

SOCIAL CONNECTION OF STUDENTS AND ITS  
ROLE IN BLENDED LEARNING ENVIRONMENTS

By

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Title of Study: SOCIAL CONNECTION OF STUDENTS AND ITS ROLE IN  
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Abstract: The purpose of this qualitative study was to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership master's level graduate program, and to explore if these relationships have an impact on their academic success as perceived by the students. Participants in this study are members of a blended learning cohort enrolled in hybrid and online learning experiences which have started their course work at the same time, enrolled in the same courses each semester. Data were collected through Social Network Analysis (SNA) survey, interviews, observations, and document review. The data from the SNA was imported into UCINET and NETdraw to create sociograms which aided in the selection of participants invited to interview. The data in this study indicate that there are few social connections between students in this blended cohort. Of those relationships that do exist, they are often one-way and transactional. These relationships are often built on trust as defined by competence and, in some cases, vulnerability. Because relationships are built on the perception that the other person can be of assistance in coursework, there is very little utility for social interaction outside of class, and there is a sentiment among cohort members interviewed that the relationships built during this BLC are not sustainable beyond graduation. Though formal structures built into the BLC are intended to encourage student community and collaboration, students report that these tools are limited in their ability to build relationships. Students interviewed credited more informal methods of relationship building for the few relationships that they have built with peer BLC members.

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## CHAPTER I

### INTRODUCTION

During the past several decades, there has been an influx of technology usage in the daily lives of Americans (Acree, Gibson, Mangum, Kellogg, & Branon, 2017; Pew Research Center, 2018). According to the Pew Research Center (2018), over 89% of all American households, including one out of every 10 American adults, have access to the internet, particularly through smartphones (Pew Research Center, 2018). With this type of access at our fingertips, it is not surprising that there is a prevailing culture of online interaction in today's society (Grieco, 2017). For generations like Millennials (Gen Y) and Post-Millennials (Gen Z), these groups see technology not as a luxury of service, but as a way of life for communicating, socializing, and engaging in their everyday world (Schrum & Levin, 2015). With the advent of cloud-based applications, we are, more than ever before, working and living in a world that builds knowledge from connections and extensions beyond our immediate reach. This cultural norm has created a need to integrate technology-with teaching and learning in educational institutions.

The element of convenience and online access to information has created the catalyst for change within the university system. These systems have introduced alternative formats of learning referred to as blended learning environments. The concise definition of blended learning "is the organic integration of thoughtfully selected and

complementary face-to-face and online approaches and technologies” (Garrison & Vaughan, 2008, p.148). In much simpler terms, blended learning is a combination of face-to-face and online teaching (Baker, 2010; Owston, York, & Murtha, 2013) that often centers on interactions within a Learning Management System (LMS). Learning Management Systems are online computer applications where activities, discussions, assignments, and collaboration can occur. Blended learning in some instances can serve as the umbrella term for both hybrid and online learning experiences. In hybrid learning environments, students attend a few face-to-face classes, while the remainder of the time spent online. Online courses do not necessitate learners to meet face-to-face, therefore course content is provided exclusively in a virtual space, often via the LMS and accessed by a computer or electronic device.

These new types of blended learning environments have become more widespread in higher education learning institutions, and with the increased usage has also derived an increase in the number of students enrolling in these types of courses and programs (Kurucay, & Inan, 2017; Winn, Leach, Erwin, & Benedict, 2014). The benefits gained through blended learning course models allows for the advantages of both traditional teaching methods alongside technology supported content, and assignment delivery (Baker, 2010). There is a wealth of research on how to design these types of courses (Dabbagh & Kitsantas, 2012; Garrison, Anderson, & Archer, 2000; Owston et al., 2013), the perceptions of students in blended learning (Dziuban, Moskal, Kramer, & Thompson, 2013; Owston et al., 2013), and the reasons student select these types of learning experience (Winn et al., 2014; Wu, Tennyson, Hsia, 2010); however, there is limited research on the social connections among students who engage in this type of learning

experience and the impact this has on their perceived success. Research indicates that adults learn and work best in social networks and are most satisfied in their work when these social needs are met (Knowles, 1984).

### **Problem Statement**

For graduate students, the search for degree programs designed around blended learning environments seems to be more critical than in previous years. Research indicates that prospective students are increasingly seeking programs of study and classes based on a few important factors: a) delivery of content, b) convenience, c) tuition cost, and d) reputation (Winn, et al., 2014; Wu, Tennyson, Hsia, 2010). As a result, many universities are taking steps to develop and redesign much of their course content and program offerings to meet the demands of these students (Holmes, Trimble, Morrison-Danner, 2014).

However, for some university programs, though the need is there, the choice to adopt these programs has been with great hesitation (Torrissi-Steele & Drew, 2013), and of those courses and programs that are offered, many lack the characteristics of effective teaching that result in student learning and success (Manning-Ouellette & Black, 2017). Research indicates there are a number of reasons that online courses do not lead to positive student outcomes. Studies by Afip (2014), Erichsen et al. (2013), Torrissi-Steele and Drew (2013), and Van Laer & Elen (2017) found that the students' level of technical familiarity and lack of proper access can serve as barriers to success in blended learning environments. Other research points to the lack of expertise of course instructors (Paechter, Maier, & Macher, 2010) as well as the lack of student motivation and persistence (Dechacht et al., 2015) as reasons for the lack of student success.

Research indicates that the social network of students may also be one additional reason for the difference in success rates in blended learning environments. Vygotsky (1978) theorized that, for students, learning is a social practice based on meaning-making, perspectives, and experiences. In the eighties, Knowles (1984) further explored how adults learn best by studying different elements that supported their academic achievement. Knowles (1984) theorized that adult students are social creatures and their interaction with others aided in personal growth. Researchers have continued to find social networks a significant component in students' learning (Kim, Song, & Luo, 2016). For example, Garrison (2017) points out the necessity for “community identity and collaboration, risk-free learning environment, and projected emotion or expression” (p.28) as part of group cohesion. He posits these elements in a blended learning environment influence a students' sense of connection, identity, and purpose (Garrison, 2017). Daly (2010) discusses the constructs of social networks in similar educational systems of practice and surmises that these ecosystems can serve as more than channels of communication, but potentially as a means to individual improvement. Garrison (2017) expands on this concept by stating that connection among members of a learning community has shown to increase student engagement and can be a factor in their retention in an online course.

### **Purpose of the Study**

The purpose of this qualitative study was to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership graduate program. Community of Inquiry theory was used as a lens to better understand how these networks may contribute to student success.

## **Research Questions**

The following research questions will guide this study:

1. What does blended learning look like in the selected graduate program?
2. What are the underlying social networks of students participating in blended learning environments?
3. How do these students describe the role of their social networks in the blended learning environment?
4. How does Community of Inquiry theory explain the above?

## **Epistemological Perspective**

For this study, the researcher aligned this research with the epistemology perspective of constructivism. This philosophical worldview where “truth and meaning do not exist in some external world, but created by the subject’s interaction with the world” (Gray, 2013, p.20), will allow for maximum exploration of blended learning environments. From the approach of constructivism, the research seeks to understand the world in which exists and the meaning created in this construct (Creswell & Creswell, 2018; Crotty, 1998; Gray, 2013).

## **Theoretical Framework**

Many students today seek to enhance their knowledge through alternative or non-traditional learning experiences (Baker, 2010). Through courses offered in both face-to-face and online interaction, also known as a hybrid, and courses offered exclusively through technology and internet-based tools, also known as online, these environments allow for flexibility, individualization, and choice (Wu et al., 2010). Scholars have conducted much research on the design and development of these types of blended

learning environments (Baker, 2010; Dabbagh & Kitsantas, 2012; Garrison et al., 2000; Owston et al., 2013; Paechter et al., 2010) and the theoretical framework used in this study provides guidance and language to better understand how students connect and engage with their peers and instructors (Snyder, 2009; Wu et al., 2010).

The Community of Inquiry (CoI) theoretical framework is a method that focuses on three elements of an educational experience for learning (Garrison et al., 2000). The combined facets of the framework include three interdependent elements that come together to create a meaningful learning experience, a) Cognitive Presence, b) Social Presence, and c) Teaching Presence (Garrison et al., 2000, p.2). These elements create the lens for the CoI analysis that speaks to the manner in which an individual engages in meaningful discourse and reflection to create personal meaning and understanding (Garrison, Cleveland-Innes, & Archer, 2013; Garrison, 2017).

In this framework, social presence is defined as the way in which people project themselves both socially and emotionally in a learning environment and how the learning environment connects to them as a real person (Garrison et al., 2000; Garrison, 2017). Teaching presence is the manner in which the instructor provides content through meaningful learning outcomes (Garrison et al., 2013; Garrison, 2017). Lastly, cognitive presence is when the student can adapt their academic knowledge and produce constructed meaning through reflection and discourse (Garrison et al., 2013; Garrison, 2017).

The Community of Inquiry (CoI) served as an excellent framework for research questions regarding student's social interactions in blended learning environments. Since this framework has been cited as an appropriate framework for evaluating online learning



communities (Garrison et al., 2013; Garrison, 2017), this is the best fit for the research due to the environment in which it takes place. This framework allowed for a focused direction of the study in the three areas of the educational environment; the understanding of social presence, the manner in which students engage with or without the instructor, and essential knowledge gain (Garrison, 2017).

### **Procedures**

Gray (2013) defines qualitative research as the process in which a researcher looks to “gain a deep, intense and holistic overview of the context under study, often involving interaction within the everyday lives of individuals, groups, communities, and organizations” (p.160). Qualitative research allows the researcher an opportunity to explore a topic of interest (Creswell & Creswell, 2018). It leverages methods such as observations, interviews, questionnaires, and document review (Creswell & Creswell, 2018; Gray, 2013). For this study, the researcher utilized qualitative study methods, with an epistemology, where “truth and meaning do not exist in some external world, but created by the subject’s interaction with the world” (Gray, 2013, p.20). From this approach of constructivism, the research seeks to understand the work in which exists and the meaning created in this construct (Creswell & Creswell, 2018; Crotty, 1998; Gray, 2013). Because this study sought to explore social networks of graduate students pursuing educational leadership degrees and better understand how students social connections are related to course success, the researcher engaged in an exploratory case study to explore the “cultural-sharing behaviors” (Creswell & Creswell, 2018, p.183) of graduate students participating in the selected blended learning environment.

## **Population and Participants**

According to Creswell & Creswell (2018) and Patton (2015), the researcher must set the stage for the selection of the appropriate candidates for any study. Purposeful sampling was utilized to select participants who could provide “information-rich” (Patton, 2015, p.264) data, with “central importance to the purpose of the inquiry” (Patton, 2015, p.264) of this study.

The population for the study was students enrolled in a graduate study program in a public higher education institution located in a suburban area of the midwestern United States. This site was selected using purposeful sampling because of its utilization of blended learning models, both hybrid and online, for delivery of instruction and a cohort model for program completion. In addition to the purposeful sampling of the setting, purposeful sampling was used to identify participants for this study. Based on the inquiry of this study, a cohort of graduate-level students, who are seeking a degree in educational leadership, and who currently participate in blended learning course options, were recruited for the study. A total of 15 students are eligible to participate. Of the 10 students eligible, 10 students opted into the study and were administered the online survey. Of the 10 students who completed the survey, five students were selected for interviews and observations. All attempts were made to recruit a representative sample from the population that met the criteria: 1) student is enrolled as part of the graduate cohort in educational leadership, 2) student is enrolled in at least one blended learning course, and 3) student submitted the SNA survey. Participants who identified as isolates or actors having a high number of ties were asked to interview, and additional interview participants were not recruited based on the SNA survey results.

## **Data Collection**

Data collection for this study included visual representations of the participants' social networks using Social Network Analysis (SNA) survey, interviews, observations and document review.

**Social network analysis.** A survey was disseminated to all eligible cohort members to collect data regarding students' connections and interactions with peers inside and outside of the cohort. Surveys were free-choice (Scott, 2000) and participants will not be limited in the number or type of answer they provide. Surveys were administered electronically using Qualtrics.

**In-person interviews.** Semi-structured research interviews of approximately 60 minutes each were conducted with five research participants. Interviews occurred in a natural setting chosen by the participant.

**Observations.** A classroom environment observation was conducted in one course in which the research participants were enrolled. Observational protocols for the observation included a description of the setting, participants, activities and interactions, the time (both frequency and duration) and any other subtle factors from the environment observation.

**Document Review.** In addition to the interviews and observations, documents relevant to the scope of the study was collected from the study participants. Documents may include student work, participant communications, images, course documents, syllabi, and evidence of interactions. The documents provided context for the study environment and contributed to the meaning making process of the study (Patton, 2015).

## **Data Analysis**

SNA surveys were analyzed using UCINET and NetDraw software. The results of the survey were entered into UCINET to create matrices of reported relationships. The matrices were entered into NetDraw to create visual representations, or sociograms, of the reported relationships. Interviews, a classroom observation, and document review data were gathered, transcribed and coded into themes by the researcher. The researcher used qualitative strategies for coding and theming of the data with the theoretical lens of CoI. Saldaña (2015) ascertains both first and second rounds of coding as important processes to make meaning of the researcher's gathered data. Though one round of coding may be enough to begin to see patterns in research data, Saldaña (2015) emphasizes that second round coding provides advanced ways of "reorganizing and reanalyzing data coding" (p.234) from a first-round cycle. The goal of the second round process is to develop categories, themes, or conceptual ideas regarding the research data (Saldaña, 2015).

## **Significance of the Study**

While examining the various research related to students participating blended learning environments while pursuing a degree in higher education, it is apparent that a gap exists in the understanding how social networks influence, if at all, their success. Much of the research conducted about the role of social networks and learning focus on the interactions between students and instructors while engaging in different types of learning activities without addressing the entire social network of the student and its possible influence of the network on students.

The research in this study can be beneficial to the body of research that already speaks to the importance of student's social network in blended learning environments. There is a belief that the results of this research will call for the need to conduct more research on how social networks among students impacts their success. With a better understanding of student needs in blended learning will lead to better developed courses which not only focus on the learning outcomes but also the characteristics needed to foster student success.

The research in this study can be beneficial to educational leaders in both K12 and higher education institutions. As universities across the nation compete for student enrollment, understanding how students determine success in courses and the social constructs that help make them success could serve as an essential framework for course and program design. The results of this study may inform graduate level educational leadership programs as they develop courses to prepare future school leaders.

