profit	2014	Gary
3	N University	Health Science	Doctoral	Non-Profit	2009	Helen
4	C University	Instructional Design	Doctoral	For-Profit	2009	Jack
5	D University	Educational Technology	Master's	For-Profit	2015	John
6	F University	Health Care Management	Master's	Non-Profit	2015	Julie
7	P University	Criminal Justice	Master's	For-Profit	2008	Kevin
8	L University	Education Learning and Change	Doctoral	Non-Profit	2011	Laurel
9	M University	Educational Management	Doctoral	Non-Profit	2013	Logan
10	E University	Reading Specialist	Master's	Non-Profit	2006	Paula
11	N University	Educational Technology	Master's	Non-Profit	2013	Steve
12	I University	Instructional Technology	Master's	Non-Profit	2013	Valerie

Appendix C

Nvivo Coding Tables

Table C1

Q2-Type of Learning Experience		Sources	References
Negative		12	17
	Isolating	3	4
Positive		9	13
	Social	9	11
Prior Learning Experience		3	4

Table C2

Q3-Course Delivery/Face-To-Face Components		Sources	References
How were online course delivered?		9	37
	Assignments	4	7
	Course Introductions	3	3
	Discussion Boards	5	17
	Group Work	3	3
	Live Chats	2	8
Face-To-Face or residency requirements		8	32
	Yes-Residency	5	21
	No-Residency	2	3
	Visited Campus	1	1
	Face-to-Face Orientation	2	2
	Meet Instructor Face-to-Face	1	3
Cohort Model		10	12
	No-Cohort	7	7
	Yes-Cohort	3	5

Accelerated Courses		4	6
	Yes-Accelerated	2	2
	No-Traditional	2	2
Graduation Ceremony		10	13
	No-did not attend	5	7
	Yes-attended	5	6

Table C3

Teaching Presence Elements		Sources	References
Design and Organization-Setting Curriculum		2	2
Facilitation of Discourse-Sharing Personal Information		6	8
Direct Instruction-Focusing Discussions		2	2

Table C4

Q4-Teaching Presence		Sources	References
Relationship with instructor		10	16
	Positive	7	11
Did connection contribute to success?		9	18
	Yes-strong connection	6	12
	No-weak connection	4	5
Do you still communicate with your instructors?		6	9
	No-don't communicate	1	1
	Yes-still communicate	5	8

Table C5

Q5-Social Presence/Social Capital		Sources	References
Relationship with Classmates		4	6
Did connection with classmates contribute to success?		9	35
	No-didn't matter	5	5
	Yes-but not strong bonds	6	9
	Yes-contributed to success	8	21
Do you still communicate with your classmates?		10	18
	No-don't communicate	4	4
	Yes-in person	3	6
	Yes-social media	6	8
Sense of Community		3	8

Table C6

Elements of Social Capital		Sources	References
Affective expressions-emotions		1	1
Open communication-risk-free expression		2	2
Group cohesion-encourage collaboration	Encourage collaboration	8	12

Table C7

Q6-Factors of success		Sources	References
Intrinsic factors		11	26
Extrinsic factors		5	7
Barriers to success		1	1

Table C8

Q7-Intrinsic Motivation-Metacognition		Sources	References
Describe a challenge	Total	12	36
	Writing	3	3
	Time	3	4
	Learning	3	5
	Research	2	2
	Living Without Balance	1	1
	Being Away From Family	1	3
	Interpersonal Skills	1	1
	Dissertation	2	10
	Not Used to Online	1	1
	Life events	1	3
	Expecting	1	2
	Typing	1	1
Academic Support		12	65
	Technical Support	1	2
	Dissertation Committee	4	7
	Internet Resources	1	2
	Institutional Resources	12	27
	Family	2	2
	Co-Workers	6	21
	Colleagues	1	2
	Microcommunities	6	19
	Online Classmates	2	2
	Online Instructor	4	4
Personal Support		10	19
	Wife	3	4

	Husband	6	9
	Friends	1	1
	Co-Workers	1	1
	Parents	2	2
	Children	1	1
	Alcohol	2	2

Table C9

Elements of Cognitive Presence	Sources	References
Triggering Events-Sense of Puzzlement	0	0
Exploration-Information Exchange	2	3
Integration-Connecting Ideas	0	0
Resolution-Applying New Ideas	0	0