### **Limitations**

Potential limitations of this study include the sample, the duration of the study and the researcher's interpretation of the findings. The sample for this study included students in one university cohort engaged in an online or blended cohort model of a masters-level education leadership graduate program (BLC). Therefore, the number of eligible students was limited. Additionally, students self-selected into the BLC so participants may have been predisposed to learning within this context. Another consideration would be the students participating in this study are at the beginning of their program of study and have enrolled in only three semesters of course work together. It is possible relationships may grow or change over the course of the remainder of the BLC program. As this study

took place during one course in a series of semesters toward a degree program, this study is also limited to the time and place it was conducted. Experiences in previous courses were reported as remembered by students interviewed, and there is no prediction or generalization to future courses in the degree program, and social connections may manifest differently in different educational contexts. Finally, the data was interpreted through the perspective of one single researcher. Data collection and analysis may be subject to the positionality and potential bias of the researcher. Given these limitations, the purpose of this study is not to generalize to the larger population, but to inform the daily work and practice of practitioners and participants who engage in blended learning environments.

### **Definition of Terms**

- Asynchronous – participating in a non-simultaneous activity or experience online.
- Blended Learning – the combination of face-to-face teaching methods with online or hybrid spaces.
- Blended Learning Environment- an educational environment that includes both traditional teaching methods in combination with online or hybrid meeting space.
- Cognitive Presence – “the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry” (Garrison, Anderson & Archer, 2001, p.11)
- Cohort – a group of people, bound together by their enrollment in a graduate educational leadership program, who start at the same time and often end at the same time.

- Community of Inquiry- a theoretical lens that analyzes the learning environment based on cognitive, social, and teaching presence (Garrison, 2017).
- Hybrid Learning – The combination of both face-to-face meeting and online engagement.
- Learning Management System- an online software application that allows for student and teacher interaction, and resource document repository.
- Millennials (Gen Y) – people born between 1981-1991.
- Online Learning – Engagement and learning happen through means of multimedia tools.
- Post-Millennials (Gen Z) – people born between 1991 – 2001.
- Social Network Analysis – the process of investigating the social connections among individuals in a group.
- Social Presence – the ability to identify as self in a group and develop relationships in an environment (Garrison, 2017).
- Sociogram – visual diagram of the interrelationships among group members.
- Synchronous - participating in a simultaneous activity or experience online.
- Teaching Presence – “the design, facilitation and direction of cognitive and social processes” (Garrison, 2017, p.27) in a learning environment.

### **Summary and Organization of the Study**

This study represents the social network of graduate students, enrolled in an educational leadership program with experience participating in blended learning environments. The results of this study should shed light on the understanding of the

social networks of students and how they attribute, if at all, to their success. There are five chapters in this study; each one focused on an element of this research.

Chapter I includes the statement of the program, the purpose of the study, and the research questions that guided this inquiry. This research utilized social network analysis in conjunction with an exploratory case study, analyzed through the lens of Community of Inquiry (Garrison et al., 2000) to see what realities exist.

Chapter II provides a review of the literature that provides a better understanding of the research topic being studied. The following topics are addressed in this chapter: blended learning, university adoption, benefits to students, student success, barriers to adoption, adult learners, social connections, and contributions to learning.

Chapter III provides a detailed description of the research method and procedures leveraged during this study including participant selection, data collection, data analysis, including theming and coding. This chapter includes the methodical stance of the researcher including the trustworthiness and the limitation of this study.

Chapter IV presents the findings of the research, the description of the data reviewed. The data collected through social network analysis, observations, interviews, and document review are explained in detail in this chapter. The gathered data were analyzed through the Community of Inquiry (Garrison et al., 2000) theoretical framework.

Chapter V concludes the findings of the study. The goal of this study is to provide in-depth research regarding student's social networks in educational leadership blended learning programs, in the hope of proving school traditionalies and university leaders



with vital data related to how students interact and the potential influence on their current and future success. Finally, future recommendation for this research were offered.

## CHAPTER II

### REVIEW OF LITERATURE

This chapter reviews the literature related to the topic of study. First, this review provides a comprehensive overview of the research related to blended learning and blended learning environments, the adoption of these environments in higher education, and the benefits for students. Second, the research provides context on students' lack of successful endeavors and potential factors for dropout in blended learning environments. Third, pertinent literature related to the adult learners, social presence, and the social networks, primarily related to blended learning environments is provided. Finally, this chapter includes literature on the theoretical framework applied in this study.

#### **Blended Learning**

The term 'blended learning' refers to the combination of face-to-face teaching and the use of a content delivery system to provide access to content and participation in activities (Afip, 2014; Baker, 2010; Graham, Woodfield, & Harrison, 2013; Owston et al., 2013). Blended learning environments allow for access to information and participation in learning activities both in classrooms and online, or exclusively online (Baker, 2010; Owston et al., 2013; Wu, Tennyson, & Hsia., 2010). Wu et al. (2010) stated well-developed blended learning environments are multi-faceted offering a way to

access content, communicate with others during learning, and develop evidence of constructed knowledge.

Wu et al. (2010) described quality blended learning environments as those which contain materials for learning, provide opportunities for peer and instructor interactions, and allow the learner to gain a sense of belonging. Effective blended learning environments leverage the same methods as traditional methods used in face-to-face learning environments such as information access, quizzes, and discussions (Wu, Tennyson, Hsia, 2010) while groups of “learners work together and regularly interact with their fellow students and the teacher using asynchronous and/or synchronous communications technologies” (Anderson, Upton, Dron, Malone, & Poelhuber, 2015, p.7). Effective blended learning provides a new way of educating students in a flexible and often more accessible environment as classroom interactions are not bound by location or space like many other learning experiences. The potential of this learning environment is genuinely endless (Garrison, 2017) and only bound by the constraints of policy, ideas, and users. As a result, blended learning has opened a world of possibilities for higher education (Larsen, 2012).

### **University Adoption**

There were concerns in the early nineteen-eighties that online learning removed the social interaction between students and instructors. These concerns brought about a refocus and exploration of social learning theory. As a result, research and practice moved away from focusing solely on the use of the computer and related applications to the student and their course-related interactions (Francescato, Porcelli, Mebane, Cuddetta, Klobas, & Renzi, 2006). Higher education institutions today view blended

learning as a way to engage students in problem-solving activities, provide enhanced curriculum, and support after graduation (Gordon et al., 2016; Johnson, 2016).

While there is an overall decrease of enrollment occurring across the nation in higher education institutions, four-year public institutions are seeing annual growth in overall enrollment numbers (Seaman, Allen, & Seaman, 2018). Some of this growth may be attributed to the growth in online learning options. Research indicated that 31.6 percent of students enrolled in higher education are participating in some type distance education course, which is up by 17.2 percent from 2012 reports (Seaman et al., 2018). With this increase, universities are beginning to look more closely at research related to appropriate teaching strategies and design to support successful online and hybrid programs (Baker, 2010; Graham, Woodfield, & Harrison, 2013; Kurucay, & Inan, 2017).

Garrison & Vaughan (2012) theorize that blended learning can transform and innovate teaching and learning in higher education and that the flexible nature of blended learning has the opportunity to make higher education more attainable and achievable. This can be especially true for adult learners that have full-time employment or family commitments (Deschacht & Goeman, 2015). According to Garrison et al., blended learning has the potential to engage students in active learning models and also allows for student collaboration, group engagement, real-world experiences, and enriched opportunities (Garrison et al., 2012). Because of the opportunity to increase enrollment and the benefits of blended learning, institutions of higher education are increasingly budgeting resources for the expansion of online and blended learning environments (Dziuban et al., 2013). The goal is to have more students participate in these types of courses (So & Brush, 2008), which, in turn, generates revenue dollars for the college.

## **Benefits for Graduate Programs**

Gone are the days of school leaders focusing solely on the operational and managerial functions of a school. Today's school leaders are focused on leading school communities through programs of learning and growth (Gray, 2013). Additionally, future school leaders can anticipate the need to facilitate a broader school community through the adoption of technology (Gray, 2013). Researchers find that successful innovation in educational leadership programs that emphasizes a strong focus on inquiry and problem-solving based models that include collaboration, mentoring, and social capital may provide future leaders these skills (Crow & Whiteman, 2016; Hernandez, Roberts, Menchaca, 2012). Further, blended learning environment design models in educational leadership programs are a great platform to deliver these essential elements to learners (Gordon, Oliver, & Solis, 2016).

Research has continued to show evidence that educational leaders that attend quality programs demonstrate strong leadership skills (Crow & Whiteman, 2016). If educational leadership programs want to continue to be relevant in the preparation and practice of future school leaders, they need to change by adopting more innovative and alternative models that allow the students to participate in experiences that apply to the job (Johnson, 2016; Winn et al., 2014). These alternative models need to explore the use of blended learning environments for instruction, collaboration, and fieldwork experiences related to the work (Crow & Whiteman, 2016; Hernandez et al., 2012). Many educational leaders encounter online, and hybrid environments on the job, and by providing them with these essential experiences and tools for learning while growing in the leadership field provides candidates with a better understanding of how to engage,

and thrive in these environments (Hernandez et al., 2012). In fact, in an evaluation of principal preparation programs, researchers (Hernandez et al., 2012) participating school superintendents indicated that the use of online courses and flexible scheduling as well as less traditional face-to-face modes of would be more accommodating to students enrolled in educational leadership programs.

### **Benefits for Graduate Students**

According to Afip (2014), “Blended learning allows the learners to make choices about their learning on where and when they want to learn, what and how they want to learn and their goals in learning” (p.5). Additionally, blended learning can be enjoyable and motivating to students because it caters to “diverse learning that can be achieved from the interactive learning activities offered by online learning” (Afip, L. A. 2014, p.5). Afip (2014) has also found that blended learning can offer a sense of community to those students that participate.

Dziuban et al. (2013) indicated that some students feel that technology that provides advanced communication and interactions among students and peers provides them with some advantage and ownership in their learning. These advantages are extended to the instructor, providing more technology advancements, broadening the content and resources of a course (Wu, Tennyson, Hsia, 2010), and addressing the teaching and learning challenges felt by instructors in higher education (Garrison et al., 2012). There are academic and pedagogical benefits for embracing blended learning instruction, which can include: schedule flexibility, effective and efficient instruction, and potential cost benefits to educational institutions (Porter, Graham, Spring, & Welch, 2014).

## **Student Experiences in Blended Learning Environments**

Blended learning environments have the potential of removing limitations found in other learning modes by providing more flexibility, ownership, and success among students (Erichsen et al., 2013). Many students that participate in blended learning environments reap the benefits of this model and indicate an increased satisfaction and academic achievement in their course (Erichsen et al., 2013; Owston et al., 2013; Paechter et al., 2010). While some find success in these types of learning environments, others are not and fail to be successful in their experiences.

### **Student Satisfaction**

If there is higher satisfaction in blended learning courses as compared to traditional learning models (Owston et al., 2013), then there needs to be a better understanding of the factors that affect increasing student satisfaction rates. So what determines satisfaction in blended learning environments?

According to Wu et al. (2010), "computer self-efficacy, performance expectations, system functionality, content feature, interaction, and learning climate are the primary determinants of student learning satisfaction" (p.155). While the research of Wu et al. (2010) focuses on the design and development of blended learning environments, it is the research of Erichsen et al. (2017), which focuses on satisfaction indicators from students. Erichsen et al. (2017) found that students find course satisfaction when they perceive there is flexibility, engagement of the instructor, interactive communication and varied assignments in a course. The research shows that as students become more familiar and comfortable with blended learning environments, their interactions between each other become more prevalent and in turn fosters a

community built on trust, collaboration, and purpose (Garrison, 2017; Wu et al., 2010). Baker (2010) found that students who indicated a higher satisfaction with their courses indicated having positive relationships with their instructors. Van Laer, & Elen (2017) emphasized the importance of personalized learning in blended learning environments and how these factors influence student satisfaction with their learning experience. All these interactions and experiences create an environment that students perceive as positive.

### **Student Interaction**

The way we interact with people in a learning environment is an essential element. Kurucay and Inan (2017) stated that there are three types of interactions in blended learning environments: learner to content, learner to instructor, and learner to learner. These interactions are vital to the success and satisfaction of students in blended learning environments. Some studies suggested that learner to learner engagement or interaction will improve the blended learning experience of students, and ultimately increase their satisfaction and achievement in the course (Kurucay & Inan, 2017). This same study also found that instructors play a role in the student's satisfaction based on the interactions with the instructor. It is the relationships among the instructor, students, and peers that have an impact on the satisfaction rates of courses. "Interaction between student and instructor supports knowledge construction, motivation, and the establishment of a social relationship" (Paechter et al., 2010, p.223). The research supports the blended model of learning because it aids in students' interactions and deepens their peer relationships (Owston et al., 2013).



## **Course Design**

Well-developed learning environments are multi-faceted and include learning materials and opportunities for peer and instructor interactions and contribute to the learner's sense of belonging (Garrison, 2017; Wu, Tennyson, & Hsia, 2010). One design element that comes to light in evaluation is the preference for a student's ability to collaborate with their peers on projects as opposed to completing task-oriented assignments. When this element is present, students experience more satisfaction in the blended learning course (So & Brush, 2008).

Beyond the tasks and activities that students participate in while enrolled in blended learning experiences, the instructor plays a vital role in course satisfaction. Students indicate a higher overall motivation and satisfaction, (Paechter et al., 2010) when the instructor served as an active participant in the course, (Baker, 2010). Baker (2010) defined these actions as "immediacy and presence" (p.22). When these instructor's actions are present in a blended learning course, students reported an increase in the level of satisfaction and motivation. Paechter et al. (2010) defined this interaction between student and instructor as critical elements for students "knowledge construction, motivation, and the establishment of a social relationship" (p.223). Garrison (2017) believed the role of the instructor is to provide quality course design, facilitation of discourse, and instruction. However, faculty immediacy seems to have the most significant influence on students' satisfaction levels because location and space seem to be minimized when instructors are responsive (Garrison, 2017).

While the instructor's role of facilitation and participation play an integral role in students blended learning course satisfaction, Johnson, Aragon, Shaik, & Palma-Rivas

(2000) found that overall, direct student and instructor communication played a significant role as well. Instructors often use tools like email, chat, video streaming and discussion boards that integrate with the content management system to connect directly to students in their blended learning environment (Wu et al., 2010). Students who feel that sense of support and connection with their instructors have a higher course satisfaction rate (Wu et al., 2010). Students are more likely to share their opinion on topics in online environments that might be more difficult in traditional face-to-face classroom settings (Owston et al., 2013).

### **Academic Achievement**

Academic achievement can be identified as grades in a course or the personal perception of a student's definition of learning (Kurucay & Inan, 2017). Research indicates that the more satisfied a student is with their course, the higher the likelihood of academic achievement (Kurucay & Inan, 2017). Owston et al. (2013) found that high-achieving students were more "satisfied with their blended course, and preferred the blended format over fully face-to-face or online" (p.41) coursework. Researchers (Erichsen et al., 2013; Owston et al., 2013; Paechter et al., 2010) also identified a correlation between student perceptions in blended learning environments and their academic success. Based on the interaction online through group collaboration and discussion boards, there is a belief that the quality of the instruction is often "higher quality of learning" (Owston et al., 2013, p.43) in an online environment. Student self-regulation, goal setting, and the interaction and expertise of the instructor also play a role in the perceived academic success of students (Owston et al., 2013; Paechter et al., 2010; Rubin, Fernandes, & Avgerinou, 2013).

## **Barriers in Blended Learning**

There are many factors that can contribute a lack of success in blended learning environments (Afip, 2014). For some students and instructors, the lack of proper technical knowledge and access to technology can make blended learning difficult to manage (Afip, 2014; Erichsen et al., 2013; Torrisi-Steele & Drew, 2013; Van Laer & Elen, 2017). McKnight-Tutein and Thackaberry (2011) identified gender differences as a possible barrier indicating that men perform better in online models while women perform better in hybrid models. While these factors are essential to bring awareness of the multiple barriers to success, much of the research on blended and online learning points to the lack of self-regulation, learner ownership, and external support as major challenges (Dechacht et al., 2015). Dechacht et al. (2015) found that decreased involvement or achievement in blended learning may be due to lack of interest, inadequate goal matching to their future success, and lack of comfortability with technology in blended learning courses.

### **Student Dropout**

While many factors contribute to student barriers and disadvantages (Afip, 2014), the resulting dropout rates of students are primary concern in institutions of higher education. The possibility of increased drop-out rate often prevents the initial implementation of blended learning models (Deschacht & Goeman, 2015). Research does indeed indicate that dropout rates are higher among students learning in blended learning environments as compared to their face-to-face counterparts (Deschacht & Goeman, 2015). Kurucay and Inan (2016) found that student dropout was influenced by the lack of personal interaction and this sense of isolation plays a major role in academic persistence.

Additionally, Owston et al. (2013) found that students often identify external factors for their failure in blended learning. These external issues can be identified as a lack of family support, insufficient time to complete assignments, inadequate instructor support, and unclear assignment expectations (Owston et al., 2013).

### **Self-Regulation**

While higher achievers are more satisfied with blended learning environments, the inverse is also true; lower achievers are less satisfied with blended learning environments (Rubin, Fernandes, & Avgerinou, 2013). Higher achievers engage more fully online in course activities (Rubin et al., 2013; Owston et al., 2013), while unmotivated students find blended learning less satisfying than their self-motivated counterparts. Rubin et al. (2013) stated that self-regulation is a student's ability to focus on assigned tasks, set academic goals, manage course assignments, and employ good study techniques. Deschacht and Goeman (2015) suggested that some adult learners lack the ability to take ownership of their learning, and struggle to find ways to self-regulate.

### **Social Connections in Blended Learning Environments**

Technology in blended learning environments allows learners to connect in ways that are hard to achieve in face-to-face course models (Enrichsen et al., 2013). Blended learning provides an avenue to build social connections through the means of both face-to-face and asynchronous learning by using discussion boards and collaborative activities. This mode of “dialogic pedagogical approach reflects a social constructivist epistemology” (Shea & Bidjerano, 2010, p.1722), advocated by Vygotsky (1978) as a “means for collaborative knowledge construction” (Shea & Bidjerano, 2010, p.1722).

Vygotsky (1998) surmised that “education is realized through the student’s own experience, which is wholly determined by the environment” (p.50). It is through these experiences in the environment and through instructor and student collaboration that a student’s learning thrives (Whiteside, 2015).

Malcolm Knowles (1984) built upon the research of Vygotsky (1978) by studying the way in which adults learn (Afip, 2014; Bliden, 2014). Knowles (1984) Coined the term ‘andragogy,’ which means the “process of teaching and learning for adults” (Afip, 2014, p.36). In Knowles’ (1984) work he identified five characteristics of adult learners, self-concept, experience, readiness, orientation, and motivation.

- Self-concept identifies the way in which an adult perceives themselves as a self-directed person, in control of their actions and decisions.
- Experience speaks to the accumulation of life experiences by adults that play a role in their learning.
- Readiness refers to the prepared nature of an adult in alignment with their role as a learner.
- Orientation identifies the transition of adults to problem-centered thinking.
- Motivation refers to the internal motivation present in adult learners.

The activities that adult learners need to engage in must focus on relevance, authenticity, and real-world application. Afip (2014) suggested that when the needs of students are met, they are more intrinsically motivated to succeed. It is important to adults that they receive performance requirements that outline what is expected in their learning, they demand opportunities for success, and require autonomy during the

learning process. Feedback from both their peers and instructors is essential because it provides them with the reinforcement of growth and learning that they seek.

In the early 80's there was a concern about the lack of social interaction found in technological learning environments of the time. It was during this period that research began to focus back on the theories of how students learn best and the role that social interaction played. Through the 90's there was a shift in research to focus on learner-centered models of instruction, where students work to collaborate with others in cooperative groups leveraging computer-based tools. It was not until some years later that research began to see the adoption of online and web-based tools that allowed for the sharing and exchanging of ideas and resources (Francescato et al., 2006). It is these changes that form the framework for program and course design to avoid social isolation (Holmes et al., 2014). Holmes et al. (2014) states that learning in blended learning environments is social by nature, and online and hybrid environments are designed to allow students to collaborate and engage in meaningful learning tasks that foster a sense of community. Since adults seek to have positive relationships with their peers and instructors and community is important to their learning, blended learning is a good fit for many (Afip, 2014; Bliden 2014). Since there is a clear understanding that adults have different learning needs than children (Afip, 2014), courses and programs need to be designed with these learners in mind (Baker, 2010). Some research indicated that older adults have "a strong need for a sense of belonging and personal growth, and thus a heightened interest in learner control, whereas younger adults' motives for learning were more competition-related" (Torrissi-Steele & Drew, 2013, p.1406), in their learning environment. Considering most adults were taught in very traditional and formal models

of instruction, that means the new setting of blended learning can serve as a potential challenge until they become comfortable and adopt these new and alternative ways of learning (Cercone, 2008)

### **Social Presence**

The concept of social presence has been defined in different ways in different research studies. Research points to social interaction, immediacy, intimacy, emotion, and/or connectedness” (Lowenthal, 2009, p.114) in a culture or learning environment when describing social presence. According to Baker (2010) “social presence is described as the feeling that group members communicate with people instead of impersonal objects.” (p.5), and Lee (2014) stated it is when group members project “their personal characteristics, thereby presenting themselves to the other participants as real people” (p.41). Research indicates when social presence is high there is a feeling of cooperation and involvement (Baker, 2010; Power, 2016). When students feel disconnected with their peers and instructor online, there is a lack of group cohesion. Lack of social interaction has a negative effect on students, and when there is a “decrease in engagement and satisfaction, there is an increase in dropout risk” (Van Laer & Elen, 2017, p.1407).

The concept of social presence begins before the course starts. During the design and development process, the course designer must provide multiple instances throughout the course for the instructor to extend formal and informal engagements with the students focused on course outcomes (Baker, 2010). There is an understanding that “Social presence cannot be established, indeed cannot exist, without interpersonal and intrapersonal interactions” (Power, 2016, p.201), and students need to be provided opportunities in the course to create their social presence. Social connection and social

presences can shed light on the culture, environment, and interpersonal interactions among students in blended learning (Kurucay & Inan, 2017). This connection in learning fosters the climate for social interaction and increases social presence among students (Weidlich, & Bastiaens, 2017). Understanding social presence's potential is very important to the process of building online learning environment for students (Garrison, 2017; Sung 2012). Designing a culture that supports immediate feedback, expectations, social norms, and respect for the learning process is important to social presence. The personalization of the instructor in a course tends to increase the likelihood that students will feel a sense of social presence. The use of a student's name and allowing them to share personal connections and stories in a blended learning course is essential to feel a social presence. Research in blended learning course design has often focused on the use of technology in these environments (Sung & Mayer, 2012), but there is a need for a more concerted effort on exploring how social connections among students affect their feeling of social presence, and if this network aids in their perceived success.

### **Social Networks**

Social relationships among individuals in educational environments have been an intriguing topic to researchers, especially those looking to understand educational change. Education has been slow to adopt strategies to research the relationships between individuals in a particular culture (Daly, 2010), known to many fields as Social Network Analysis (SNA). Social network research has significantly increased over the past two decades (Daly, 2010), and those that have adopted this process of analysis to understand the broader context of culture or environment often reap the benefits of understanding conditions, processes, and outcomes that prevent or advance change. SNA allows for



researchers to explore both informal and formal relationships in an organization and to understand how these connections affect the culture or environment being studied (Daly, 2010). Social network analysis provides researchers with a visual representation, known as a sociogram, which provides an understanding as to the relationships and connections among individuals in a culture or environment. Daly (2010) suggested that informal and formal webs of interactions and relationships can determine how culture improvement and advancement is positively or negatively influenced. Researchers have also found that research on culture change and improvement lacks attention to the social links between individuals, and without this understanding, it leaves the research short in a complete analysis of an environment (Daly, 2010).

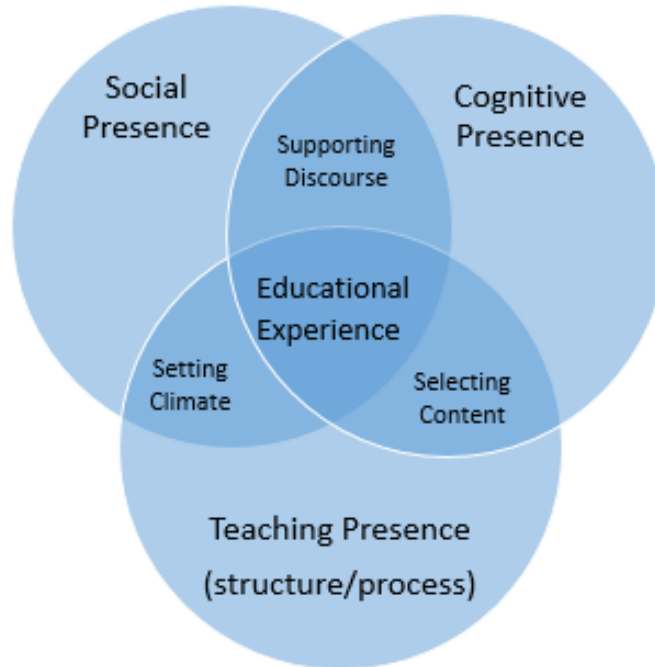
Social network analysis uses terms that provide meaning and understanding to the different elements of social networks. Daly (2010) refers to the “network as a group of actors who are connected to one another through a set of different relations or ties” (Chapter 1, Section 2, para. 9). These actors may have different roles in a network; central actors, peripheral actors and isolated actors. It is through these connections that actors, which are known as nodes, exchange information and knowledge. One of the primary elements in understanding social networks is understanding social capital. Social capital is built on the understanding that relationships provide a way of accessing, borrowing, and leveraging others resources in an environment (Daly, 2010). These ties and connections between individuals in an environment can provide support or hinder the flow of interaction.

## **Theoretical Framework**

Garrison (2017) stated, “the digital era reflects a connected society whose success is dependent upon collaborative approaches to thinking and learning” (p.4). This message holds true when referencing blended learning environments and understanding the connections and interactions of students in these learning constructs is very important. The use of the Community of Inquiry (COI) model is a logical lens to apply when researching blended learning environments (Garrison et al., 2000).

The COI is a conceptual model that focuses on the integration of and engagements between the different individuals in a blended learning environment (Garrison, 2017). This model serves to provide focus on three important elements of this learning environment: the instructor, the student, and the learning. Garrison, Anderson, and Asher (2000) theorized that this model represented the essential elements that provided students with an optimal educational experience. See Figure 1 (Garrison et al., 2000).

Figure 1



*Figure 1: Diagram of Community of Inquiry (COI)*

The foundational element of this framework is built upon the “collaborative constructivist” (Garrison, 2017, p.9) approach to teaching and learning. In this framework, construction of knowledge, social interaction and teaching engagement are all honored as interacting ideas and concepts in a learning experience. This framework expands on the concepts of personal and interactive learning by recognizing that learning is a social experience interdependent on a “sense of purpose and belonging” (Garrison, 2017, p.10) in a community. Therefore, the COI framework emphasizes the “collaborative approach to thinking and learning” (Garrison, 2017, p.11).

### **Social Presence**

Social presence is the “ability of participants to identify with a group, communicate openly in a trusting environment, and develop personal and affective relationships” (Garrison, 2017, p.25) by projecting a sense of being real or human. Since social presence is found to be an essential characteristic to the establishment of a community, it makes sense to use the COI framework to evaluate further the social networking structures of students participating in a research study on blended learning.

### **Cognitive Presence**

Cognitive presence, which is derived from both Dewey’s and Vygotsky’s research on the construction of knowledge and inquiry, speaks to the “purpose, process, and product” (Garrison, 2017, p.26) of a student’s learning. This tenant focuses on the construction of knowledge that occurs through discourse and critical reflection and, moreover, represents the ability of students to “create meaning out of ideas and facts through the means of discussion, reflection, and application” (Rubin et al., 2013, p.49).

### **Teacher Presence**

Teacher presences should not be confused with the action of teaching in a blended learning environment, but more as how an instructor serves as a guide and facilitator of both cognitive and social interactions with the purpose of meaning educational outcomes. The idea behind this tenant is to focus on the instructor as the facilitator of learning and his/her shared role in the community of inquiry.

### **Indicators of COI**

COI has been used as a research construct and framework for the past twenty years. This framework has been tested through many different qualitative and qualitative

studies to vet its construct as a credible framework for research in blended learning environments (Garrison, 2017; Shea & Bidjerano, 2010). Through these different research studies have emerged a group of theoretical indicators that have proven to be an essential guide during the data gathering and analysis process of research. Garrison (2017) suggests specific categories and indicators which in other research, serve as “enormously useful in the gauging and understanding the dynamics of a community of inquiry” (p.27). See Table 1.

Table 1		
<i>Codes Related to Community of Inquiry Theory</i>		
<u>Elements</u>	<u>Categories</u>	<u>Indicator (Examples Only)</u>
Social Presence	Personal/affective	Self-projection/expressing emotion
	Open Communication	Learning climate/risk-free expression
	Group Cohesion	Group identity/collaboration
Cognitive Presence	Triggering event	Sense of puzzlement
	Exploration	Information exchange
	Integration	Connecting Ideas
	Resolution	Applying new ideas
Teaching Presence	Design and organization	Setting curriculum and methods
	Facilitating discourse	Shaping constructive exchange
	Direct instruction	Focusing and resolving issues

Note. Reproduced from Garrison, D. R. (2017). *E-Learning in the 21st century: A community of inquiry framework for research and practice* (3rd ed.). London: Routledge/Taylor and Francis, p.28.