Table C10

Q8-Cognitive Presence		Sources	References
How did online learning help you to become more knowledgeable about your field?		11	36
	Altered Thinking Process	2	2
	Better at Researching	2	2
	Dissertation Defense	3	10
	Global Knowledge	4	8
	Graduate Assistantship	1	2
	Learn More About Field	4	6
	Learned More Online	2	2
	Resilient Problem Solver	1	1

Table C11

Q9-Impact of Online Degree		Sources	References
Would you do it again?		12	14
	No-Never Again	1	3
	Yes-Again	5	6
Describe impact of receiving online degree		11	26
	Able to Complete Degree	1	1
	Confidence	3	5
	Employment	6	12
	Learned New Things	4	4
	Met Milestones	1	1
	Respect	2	2
	Rigorous Experience	1	1
What would you change?		10	13
	Better Synchronous Technology	1	3
	Create More Community	1	1
	Different Program	2	2
	Miss Face-to-Face	1	1
	Reduce Distractions	1	1
	Schedule Changes	1	1
	Slower Pace	5	5
	Start Program Earlier		
What would you keep the same?		6	8
		2	2
	Meeting Face-To-Face	4	5
	Delivery method	1	1
	The instructors		

Table 12

Q10-Open Ended Comments/Conclusion		Sources	References
Anything else you would like to share		5	10
	Encouraged Children to be online learners	1	6
	Positive experience	4	4

Table C13

Missing COI Presence

Learner Presence		Sources	References
Learner Presence		12	56
Self-Regulation		8	18
1. Evaluation and reflection		3	4
2. Performance-monitoring and strategy use		5	11
3. Planning or forethought		3	3
Co-Regulation		12	31
1. Collaborative Learning Activities		11	16
2. Peer Tutoring		1	1
3. Learner trying to influence others not doing as well		6	14
Socially Shared Regulation			
1. Shared group understanding		3	7
2. Shared Group Decisions		2	3
3. Group Goals		0	0
4. Track Group Progress		1	2
5. Shared Outcome		0	0
		1	2

Table C14

Metacognitive Constructs

Metacognitive Construct	Sources	References
Metacognitive Construct	3	5
Knowledge of Cognition-Knowledge + Motivation	2	3
Monitoring of Cognition-Reflection + Assessing Learning Progress	2	3
Regulation of Cognition-Control of Learning Process	0	0

Table C15

Autonomy Presence	Sources	References
Autonomy Presence	9	21
Intrinsic Motivation-Intrinsic Drive	5	9
Interpretation-Formulating Ideas	2	2
Inspiring Discourse-Sharing Ideas	3	4
Learner Autonomy	3	6

Table C16

Agency Presence	Sources	References
Agency Presence	6	26

Table C17

Social Capital Theory	Sources	References
Strong Bonds	1	1
Weak Bonds	3	5

Appendix D

RTAF Approval

Indiana University of Pennsylvania
www.iup.edu

Office of Assistant Dean for Research
School of Graduate Studies and Research
Stright Hall, Room 113
210 South Tenth Street
Indiana, Pennsylvania 15705-1048

P 724-357-7730
F 724-357-2715
www.iup.edu/research

May 19, 2015

Cori Dunagan
26 Brook Street
Warren, PA 16365

Dear Ms. Dunagan:

I recently received your Research Topic Approval Form requesting approval for your topic entitled, *The Voice of the Learner: A Phenomenological Study of the Online Learning Experience.*

After a careful review of your project summary, I feel that your research may require human subjects review. Please complete the Human Subjects Review Protocol and return it to my office as soon as possible. The form is available on our website at http://www.iup.edu/research. Select *Resources for Researchers* and *Institutional Review Board for the Protection of Human Subjects*, and then select *IRB Forms* and *Application Instructions*.

Please follow the instructions carefully. If you have any further questions, please call my office at (724) 357-7730.