### **Summary**

Chapter II presented a synthesized look at research related to this topic and providing the foundation to understand the need for this study. This literature is divided up into four parts. The first addressed university adoption and benefits for students, the second looked into the constructs for barriers in blended learning, the third reviewed the potential elements that influence a student's perceived success, and the fourth was a review of the Community of Inquiry, theoretical framework used as a lens for this study.

In the first section of this review, the literature described the aspects of a blended learning environment and set forth an understanding of the different terminologies used in this alternative mode of learning. This section elaborated on the body of research which supports the adoption of these types of learning environments in a higher education institution, and the perceptions that university leaders and instructors have about this learning delivery method. The research communicated the needs for these environments in higher education institution if not only from the demands presented by structures and societal norms but also based on the inherent benefit for students that participate. The research provided at the beginning of this review outlines the benefits of these types of learning environments for students today and the importance of adoption.

The second section of the literature review focused on how some student finds success in this learning environment, and reasons which others do not. This section outlined reasons that influence those results, along with the impact on student

achievement and academic success. While there was much research on the success of student's in blended learning, there was also research supporting the concerns, barriers, and issues of this learning environment. A lack of technological aptitude and self-regulation continued to be the common issues for student drop-out in these learning environments.

The third section of this review focused on the areas that lead a clearer understanding of the research topic and why it needs to be explored. This section identifies the way in which adults best learn, which is through self-construction of knowledge, through active engagement and interaction with others (Knowles 1984; Garrison 2017, Shea & Bidjerano, 2010; Vygotsky 1978). These learning practices and the social connections of others found in research provides a deep understanding of the importance of social interactions in learning. Understanding the way people connect and the manner in which they engage has excellent potential in both blended learning design and development, but also to the education community in general. The literature provided a basic understanding as to how the use of social network analysis allows researchers to see relationships and connections among learners and interpret these networks more thoroughly.

This chapter concluded with a look at the theoretical framework, CoI (Garrison et al., 2000), as an established framework used to evaluate environments, such as the one in this study. The framework allows researchers to view three essential aspects of a learning environment for both data gathering, and analysis. The tenants of this framework include social presence, cognitive presence, and teacher presence, which all work congruently to provide a quality educational experience.

## CHAPTER III

### METHODOLOGY

This chapter will provide a detailed description of how the study was conducted. Detailed information about participant selection, data collection, and data analysis techniques is included. This section also includes information on researcher bias and concludes with details related to trustworthiness techniques.

#### **Statement of the Problem**

There is a documented increase in students seeking to participate in online and hybrid learning opportunities in higher education (Kurucay, & Inan, 2017; Winn et al., 2014). While it is well known that students can benefit from these type of blended learning environments (Owston et al., 2013; Wu, Tennyson, & Hsia, 2010), in some cases students encounter barriers that prevent success (Dechacht et al., 2015; Paechter et al., 2010). One reason for the difference in success rate may be the social network of students and the ways these networks contribute to their success.

#### **Purpose of the Study**

The purpose of this qualitative study was to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership graduate program. CoI Theory was used as a lens to better understand how these networks contribute to student success.



## **Research Questions**

The following research questions will guide this study:

1. What does blended learning look like in the selected graduate program?
2. What are the underlying social networks of students participating in blended learning environments?
3. How do these students describe the role of their social networks in the blended learning environment?
4. How does Community of Inquiry theory explain the above?

## **Research Design**

Because this study sought to explore a phenomenon through the use of how or why questions, a qualitative case study design was selected. Merriam (2001) defines case studies as particularistic, descriptive, and hueristic. Case studies are focused on a specific event or phenomenon (a case), include thick rich description to report the findings, and seek to better understand the case within the study (Merriam, 2001). Merriam (2001) also argues that the decision to use case study as a research method is defined by the nature of what the research aims to study. In the field of education, if a researcher seeks to better understand “problems of practice” (Merriam, 2001, p.34), then a case study is appropriate. Specifically, this study employs a descriptive case study design that intends to explore the phenomenon under study and provide a detailed narrative of the participants’ experiences within the phenomenon.

## **Research Population**

According to Merriam (2001), “the single most defining characteristic of case study research lies in delimiting the object of study, the case” (p. 27). Therefore, it is

imperative that the population selected for this study be bounded within a unit. This is especially important in this study as blended learning environments, by nature, can be open to a large amount of people over an indefinite amount of time. To ensure the population of this case meets the definition put forth by Merriam (2001), the selected population has been narrowed to one graduate level program in educational leadership implementing a blended learning model within one university. Specifically, for this study a graduate level educational leadership program that uses a cohort model in which students enter into and progress through the program as a group was sought. Based on the criteria for this study, I chose Middle University (MU) as the research site.

MU has a history of providing a strong educational leadership program. This program of study is a nationally recognized, accredited program and has continued to maintain a healthy enrollment over the past few years. In recent years, MU has implemented blended learning options in many of their programs including their educational leadership program.

### **Research Sample**

For this study, I used purposeful sampling (Patton, 2015) to identify the participants in this study. Graduate students at MU accepted in the masters level educational leadership program cohort, who are participating in a cohort model and enrolled in at least one blended learning course (either online or hybrid) for the semester could participate in this study. The sample for this study included all students that represent multiple gender, race/ethnicity, age, and income groups.

Anyone not categorized by MU as an educational leadership program student could not participate in this study. A student who was not in the graduate level

educational leadership program was not included in this study. A student that was not participating in a cohort model and enrolled in one blended learning course during the semester of data collection was not included in this sample group for study.

Based on these criteria, a total of 15 students were eligible for participation in the study. While all 15 cohort member students were invited to participate in the study, 10 students opted in and were provided the SNA survey for completion. The results of the SNA survey were used to identify potential interview participants. Interview participants were recruited through the administration of the survey. Additionally, survey respondents who were identified in the survey as having a disproportionately low (isolates) or high (central actors) numbers of ties were recruited to interview. A total of five cohort members consented to interviews and observations for this study.

### **Data Collection Strategies**

The methodological techniques for this research study included an SNA survey, virtual interview, blended learning environment observation, and document review.

#### **Survey**

Each student participating in the study was provided an online questionnaire requesting they identify the social network connections that exist between themselves and others in their blended learning environments. The name-generator survey asked open-ended response questions about participant relationships and connections to other individuals (Borgatti, Everett, Johnson, 2013) both inside and outside the learning environment while participating in the program of study. These survey questions were based on the literature review and relevant research on creating SNA surveys (Borgatti, et al., 2013). The survey questions were as follows:

1. In your current online course, to whom do you go to for assistance with course questions or assignments?
2. In your current online course, to whom do you go to for sharing your frustrations?
3. In your current online course, who do you feel understands you as a real person?
4. In your current online course, with whom do you interact with on a social level outside of class?

### **Virtual interviews**

Interviews of selected candidates were conducted via the computer, with a web conferencing application called Zoom.

I set up one virtual interview through an introductory email sent to each research participant selected for this portion of the study. The email contained a summary of the research study and participant expectations. In the body of the email there were suggested times and dates for scheduled interviews. The participants were asked to select their first, second, and third choice for interview times.

I reviewed the scheduled data and determined a date and time for each interview. A follow-up email was sent to each participant with their interview date and time. In addition to the confirmed interview date and time, the email contained information for communicating requests for a date and time change, a calendar attachment (.ics file) and calendar reminder notifications (one week, day prior, and 30-minute reminders).

One week prior to a participant's scheduled interview, I sent an email reminder with all pertinent interview information. All interviews took place via the computer, one

hour each, accessed from my office and connected to the student via any location or device they choose. All interview data were collected at the time of each scheduled participant. The interview was recorded via the web conferencing application, and notes were taken throughout the process.

### **Blended learning environment observations**

An environment observation was conducted in a classroom environment that the research participants were enrolled. The observation included a systemic review of the events, behaviors, and documents from the environment. The observational protocols for the observation included a description of the setting, participants, activities and interactions, the time, both frequency and duration and any other subtle factors from the environment observation.

I contacted the associated course instructor via email with an accompanying copy of the approved IRB, to gain permission to observe one of the course face-to-face meeting held during the duration of the research.

During the classroom observation, I gathered information that could be relevant to the study, including the number and types of interactions between students, their instructor, and the course activities. The participants shared their engagement in the course, the duration of the time spent in the course, and types of interactions and engagements (discussion boards, course activities, and peer comments) the study participants have with their peers. I captured field notes during the observation session and applied observational protocols that included a description of the setting, participants, activities and interactions, the time, both frequency and duration, and any other subtle factors from the environment observation.

## **Document Review**

Pertinent documents, such as student work, participant communications, images, course documents, syllabi, and evidence of interactions of research participants were reviewed during the study. The documents were reviewed and were collected for analysis and triangulation with the other gathered data to provide context to the interactions and engagements of the participants in the study.

## **Data Analysis**

As recommended by Merriam (2001), data analysis in this study was simultaneous with data collection. Through this constant comparative method (Merriam & Tisdell, 2016) I read and reviewed each data set as I collected it, noting any preliminary codes or important participant words and phrases. Data were then organized by data type for easy review and access for future analysis and comparison. The following steps were followed to analyze the data for this study.

### **Organize the Data**

Patton (2015) suggests that researchers establish a means of organizing the data prior to beginning the analysis process and recommends starting with inventorying the collected data. Throughout the study, data from interviews, observations, and documents were gathered, inventoried, transcribed, and prepared for the coding and theming process. Data were first organized in folders electronically by data type. As the analysis process progressed, data on the computer was further sorted by participant and then by theme.

### **Social Network Analysis**

For this study, I conducted a Social Network Analysis using the results of the Qualtrics survey provided to the research participants. The data from the survey was used

to develop a network matrix for each survey question. The matrices were exported from UCINET, and then imported into NetDraw (Borgatti et al., 2013). For each matrix, NetDraw generated a sociogram that represented the connections between the participants in this study (Borgatti et al., 2013). The sociogram served as a visual representation of the perceived networks of participants and their connections to one another. While these sociograms were not quantitatively analyzed, the results of the surveys were triangulated with interview and observation data.

### **Code Data**

When data were organized, I read through each data set for familiarity. Then, I employed qualitative strategies for coding and theming of the data. During this cycle of coding, I used both Merriam's (2001) process for analyzing qualitative case studies and Saldaña's (2015) coding method for first cycle coding with the intent of finding direct meaning from the data. The first coding method applied to the data were InVivo Coding, which is often synonymous with "literal coding, verbatim coding, and natural coding" (Saldaña, 2016, p.105). InVivo coding allowed me to identify the terms and language that the participants used to describe their blended learning environments and social connections with their peers. After this first round of coding, a second round of descriptive and process coding occurred. Short words and phrases were written on the data set to identify topics of importance and identify action of an observed activity.

This process of coding included highlighting transcripts for relevant information, jotting down codes, transferring the highlighted sections and codes to a new comprehensive document to list or map the identified codes.

## **Categories and Themes**

After a map of potential codes was developed, I conducted second cycle coding to reorganize the codes into categories and themes for each data set. Axial coding was used to identify patterns in codes and develop categories based on similarities, characteristics, and central terms or phrases. Axial coding served as the process to bring together the different elements identified in the first round of coding, and aimed to link these concepts (Saldaña, 2016) like the hub of a wheel might link the spokes of a wheel together so it can be best used for its intended purpose. During this second cycle coding, I read through the InVivo codes and began to highlight words that could be categorized together. I reviewed these documents and notes to determine categories. Then, codes and categories, were analyzed across all data sets, and through this process, the major themes of the study emerged.

## **Use of Theory**

The Community of Inquiry framework was selected as the theoretical framework for this study. As this framework has been cited as an appropriate framework for evaluating online learning communities (Garrison et al., 2013), this seemed to be an appropriate fit for this research study. Using CoI as a lens, theory was applied *a posteriori* to explain and provide language for the major themes. In Chapter IV, the three constructs of CoI, social presence, teaching presence, and cognitive presence, are used as three-pronged analysis of the major themes of this study. In Chapter V, these same constructs are used to answer Research Question #4.



## Convey Findings

According to Merriam (2001), “in qualitative research, it is the rich, thick descriptions, the words (not numbers) that persuade the reader of the trustworthiness of the findings” (p. 15). In this study, thick, rich description is used to present the case in Chapter IV. Narratives are used to describe the context of the study, tell the story of each study participant, and present the major themes. CoI is also used to answer Research Question #4 in Chapter V.

### Trustworthiness of the Findings

Gay, Mills, and Airasian (2012) define trustworthiness as the actions taken on by the researcher that “addresses the credibility, transferability, dependability, and conformability of their study and findings” (p.393). I worked to establish trustworthiness in the study by adhering to the following data accuracy techniques. These techniques are in place to ensure data represents the intent of the study (Table 2).

Table 2		
<i>Trustworthiness Criteria and Examples</i>		
Credibility		
<u>Criteria/Techniques</u>	<u>Result</u>	<u>Examples</u>
Prolonged Engagement	Builds Trust Fosters Relationships Builds a Deeper Understanding of Case Study Environment	One-hour interviews Twice during the course of study
Persistence Observations	Intentionality Obtain in-depth data	On-site & Online Investigations
Triangulation	Verify Data Operational Process Provides Voice	Multiple data sources Interviews Document Review

Table 2 (continued).

Peer Debriefing	Finding Alternative Explanation Confirming Themes	Colleagues Research Participants
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### **Researcher Role and Bias**

I would guess that many research ideas start out with a fascination of the interworking of a specific phenomenon or experience. The natural tendency, according to recent research, is that people seek to have a purpose in their lives (Baumeister, Vohs, & Garbinsky, 2013), and I guess for me the purpose of my research correlates to one of my greatest passions: education. For over twenty-five years I have dedicated my life to being a positive and influential activist for effective educational practices and policies alongside the continuation of my own education. While most of my experience has been in a K-12 public education environment, it is my current engagement in higher education that informs my latest research topic. I desire to seek a better understanding of adult learners and their educational experiences in blending learning environments, and those interactions that aid in the overall learning experience and success. My belief is a deeper understanding of this phenomenon will lead to the design and development of programs that support the success of students. Based on my background as a life-long educator, it is important to me that the reader understand my identity as the researcher on this topic.

### **Reflexivity**

Reflexivity is used to, “intentionally reveal underlying assumptions or biases that may cause you to formulate a set of questions or present findings in a particular way”

(Gay et al., 2012, p.393-394) in regard to qualitative research. Patton (2015) explains that reflexivity is a process that helps us participate at a much deeper and more specific level of reflection. The author suggests that this word brings about “deep introspection, political consciousness, cultural awareness, and ownership of one’s perspective” (Patton, 2015, p.70) while, participating in the research process.

The study I chose to conduct was focused on the social network of students who are participating in blended learning environments. I held some preconceived assumptions about how students may respond based both on my experiences and the research I have read related to that topic of study. These as assumptions started with what I have experienced as an instructor and designer of blended learning environments. When students participate in blended learning experiences, I believe that they have more autonomy in their learning and over social connections, which translates to student ownership of the management and operation of learning.

### **Researcher Identity**

From Luttrell’s (2010) reflexive exercise I chose to draft a memo regarding my identity as a researcher by answering the suggested questions from this work. He asks the researcher to consider the following (Luttrell, 2010, p.470):

- What presumptions do you hold about the topic, people, place, or things? What are your assumptions and beliefs based on?
- What are your passions? What makes you care about the topic or the people, places or things that you wish to study?
- What presumptions do you hold about the topic, people, place, or things? What are your assumptions and beliefs based on?

- What is currently preoccupying your mind as you begin your research?
- What are your predilections and preferences as a researcher?

My thoughtful responses to Luttrell's questions brought forth much understanding as to the purpose and story of why I seek to better comprehend this topic. I wrote:

I am an educator who has always loved the way technology has advanced and enhanced learning in the classroom. I have seen the value of online learning in both my learning experiences and the experiences of people close to me. The advantages that online learning can provide people are very powerful. My husband was able to complete his bachelors degree online while working a full-time job. My son has participated in many online and blended learning experiences as a high school student. In these learning experiences, I have observed what can be a positive, engaging learning experience and what, in contrast, can for some cause great frustration and discouragement.

Most of my presumptions come from personal experience and research regarding blended and alternative learning experiences. I believe that students want to feel a connection to their environment, peers, instructor, and the content they are experiencing. I believe students are seeking feedback on their work, and they like learning experiences that allow for higher levels of engagement (creating/synthesizing) and not low levels of engagement (summarizing/recitation). I believe that when learning fits into their lifestyle and world experiences, instructors build stronger educational connections for students. I believe if we want students to be lifelong learners, we need to demonstrate how learning is a part of our everyday life.

As I think about my research topic, I find myself looking at internal connections that students make while participating in blended learning experiences. I think my research, up to now, has been focused on what students are experiencing and less on what they are actually *doing*. In more simple terms, how do students persist in blended learning experiences and what factors aid in their academic press? I am wondering if exploring the social networks of students in blended learning experiences and how that might influence their persistence and efficacy in learning would reveal answers to these questions.

As an educator, I tend to migrate to quantitative data, but as a researcher, I tend to be more interested in qualitative data. I believe that voices from the field are important, which is why I value qualitative research, to bring depth and

understanding to education. I believe that it through these voices and experiences that we can develop strong educational programs that students find support their academic success at its best.

### **Summary**

Chapter III outlines the research design, the methods, and the procedures that were used to conduct this research study. The case study explores the connection among students in blended learning programs and how these interactions among students and the underlying connections between social, teaching, and cognitive presence contribute to the students' success. This study leveraged SNA to collect data about the connections among students. This SNA produced a visual representation, a sociogram, to show the relationship between students. The results of the SNA determined which actors in this research will be interviewed, observed, and requested for documents.

## CHAPTER IV

### DATA PRESENTATION AND ANALYSIS

The purpose of this qualitative study was to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership graduate program. CoI Theory was used as a lens to better understand how these networks may contribute to student success.

In this chapter, there are two parts, Part I and Part II. Part I presents the data for this study. I collected the data for Part I through SNA survey, interviews with five BLC members, and observation of face-to-face classes. Documents related to the BLC degree program and courses taken during the semester the study took place were also reviewed. In Part I, I provide a context for the study and present the case through three sections: Peer Networks, Student-Instructor Networks, and Student External Networks. Part II includes the analysis of data for the study. The theoretical framework, Community of Inquiry (Garrison et al., 2000), was used as the lens for this section. Analysis is presented through the three elements of CoI: social presence, cognitive presence, and teaching presence. Major themes within each element are also provided and discussed.

## Part 1: Presentation of the Case

### Context of the Study

#### The Larger Context

Middle University, like many universities across the nation, has been tracking the impact of online enrollment in brick and mortar institutions for over ten years (State Website, 2017). While there has been a steady decline in enrollment of students in public colleges and universities since 2010 (State Website, 2017), one Midwestern state has continued as a front runner in the United States, ranking fifth among Public Colleges and Universities, offering online educational programming (State Website, 2018). In the 2015-2016 academic year, there were 108,322 students enrolled in online courses, and approximately 52 percent of all students took at least one online course (State Website, 2018). See Figure 2.

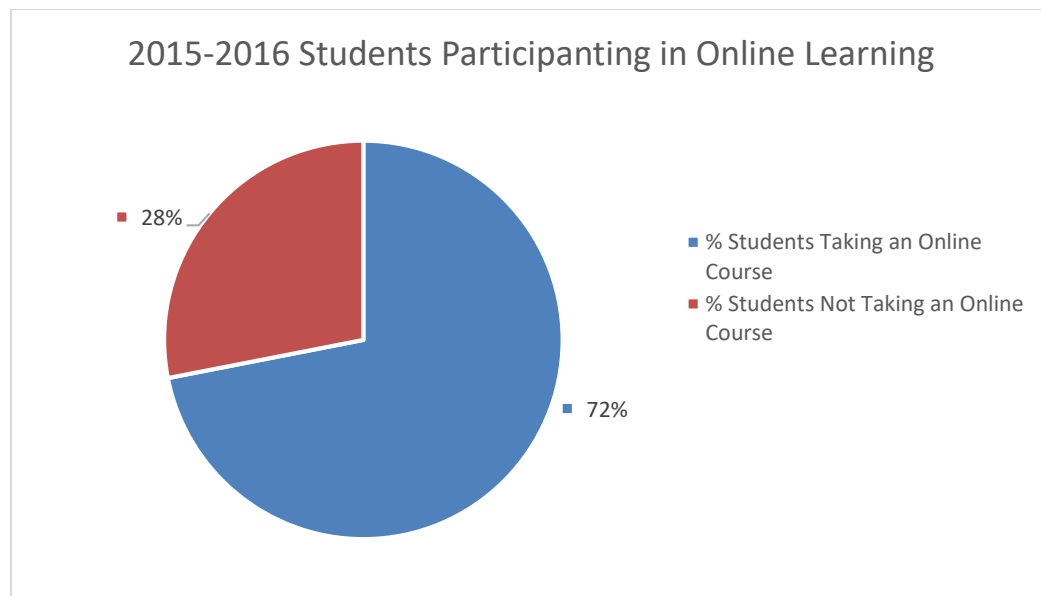


Figure 2. 2018, *Report for the Future of Higher Education in Midwest Universities*

This midwestern state reported approximately 48% of all graduate students enrolled in higher education degree programs in 2015-2016 were participating in online

or hybrid instruction (State Report, 2018). In 2017, the then governor directed the Higher Education authority to focus on the production of stronger workforce pipelines and consolidated programming and institutions to maximize the state allocated dollars, thereby producing stronger economic outcomes for the state (State Report, 2018). The Higher Education authority for this state established several working subcommittees and task force groups to study higher education options to meet the Governor's outlined expectations (State Website, 2018). A state-wide committee was charged "to review best practices in academic program delivery and online education and develop recommendations" (State Report, 2018, p. 30). The committee determined that many "adult students often juggle multiple roles and commitments that increase the likelihood they will need more flexible degree and certificate program options" (State Report, 2018, p. 51). They also determined that "expanding access to online education programs that align with workforce demand is critical to helping adult students successfully complete college degrees" (State Report, p. 51). The recommendation from the committee was to aid public colleges and universities with the strategies needed to implement quality online programs that would support the state's education system. The establishment of the Council was created "to empower excellence in online and hybrid learning experiences through a framework that grows knowledge networks and advances collaborative initiatives that enhance student, faculty and institutional success in the state" (State Report, 2018, p. 58). The Council has been instrumental in helping Colleges and Universities in this state expand their programs of study.



## **Middle University**

The selected case is situated at one regional college located in a Midwestern state. Middle University (MU) was established in the late 1800s, and over the past 200 years has gained the reputation of being a transformative and progressive institution.

MU is nestled in the heart of the Midwest, in a small suburban community located north of the State capital. Its campus is adorned with beautiful green spaces that make up the perfect backdrop for the large buildings scattered around the campus. A number of the buildings on campus are many years old, and this architecture references the history of the campus and its legacy in this community. In recent years, the university has taken great steps to build additional buildings with a more modern flair, and a few seem like they might be right out of a contemporary architecture magazine. While many of these buildings are eclectic in nature, MU has taken steps to create a warm and inviting campus for all who visit. The areas are well maintained with quaint water features, statues, and community geese that roam freely among the university grounds.

The college of education is the building that houses most of the students who seek a degree in Educational leadership, but with the rising cost of operational management of buildings and campus services, Middle University is branching out with its offerings. For MU the blended learning program serves as a way to determine the success of alternative learning options for graduate students to assess the opportunity for future growth in this area. This type of program advancement seems like a natural step for MU to implement. Their mission focuses on creative aspects of learning and strives to advance the community that it serves. Their vision is to seek the highest level of

leadership in all their attendees while focusing on innovative practices to create these learning experiences.

**Academic programs.** MU boasts of legacy programs and buildings with innovations that have changed the way students receive credit for participating in all collegiate experiences during their pursuit of a degree. MU has an enrollment of over 17,000 students with over 100 undergraduate programs of study and over 70 graduate programs of study. MU, like many institutions, has sought to expand its online and hybrid offerings inside its degree programs. MU has an entire department focused on the online development of courses and support of instructors and students' success in these online and hybrid options. This department includes instructional designers, videographers, researchers, and project managers, all charged with working directly with faculty members as they transition to online learning environments. MU has been instrumental in the state-led task forces' eLearning initiatives and has leveraged the work of the state to formulate their course frameworks for high-quality online programming. Faculty wishing to design or redesign a course, or a program of study, will do this in collaboration with MU's eLearning department. In addition, all faculty must complete an online certification course in order to be released to teach online on behalf of the university.

**Online learning environment.** The students at Middle University have the opportunity to attend the classes in person, but in some instances, they may opt to take courses in an online or blended learning environment. In order for this model to be successful, students access what is known as a Learning Management System. The Learning Management System (LMS) provides students the opportunity to engage with content, their instructors, and peers. The LMS utilized by Middle University is a national

used product that is designed to allow instructors to add content for student learning and engagement. The LMS is simply a shell, empty until the instructor adds the content that they desire for their specific course. The LMS repository is capable of providing students access to course content, participate and engage in course discussions, view assignments and rubrics, and check on their progress and class grades.

Students have many ways in which they can contribute information into the LMS, including the inputting of text into a field, recoding videos, and uploading content created elsewhere. The LMS also has opportunities for instructors to add third-party applications, allowing for a different level of engagement in the learning experience. Middle University has a department housed on its campus that manages the deployment of the LMS software application. This department supports instructors through professional development to aid in their understanding of how to best use the system for their course. In addition, Middle University has another department focused completely on the design and development of the courses that will be put in the LMS. The Department of eLearning employs instructional designers that work in collaboration with professors to design, develop, and implement quality learning experiences for students. Middle University has invested a considerable amount of time and energy in supporting the online and blended learning initiatives on their campus.

### **Blended Learning Cohort (BLC)**

With over 70 graduate programs of study, MU graduate students have many options to select when deciding to expand their education. For this study, the Educational Leadership graduate program was selected at MU. MU has a long history of providing a quality Educational Leadership program. This program intends to prepare school

educators to be future school leaders, with graduates often taking jobs as school principals and school department directors. This program of study has continued to maintain a healthy enrollment over the past few years and is a nationally recognized and accredited program. Over the past several years, MU has implemented a cohort model for their program, allowing students to start and end their program with the same group of students. MU uniquely embeds their cohorts in school districts, working to leverage school district leaders as adjunct professors during the duration of a cohort program. MU's educational leadership program's mission is to allow school district officials to engage with cohort students over two years, and in essence, participate in a two-year screening and interview process for future potential leadership positions.

At the time of this research study, MU's educational leadership (ELED) program was hosting three traditional cohort programs, each containing approximately 30 students from their three respective districts. During the past year, MU ELED implemented a blended learning cohort option. This newly established Blended Learning Cohort (BLC) was the perfect environment to study the connection between students in a blended learning environment and how students perceive these connections as influencing their success as students. This cohort of students does not come from the same district like the other cohorts offered under MU's ELED program. These students all teach in different districts across the state.

This study focused on this one blended learning educational leadership cohort program where the students participate in online and hybrid coursework. In this particular BLC, there are 15 students, all of which started their graduate program together and have enrolled in all the same courses during each semester. In this specific cohort of 15

students, 13 identify as women, and two as men. Two of the cohort members teach in private schools while the remaining members teach in public education environments. When these students meet in person, they attend class on Saturdays once a month on the campus of MU. Many of the BLC members live within a 40-mile radius of the campus, but one of the cohort members drives over three hours round trip to these sessions.

### **Participant Profiles**

Out of the 15 students in the BLC cohort, 10 students opted into the study. These 10 BLC members completed the SNA survey and out of those 10 students, five BLC members agreed to be interviewed. Interview participants in this study ranged in age from 20 to 59, four women and one man, all of whom are currently enrolled in a graduate level educational leadership BLC program at MU. The students in this study have participated in three semester cycles and were currently enrolled in two courses, one online and one hybrid. The students in this BLC are enrolled in two courses during the regular Fall and Spring semesters, and one during each intersession semester. The courses these students were participating in included Research and Evaluation and School Law for Administrators. The BLC students have the opportunity to encounter 6 different professors and adjuncts over the course program, but during this research, students reported having a total of three different professors over the three semesters of coursework.

In order to protect the identity of the participants in this study, each participant in the study was given a participant code and/or a pseudonym. All participants who responded to the survey were assigned a unique code. Additionally, all interview participants were assigned a pseudonym. From this point forward, interview participants

are referred to as Jessica, Kim, Kristen, Cindy, and Chris. These participants started the BLC with the cohort and had been in the program for nine months when the study was conducted. The participants have all enrolled in and completed the same five courses in hybrid and online formats.

Table 3 and the following participant profiles provide more detailed information about each interview participant.