Sincerely,

Hilliary E. Creely, J.D., Ph.D.
Assistant Dean for Research

xc: Dr. Jay Start, Dissertation Committee Chairperson

HEC/bb

Appendix E

IRB Approval

Indiana University of Pennsylvania
www.iup.edu

Institutional Review Board for the
Protection of Human Subjects
School of Graduate Studies and Research
Stright Hall, Room 113
210 South Tenth Street
Indiana, Pennsylvania 15705-1048

P 724-357-7730
F 724-357-2715
irb-research@iup.edu
www.iup.edu/irb

November 23, 2015

Cori A. Dunagan
26 Brook St.
Warren, PA 16365

Re: IRB Protocol #15-294
Title: The voice of the learner: A phenomenological study of the online learning experience

Dear Ms. Dunagan:

This letter is to confirm that the IRB received your research protocol on November 23, 2015. Your protocol is captioned above with the Protocol Number that has been assigned to it. The rest of this letter will give you a brief introduction to what will happen next in the hope that this helps us work together to make this process as useful as possible for you.

The first step in the review is that a member of the Board will read your protocol to determine the level of review that is required for your project. This step will take from one to two weeks.

If the project requires the attention of the Full Board, it will be assigned to the agenda for the next Board meeting and you will receive an invitation to attend the meeting and confer with the Board in person. The dates for Board meetings are listed on the IRB website (www.iup.edu/irb). The majority of projects *do not* require the attention of the Full Board.

If the project can be reviewed on an Expedited basis, it will be assigned to a reviewer. This reviewer will communicate directly with you about any concerns regarding the project. This step usually takes about one to two weeks *beyond the initial screening*. At this point, you will work with the reviewer until the project is approved.

If you are an IUP student, a student using IUP as a research site, or a faculty member supervising students who will assist with the collection or analysis of data for this protocol, please note students are required to complete the research ethics training IUP provides through the Collaborative Institutional Training Initiative (CITI) before you can receive IRB approval for your project. This training is available at www.iup.edu/page.aspx?id=93408. [Note: IUP offers several courses through

CITI; however, unless you receive funding from an external agency (like the NSF or NIH) students are only required to complete the course on ***Human Subjects Research (question one on the CITI course selection page)***].

I hope that you find this process to be as useful and collaborative as possible. We strive to provide constructive consultation and request that you follow Board/Federal guidance in your revisions. We welcome your questions, comments, and suggestions at any time.

Sincerely,

Jen Roberts

Jennifer Roberts, Ph.D.
Chairperson, Institutional Review Board for the Protection of Human Subjects
Professor of Criminology

JLR:jeb

Cc: Dr. Jay Start, Dissertation Advisor

Appendix F

Informed Consent Form

Informed Consent Form

Thank you for participating in this important dissertation research. The purpose of this study is to look at the experiences of online students. Your participation is voluntary and individual responses will be kept confidential. Your identifying information such as name will be replaced with pseudonym within the published research study. There are no known risks if you decide to participate in this research study, nor are there any costs for participating in the study; however, the reflection process may bring to mind difficult memories and counseling is available to participants if requested. If at any time you do not wish to continue, you may discontinue your participation by ending the interview. If you do not choose to continue participation, your responses and information will be excluded from the study.

The interview will take approximately one hour of your time and will involve meeting face-to face with the researcher who will ask a series of approximately 10 open ended questions about your online learning experience. These face-to-face meetings will be audio recorded for later transcription. If a face-to-face meeting cannot be arranged, a webinar meeting such as Skype, Google Hangouts or GoToMeeting can be arranged. If at any time during this research new information is presented to the researcher, that may impact your willingness to participate, you will be informed. If you have any questions, please see the contact information of the principal investigator below.

Having read the statement of Informed Consent above, I agree to participate in this study. I understand that I have the right to discontinue my participation at any time and that my personal information will be kept confidential. A copy of this Informed Consent has been provided for me to keep.

Signature:_____	**Street Address:**_____
Printed Name:_____	**State:**_____
Date:_____	**Email:**_____
	Phone Number:_____

Cori Dunagan, M.A. (Principal Investigator)
Coordinator of Academic Technology, Jamestown Community College
Doctoral Candidate, Communications Media and Instructional Technology
121A Stouffer Hall
Indiana University of Pennsylvania
cori.dunagan@iup.edu (814-282-2007)

Dr. Jay Start (Co-Investigator/Advisor)
Professor, Communications Media
Davis Hall
Indiana University of Pennsylvania
Jay.Start@iup.edu (724-357-2492)

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).