Table 3				
<i>Aliases for Interviewed Participants</i>				
<u>Name</u>	<u>Identified Gender</u>	<u>Age Range</u>	<u>Years Since Completion of Undergrad Program</u>	<u>Sociogram ID</u>
Jessica	Female	30-39	11-15 years	P104
Kim	Female	40-49	16-20 years	P109
Kristen	Female	30-39	6-10 years	P101
Cindy	Female	30-39	11-15 years	P103
Chris	Male	20-29	3-5 years	P107

**Jessica.** Jessica is dynamic. She has a lot she wants to share and express. Her long brown hair frames her face perfectly, and she moves it back and forth from her shoulders as she talks. She is highly articulate and very expressive. Her face emotes her words as she speaks and tells stories. Her body language expresses her comfortability with herself, the way she holds her shoulders back and props up her knee on the table. She is a highly successful English teacher in a suburban school district. She has always worked in public education for the same district. She understands her teaching practices and wants to get her degree in educational leadership so she can someday serve as a principal in her district.

Jessica joined the BLC at MU because she wanted to get her graduate degree completed quickly. This program offered a shorter timeline with the opportunity to do most, if not all, of the coursework online. She discussed the need to balance all of her responsibilities as a teacher, a mom, a wife, a church volunteer, and now a graduate student. Jessica says that if it were not for her husband's support and his understanding of her needs that she "does not think she could balance it all." The blended coursework makes it easier for Jessica because she "does not have to go to class every night or every week." In this study, Jessica is represented by P104 in the sociograms and Student 1 in the classroom observation.

**Kim.** Kim is a rather talkative blonde woman with a "tell it like it is" approach to life. It is clear from her interview and class observation that she is no-nonsense in her approach to both the world and her teaching. She is an alternatively certified teacher and says this type of experience allows her to view the education profession from an important lens. According to Kim, her life experiences play an important role in determining how she sets and accomplishes goals. She indicated that her life has been very difficult, but that the difficulty is what makes her a great teacher. She is bright and well-read, and her love of reading and books is something Kim says shaped her current sense of self. Her current teaching position is in high-poverty, diverse school district, where around 30% of the teaching staff is alternatively certified.

Kim selected to be in a blended learning cohort for what she believes to be a more flexible learning option than what one might find in a traditional face-to-face graduate program. She says, "in a regular class, you do not get the option to go and take a break if you need one," and she believes this has its advantages. She likes the autonomy of

deciding how to manage the workload and the potential stress of a course. In this study, Kim is represented by P109 in the sociograms and Student 10 in the classroom observation.

**Kristen.** Kristen is full of spunk and sass. Her personality and laughter were engaging. She has a way of making people feel very relaxed when they interact with her. She told lots of stories during her interview, and when she talked, she used hand gestures to speak. She is dynamic and appeared to be confident in her speech. She admitted to being driven and knowing what she wants out of life. She is currently a public school teacher in a large suburban school district where she enjoys her work but hopes to gain growth and opportunity in the future.

Kristen selected a program at MU because of the convenience of the program. She said the best benefit from being in the BLC has been the small class size. When she took her undergraduate course work, many of her classes had up to 200 students at a time. She likes that she has an opportunity to build relationships and get to know her peers because of the small cohort. Kristen also loves the “autonomy of setting [her] own work schedule” regarding the course. She likes planning for how she will accomplish the upcoming work and fitting it around her already full schedule. Interestingly, Kristen referenced that before starting her graduate degree, she had to have a “serious conversation with my husband about covering” and “about his role in our household increasing significantly.” She glowed about her husband as a great father and an occasional cook, but she needed him to understand the shift of the household roles before starting her degree. Kristen said,



“He has really risen to the challenge and showed me that he fully supports me, so that's been very nice. I thought that it was going to be harder getting him more on board with having to spend less time on his video games. But he has gladly accepted the challenge and really supported me, and he doesn't say a word about it when I don't come out of my room and cook dinner. He just knows to heat up some spaghetti-o's and call it a night, so it has caused me to miss out on time with my children. Time that I could be outside playing with them or even just watching TV with them. Like, I just don't have that time to spend next to or engaging with my children, but I just keep telling myself this is just a season and it is a short period of time.”

In this study, Kristen is represented by P101 in the sociograms and Student 4 in the classroom observation

**Cindy.** Cindy is a bubbly, charming young woman with an infectious smile. Her perfectly round face, blonde hair, and blue eyes enhance her already warm nature. Cindy was very proper in her speech, offering up yes, thank you, and ma'am, when she speaks. Cindy's virtual interview started out at their family dining room table where the room noise became too much so she quickly moved to a bedroom location so she could give the interview her proper attention. Her actions and conversation show that putting her best foot forward is very important. While her interview was at the end of a long day of teaching, she was still very nicely dressed with a hint of makeup on her face. Cindy has worked in the private school sector for her entire career, and her current work has taken her to a newly opened private school in the state.

Cindy selected the program at MU based on her desire to seek certification in educational leadership. It was a conversation with a family member that drew her attention to the blended learning program. Cindy was a current graduate student at MU, working on a masters in a different program of study when she found out about the BLC. It was because of the structure of the course work and how it would be offered in both the online and hybrid formats, with limited face-to-face meetings, that made Cindy decide to pursue another degree instead of just the certification requirements. At the time of the interview, Cindy was enrolled in both master's programs, finishing up the first one with an expected graduation date due at the end of the upcoming semester. In this study, Cindy is represented by P103 in the sociograms, and was absent during the classroom observation.

**Chris.** Chris is a young, physically fit gentleman. He is passionate about what he does for a living and expressed his love for being a coach at the inner-city high school where he teaches. He is a relatively new teacher, just starting out in his career, but speaks about how his years as a student have helped shape him as an educator. He has a bright smile, but he carries with it a hint of nervousness in his facial expressions and mannerisms. He folded his arms neatly across his body during the interview and rarely used his hands when he spoke. Chris indicated he is a spiritual and faith-based man, with a strong belief in God's will in his life. As much as Chris demonstrated his faith during his interview, he also demonstrated his desire to be heard and his will to succeed. He stated that he is driven by his desire to learn and understand the world of education so he can help create change for other students like him. He is passionate when speaking and is

very confident about what he needs to do to accomplish his goals. His sense of independence is evident.

Chris selected the blended learning program at MU based on its convenience of his schedule. He wanted a program where there were to be few face-to-face meeting requirements, so he would not have to drive into the university. He also likes that the program finished in less time than most graduate programs. Chris believes that getting an education and accomplishing what you want is a mindset. He indicates that after graduating with his masters, he will be working to get into a doctoral program to pursue a Ph.D. In this study, Chris is represented by P107 in the sociograms and Student 12 in the classroom observation.

### **Peer to Peer Networks in the BLC**

In order to better explore the relationships, specifically peer relationships, between BLC members, I used social network analysis surveys to elicit responses about connections to other BLC members. I administered the survey to all 15 BLC members and received 10 responses for a response rate of 67%. The following sections provide a description of the relationships of BLC members in terms of coursework, frustrations, personal relationships, and social interaction outside of the BLC.

#### **Peer Relationships Related to Coursework**

The first question of the SNA survey focused on student relationships in regards to completing course assignments. The question asked of survey participants was, “In your current BL online course, to whom do you go for assistance with course questions or assignments?” Out of the 10 students participating in the SNA, five of the respondents indicated a connection with at least one other student. Of the five students reporting

connections, Kristen (P101), Jessica (P104) and P106 are the nodes with the most ties in the group. Both Kristen and P101 were identified by three classmates as someone they would go to for assistance, and three students responded the same for Jessica. Both P104 (Jessica) and P106, as well as P105 and P101 (Kristen) respectively, indicated a reciprocal connection in the cohort related to course assistance. These were the only two reciprocal relationships reported for this survey question. Kim (P109) identified connections with Kristen (P101), Jessica (P104) and P105. However, no students identified Kim as someone they go to for help with the course. There were four students who responded to the survey who did not identify one connection with anyone in regards to this survey question. Cindy (P103) and Chris (P107) are among these isolates. Figure 3 shows the resulting sociogram.

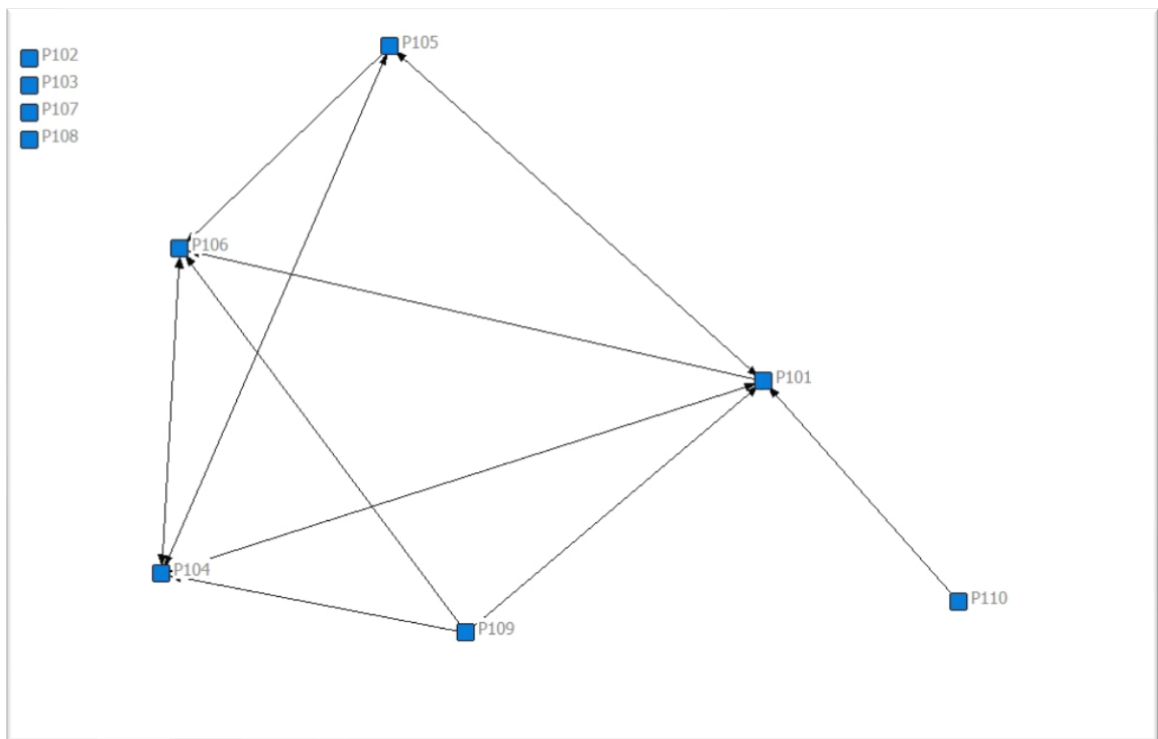


Figure 3. Sociogram showing whom students in the BLC cohort go to for assistance with course question. Each square node represents a student in the BLC.

Repeatedly, interview participants stressed personal responsibility for their learning, and believed their own expertise was what would ultimately allow them to be successful in the program. Students in this study did not report looking forward to group work or studying with cohort members. If an interview participant did refer to a relationship with a fellow BLC member, the interview participant often described the way in which the other student organized themselves or the manner in which the other student communicated their knowledge as a factor in forging connections. For example, Kristen reported using the class discussion boards to draw conclusions about her peers and their work ethic regarding the course. She said, “There are some people's posts that I have no interest in reading whatsoever, because I don't feel like they put in much effort, or you know, add value to the conversation.” During Kristen’s interview she also spoke about her first semester in the program. In this semester, she recognized that one of the other cohort members held similar investment in the program and work ethic, and Kristen felt that of all the cohort members, they would connect the most. She described this other individual as arriving early for class and having all of her materials in order, giving the impression that this student was highly organized. Kristen reported that as the semester progressed, she realized that she and this other student were two that had read the material before class and were both prepared, unlike many of her fellow students. Kristen stated that seeing this work ethic from the other student helped formulate her ideas about whom she should most align herself with over the next few semesters. Kristen commented,

“I was really careful about the person that I chose to work with. Making sure that I knew a little bit about them, that they were a hard worker, and liked to collaborate,

and was good at communication, and that they would be a good person for me to work with, had similar professional habits and traits.”

Kim echoed these sentiments in her own interview. When asked if she took the time to reach out to her peers directly in the course for assistance or clarification, she stated, “I like to work on my own.” She continued, “I feel like I'm forced to learn more that way, like nobody's carrying any of it for me.” In her interview, Kim stated she often felt frustrated by the difficulty of scheduling around others' time, and worried that her peers would not do their part in a collaborative or group assignment. In fact, Kim expressed that she thought students who enjoyed working in groups used the groups to cover for their fear of failure or, potentially, their lack of ability. From the interview and observation, it was clear that Kim did have some individuals in the group that she considered learning peers, but she also reported that she did not often seek them out for help as she did not feel they would have any more information regarding that topic than her. However, Kim did report one individual that she felt she might be able to build a connection with, and the reason was because this person was highly intelligent, and Kim felt she could trust this student to give her appropriate guidance or assistance. Of her relationships with BLC members, Kim said, “I'm not one of those people that makes long term relationships usually, I have a few in my inner circle. I'm really big on certain things like trust. I mean, I plan to down the road, kind of build those relationships more because I think it'll be important.”

### **Peer Relationships Related to Sharing Frustrations**

The second survey question sought to elicit responses from BLC members about whom they go to when they are frustrated in a course. While question one of the survey

was focused on connection around basic information related to coursework, this survey question aimed to determine which students had connections that allowed them to be emotional about coursework with other students. Out of the 10 students surveyed, seven of the students indicated a connection with at least one other peer. Of the seven students with connections, Kristen (P101) and Jessica (P104) each were identified with the most connections. Kristen (P101) was identified by three other classmates, and Jessica (P104) was identified by four other classmates. Both Kristen (P101) and Jessica (P104) identified a reciprocal relationship with P105, and Jessica (P104) also identified a reciprocal relationship with P106. Like survey question one, Kristen (P101) and Jessica (P104) were the most central actors in this network. They also served as boundary spanners, connecting P110, P109, P102, and P106, who are identified as peripheral actors, to the larger network. In this sociogram, P108, Chris (P107) and Cindy (P103) report no connection with others and were not identified by other classmates as connections. Again, no student who responded to the survey identified the instructor or any other faculty member (e.g., advisor, committee member) as a connection in relation to this question. Figure 4 shows the resulting sociogram.

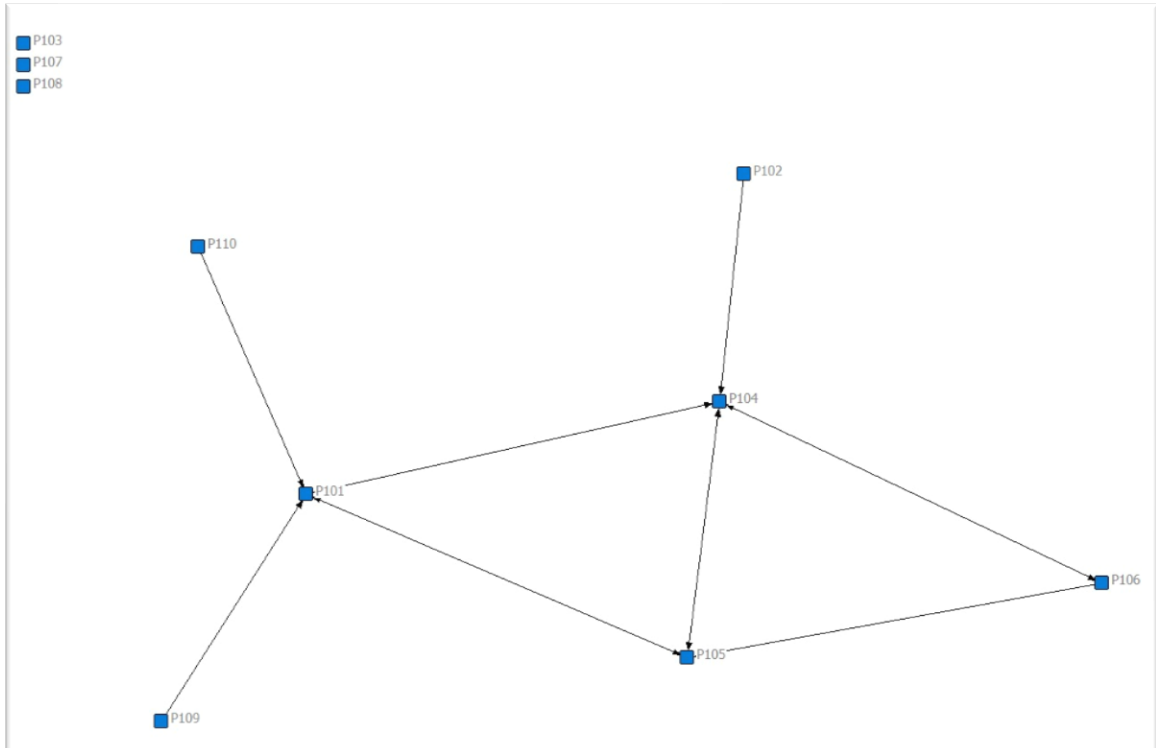


Figure 4. Sociogram showing whom students in the BLC cohort go to express their frustrations. Each square node represents a student in the BLC.

In their interviews, both Jessica and Kristen appeared to understand their central role within the BLC. Jessica described her small group of peers from the class as “tight knit” and explained how well they get along with one another. She shared that they like getting coffee with each other when they need to work on homework projects or talk through the upcoming week’s assignment. Jessica commented that she saw her classmates as a resource, specifically in regards to coursework. She shared, “I’m going to ask questions of my peers first, because they will judge me less. You know, they are my peers, and we can be wrong together and be clueless.” Jessica admitted, though, that she worked to build connections with other students in the course. She intentionally put effort into making social connections and offering opportunities for her classmates to work together in other spaces. Interestingly, though, Jessica did share that she understands that when the BLC members graduate, the reality of maintaining that close of a bond with all members



is somewhat unrealistic. Of all the students in her BLC, she did state she will probably stay most connected with those closest to where she currently works.

Kristen also understood her role in the cohort and acknowledge that she has many connections with her peers. She understood that other students come to her for clarification or voice their frustrations. Kristen also recognized what she needs from the cohort and how connections with her cohort can benefit her in the course. In her interview, Kristen talked briefly about working with two of her peers, but also admitted that she had not leveraged stronger relationships or collaborations with others in the group. In regards to coursework and frustrations, Kristen often reached out to the instructor first, but did rely on her classmates at times. She shared, “I try to ask my peers when I think I have emailed the professor too many times. I asked myself, can I ask that again, or are they going to think I’m a psycho for emailing my questions again.”

In her interview responses, Kim revealed that she also sees herself as an outlier in the network of the cohort. During her interview, she discussed her independence regarding her role in the cohort and her lack of need to work with others to complete assignments or to build relationships. In her responses, Kim often referred to relationships with BLC members, particularly relationships around content, were because of ability, or lack thereof, to complete assignments. Kim shared,

I don’t know that all of my peers feel like they can do it on their own. Some of them need that other person to kind of sort it all out. They are just wired that way, or they do better in groups.

Kim did indicate, however, that in the future, when she has a job in school leadership, she could see a better need to foster those relationships to help support her in her job.

### **Personal Peer Relationships**

Research on effective online learning points to the importance of the connection between learning and sense of self (Garrison, 2017). Therefore, research shows that students in online courses should be provided an opportunity to project themselves as a real person in online and hybrid courses. Question three of the SNA survey sought to identify connections that reflected this sense of self. Of the 10 BLC members who responded to the survey, six students indicated only one other peer that understood them as a person and not just a course peer. Again, Kristen (P101) and Jessica (P104) were identified as the most central actors. Three survey respondents identified Kristen (P101) as someone who understood them as a person, and two survey respondents identified Jessica (P104). Interestingly, Jessica (P104) only identified Kristen (P101) as student who understood her as a person, but Kristen (P101) did not identify any other student as understanding her. Again, Chris (P107) and Cindy (P203) were isolates; they did not identify any other BLC member as someone who knows them as a person, and no BLC member saw that same relationship with them. Just like SNA survey question one and two, no BLC member identified an instructor or faculty member as knowing them as a person. Figure 5 shows the resulting sociogram.

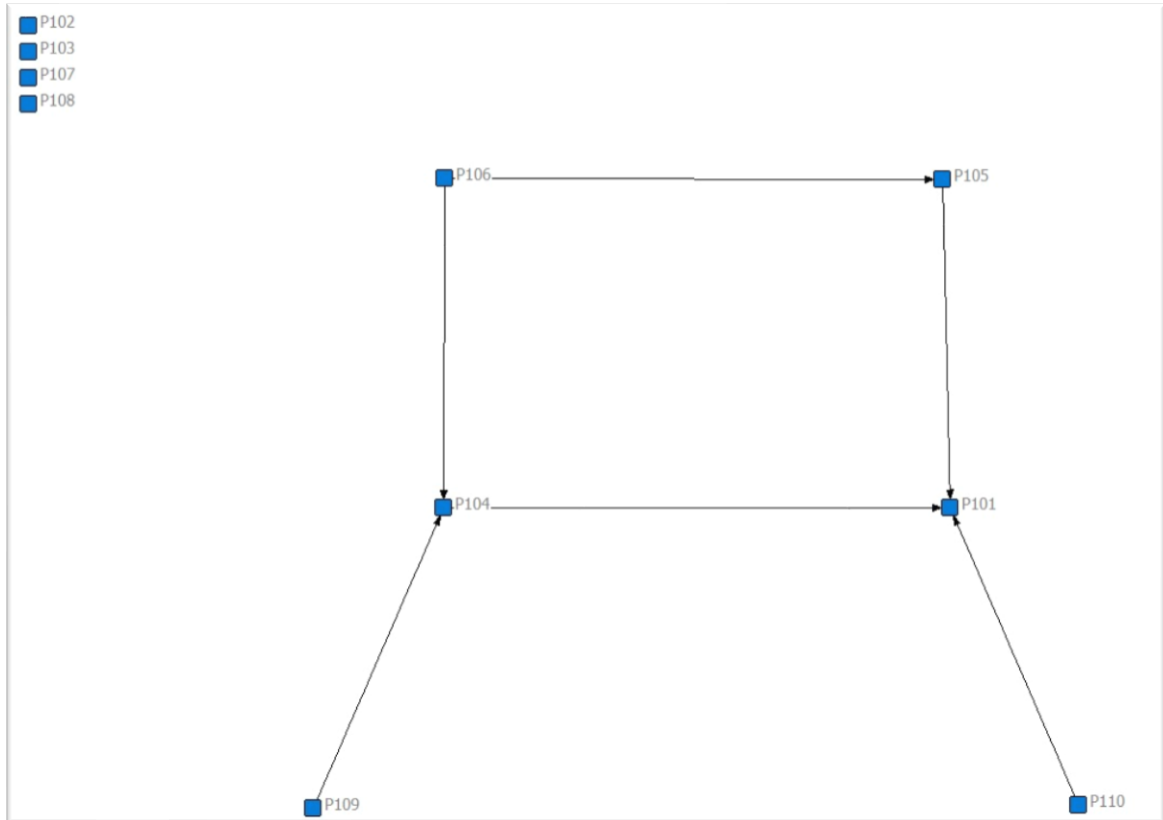


Figure 5. Sociogram showing whom students in the BLC cohort understand them as a person. Each square node represents a student in the BLC.

Although few of the students interviewed in this study shared stories of social interactions outside of the face-to-face classroom or social media, there was one culminating event that occurred during the semester that showcased some of the personal connections built within the BLC. In her interview, Jessica shared a story about one of her cohort peers finding out that another cohort member, who was having her first baby that semester, did not have many baby supplies nor any local family that would be giving her a baby shower. The cohort peer took it upon herself to contact the others in the group text to suggest they throw her a baby shower at the next face-to-face class meeting. Jessica said they contacted the pregnant student in the group to see if she would like to have a baby shower, and then they sent out an email to all the cohort members letting them know their plan. I happened to observe this baby shower during one of the face-to-

face classroom meetings. On the day of class, two students brought with them polka-dotted wrapped gifts and several plastic bags filled with cookies and party supplies. One student commented to the professor that the group could set up for the baby shower at the break.

At the class break, Jessica, Kristen, and three other students decorated the outside lounge area of the classroom so they could hold a baby shower for the student having a baby. During the classroom conversations, one student indicated that another student from the class had sent out a group message to the cohort inviting anyone from the class to stay after and celebrate. Figure 6 is a picture of the baby shower decorations.



*Figure 6. Baby Shower Decorations*

At the end of class, many of the students gathered in the hallway for the baby shower.

As indicated by the sociograms, not all students in the BLC feel like there is a peer that understands them as a person. In her interview, Cindy did not see herself as

having a significant connection among her peers. Cindy indicated in her interview that there were one or two students that she connected with outside of class, but she did not see any of this having any connection to her course success. Cindy also shared that she saw her engagements with her peers online as aiding in her understanding of course concepts. Despite these interactions, Cindy shared that she does not always feel like her ideas or thoughts land with her peers. She said she sometimes feels bad when others do not respond to her discussion board posts. She also stated that she finds herself migrating online to the people that she perceives to have characteristics of a strong writer and a deep understanding of the content. However, she did not report reaching out to these students outside of the structured online learning environment.

When Chris was interviewed, he discussed the structures of the course, but Chris indicated those structures did not work for him. He went on to state, “for me, I’ve never worked with anybody within our cohort.” When asked to elaborate, he indicated it was more of his personality type. He felt his ideas around education and his perceptions of the education structure for some groups of students set him apart from his peers. He believed his life experiences and background made the connections among his peers difficult. He said that sometimes the way his peers spoke about students in their class made him recognize how different he was from them, and he felt the best option for him was to stay silent. Chris says, “Sometimes I’m afraid to say certain things because I don’t feel like they will understand me. I have different life experiences.”

Chris’ desire to create boundaries between himself and the other students was evident during the classroom observation. On the day of the observation, he arrived late to class and joined an empty table even though his name tent indicating his assigned seat

for the day was located elsewhere in the room. Chris immediately slumped onto the table and waited for directions from the professor. When the professor gave directions for students to transition to groups, Chris followed the instructions provided, but only engaged with the professor at first by asking if he had a good conference last week. The professor and Chris made some small talk before Chris turned toward the other students working by the whiteboard. Chris did not participate or contribute much to the group during work time. Of building relationships or connections with other members of the BLC, Chris said,

I have a professor I go to and, you know, ask her what do you think? I don't need the OK from anybody, like, what you're doing is great and just stay with it. So, as long as I'm praying, I don't need anybody else.

### **Peer Relationships Outside the BLC**

Survey questions one through three were focused on relationships among peers within the online course. Question four, though, focused on students' relationships outside of the structured class. The sociogram that corresponds to this survey question (Figure 7) shows that the network of students interacting outside of class is the most sparse of the four included in this study. Of the 10 BLC members who responded to the survey, only two students (P105 and P106) indicated they interact socially with at least one other peer in this space. P105 identified three students whom they interact with outside of class, Kristen (P101), Jessica (P104) and P106. P106 only identified Jessica (P104) as a connection. While Kristen (P101) and Jessica (P104) were central to the other sociograms included in this study, neither of them identified any relationships with BLC members for this survey question. Also, there were no reciprocal relationships identified.

Additionally, Kim (P109) was a peripheral connection in the other three sociograms, but did not report any relationships occurring outside of class. It is important to note that P107 and P108 did not indicate any relationships with other BLC members on this or any of the four SNA survey questions.

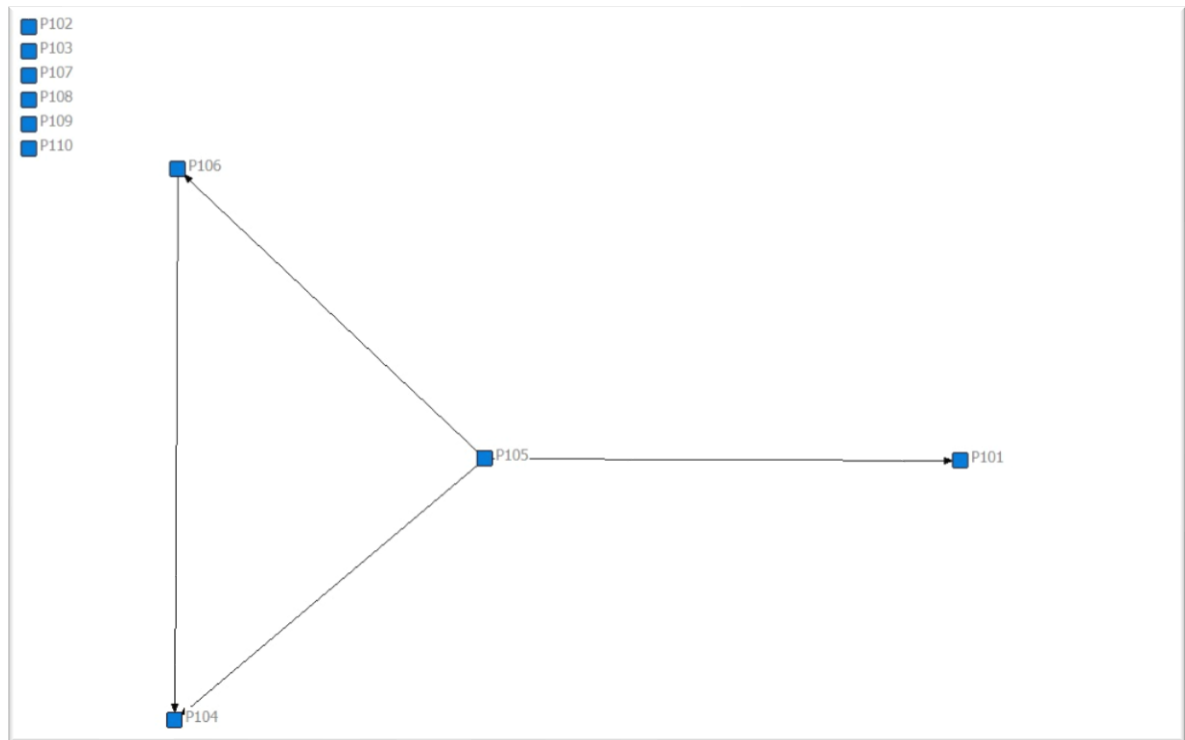


Figure 7. Sociogram showing whom students in the BLC cohort socially interact outside of class. Each square node represents a student in the BLC.

One space outside of class that students did report interacting in was that of digital and social media platforms. In her interview, Jessica indicated that none of the students in this particular BLC knew each other prior to beginning the cohort. Jessica pointed out that soon after the cohort started, many of them sent Facebook messages to connect online. Jessica saw these Facebook connections as important to her cohort experience and saw it as a way to continue relationships after the end of the degree program. She said,

I gravitate toward helping people and forming relations. I can guide people to the right places and the right sources of information. It took a while but then all of a

sudden, a group of us like sent out Facebook requests. Facebook is friendship but you're building a network and this person means more. My guess is that we'll probably move on from each other quite quickly, but we will always be able to call on each other.

Jessica also shared that many of the individuals in the cohort were a part of a group text. She started the text group for the purpose of communicating about coursework and voicing frustrations regarding the class. She clarified the group was established with positive intentions aimed at strengthening communication. Other students interviewed also mentioned the group text as a potential way to build connections. In Kim's interview, she indicated there was a group text that she had on her phone, but she only used it to discuss course-related items. She did not think that the other conversations with her peers were very productive. She indicated that some of her peers had strong personalities and opinions leaving her with a lack of desire to communicate on any topic other than coursework.

Cindy indicated she said she felt like texting was the best form of communication in her cohort. She indicated that many people in the cohort did not check their email, and that the group text allowed students to get answers to questions about the coursework. Cindy also indicated there would be possibly one or two people she felt she had closer relationships with in her cohort. She shared that she texts back and forth with these individuals, and she indicated these individuals were now her friends on social media. She said,

It just happened that when we started talking it was like, oh you know, we just seem to have a lot more in common. I think it kind of goes back to like the olden



times when people would be pen pals and never see each other. It's kind of like you build a relationship based on academics more than personal things.

### **Student-Instructor Network**

As mentioned in the Context section of this chapter, MU creates BLCs specifically for the purpose of providing a cohort model of learning for students. In the BLC model, students begin the program as a group and progress through the degree program together. Students follow a prescribed course schedule, and often, the BLC is hosted within the students' school district. This structure, MU posits, provides opportunity for students to build relationships, a sense of belonging, and professional networks. While students in this study specifically selected the educational leadership program at MU because of the online and blended learning options, they did not place as much importance on the cohort aspect of the program.

Kristen was one student interviewed that referred to the BLC cohort structure as an opportunity to build relationships. She explained, the "best benefit from being in the BLC has been the small class size." When she took her undergraduate course work, many of her classes had up to 200 students at a time. Kristen liked that she had an "opportunity to build relationships and get to know her peers" because of the small cohort size. Interestingly, Kristen is a central node in three of the four sociograms, and is the person in the cohort that other survey respondents indicated they go to for assistance with the course.

**Face-to-Face class meetings.** I, as the researcher observed a face-to-face class session in a course designed for blended learning. In this specific course, the students met face-to-face once a month during the semester, and at the time of this observation, the

students were in their fourth meeting. The classroom was set up with four rectangular tables in the room that the professor angled so students could see the board and each other more easily. See Figure 8 for a visual representation of the room.

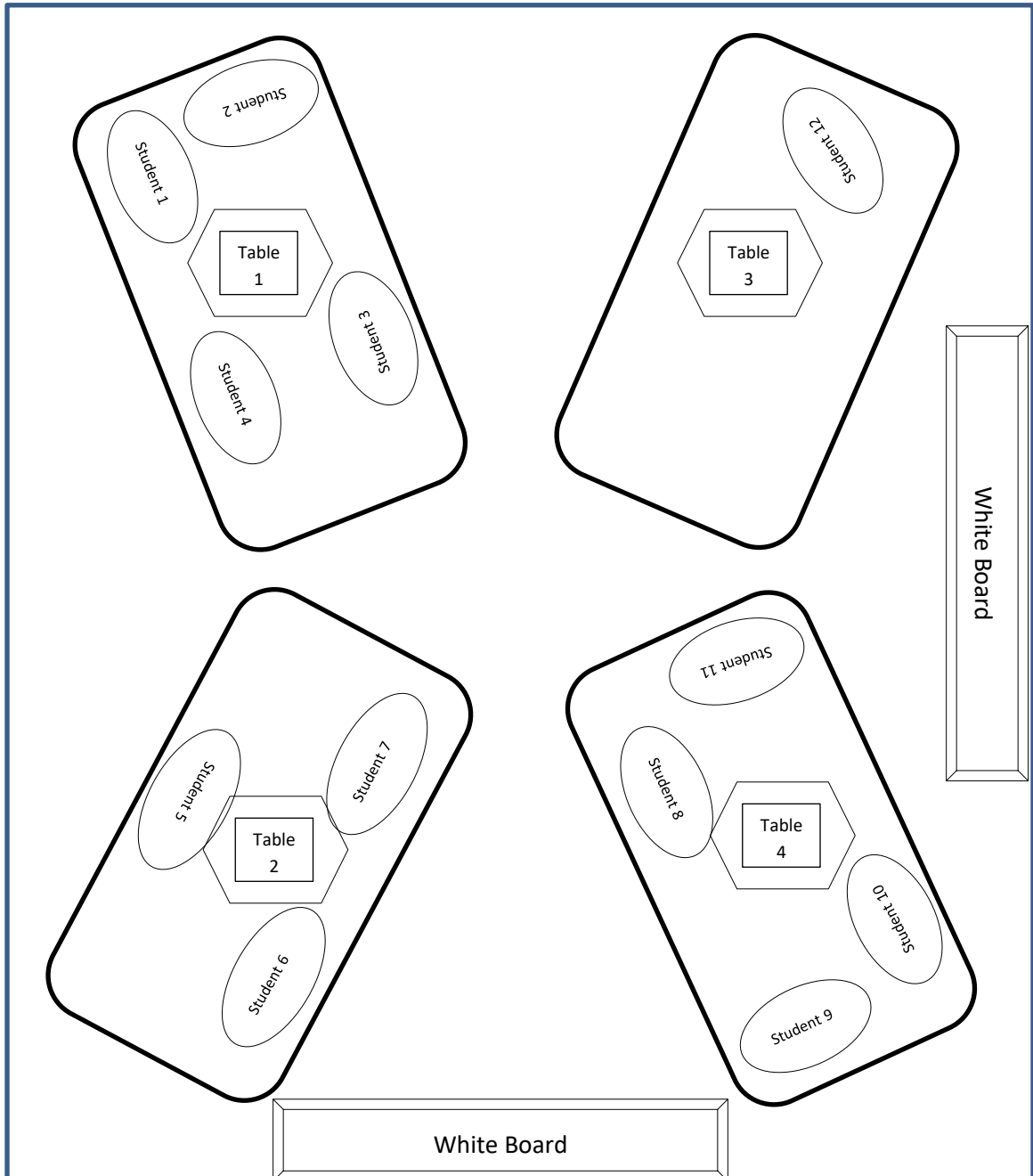


Figure 8. BLC Face-to-Face Class

During the classroom observation, it was clear that the professor of the course worked to establish an environment that would foster the opportunity for students to engage with each other. Prior to class, the professor had set up a name tent for each student, which was to be used for intentional grouping based on the upcoming classroom activity. The professor also set up the room with post-it notes and grouping signs posted on the whiteboards. In addition, the professor set up a secondary room adjacent to the meeting space so that the students could be divided into two working groups. Further, the professor brought with them donuts and a coffee maker, and when the students arrived, they spent time mingling around the room, making coffee, and eating donuts. There were 11 students at the beginning of the class period.

The activities of the class facilitated the engagement of the students with course content and with each other. The professor started the class with check-in and reflection as to how the students' research projects were progressing. Then, the instructor divided the table groups up into two working teams, Tables One and Two stayed in the original classroom to work on the activities, and Tables Three and Four moved to the adjacent room. While the students transitioned to their respective spaces, there was limited student interaction. One student asked Kristen a question about her research assignment, while Jessica and another student had a course related conversation. It is worth noting that Kristen was identified by multiple survey respondents as a connection within the cohort. While Jessica was also identified in the survey responses as having a reciprocal relationship with the student she spoke with most frequently during class. Most of their conversations were around support of each other regarding the course or assignments.

During the activity, students were required to simply recall facts from the material and organize them. Most of the students in the room looked up information in the book and online to find the answers. The answers to the activity were then displayed on the classroom whiteboard. In this specific observation, one student took charge of the process on their own by encouraging the students in Group One to not only categorize the concepts, but also define the connections between the categories. While the activity as completed by Group Two did meet the expectation of the instructor, as stated by them in class, I only observed Group One reflecting on how the information they found would apply to their current or future work. Figure 9 is a picture of Group One's final product.

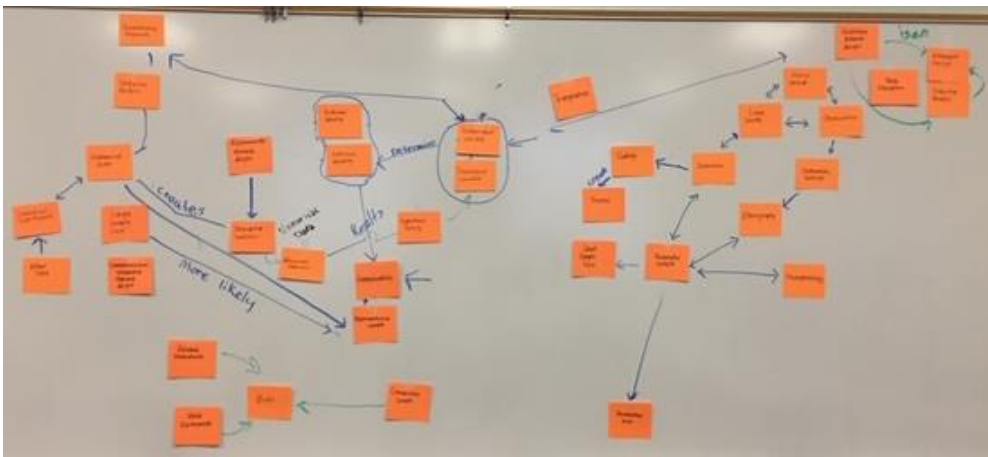


Figure 9: Classroom Activity

In her interview, Cindy was the only student who clearly discussed that she preferred online learning to a face-to-face classroom. She said her preference reflects her opinion that “there is lots [sic] of wasted time during a face-to-face class, with the instructor doing much of the talking.” Cindy also expressed that when the students participated in group activities in the face-to-face class, she did not see it as the best use of the students’ time. Cindy shared that her perception is that that the face-to-face classes are more about participation points rather than content knowledge.

During this class observations, the students in the course made small talk with the professor during the activity. Most of the students waited for the professor to engage with them directly about the content before speaking more reflective about the process and meaning of the activity. The students relied more on each other than on the support of the instructor when looking to retrieve the answers to the activity. Kristen and Jessica both engaged directly with the instructor to gain clarification related as it related to the outlined expectations of the assignment. Many students wandered in and out of the room, including Chris, on at least three different occasions during the class activity. He was the least engaged until towards the end of the activity when the professor reentered the room.

***Online class meetings.*** The typical structures of the online modules, as described by the students, included the use of discussion boards, videos, text material, and internet-based resources. According to Kim, in each online class, the professor usually provided some type of introductory video to review the content and expectations for the week. A normal week might then ask students to watch a video, read a discussion prompt, reflect on the task, and post an opinion about the topic in the discussion board.

***Discussion boards.*** During their online classes, students often engaged with each other through structured discussion boards. Some students interviewed saw the online discussion boards as an opportunity to collaborate with fellow BLC members around a topic and idea, while others interviewed saw discussion boards only as a technical function to share what they understood or learned regarding a topic. In the BLC coursework, students interviewed reported most of the discussion boards are structured where students post their first thought about the content, read their classmates' reflections or comments, and then respond to someone's post in the group. Jessica shared in her

interview that most of the online content in her course was built around discussion boards. However, she did not see this formal structure in the course as an effective way to engage with other students in the course, “only as a means to share what you have learned from the content.” Jessica elaborated that the online portions of the learning environment were repetitive. She stated that most of the content layout and expectations week to week is very similar and felt if it were left up to the students, the students would post their discussion board response and never read any of their peers’ work.

Cindy stated she does not feel this interaction through discussion boards is collaboration, but she does think this structure “allows students to engage with one another around the content.”

**Group work.** Cindy reported that although she saw limited structures in the online course that encouraged social interaction, she did reference collaboration in a previous semester where the cohort participated in a group project. As part of this assignment, students in each group had no face-to-face class time to work on the project. The entirety of the project was worked on outside of scheduled class meetings. Cindy stated that she and her group peers set up times to meet outside of class for them to work together and collaborate. Cindy said this particular group organized themselves through group text messages and often exchanged messages around meeting times, locations, progress checks, and questions related to the assignment. Cindy said it was during these times that she built stronger relationships with her peers in the BLC. She felt these opportunities to collaborate were a much better use of her time.

Other students, however, had different views of group work in the blended learning course. Kim did not feel the intent of the grouping students was meant for collaboration, but solely for the completion of tasks or project assignments. She believed

the best place for these formal collaborative structures was in the online discussion boards and not in group projects, even when group projects were performed during the face-to-face class time. Though she saw little importance in group work, Kim did share that she likes when faculty use project-based learning in her courses. She felt this type of learning was the best use of her time and was practical for her future role as a school leader. She merely preferred to work on projects individually.

***Role of the instructor.*** It is important to note here that none of the students participating in the survey referenced their instructor(s) as someone they would go to for assistance with course questions, assignments, or frustrations or someone that knew them as a person. However, all students interviewed still felt the instructor was the expert in the room whom they go to in a limited scope for assistance. In her interview, Kim indicated that she goes to the professor to seek clarification on an assignment, to get feedback as to her progress in the course, and to get assistance with the online learning management system. When she does interact with the instructor, Kim said, the communication most often comes in the form of an email. Jessica also indicated that most of her communication with her instructors is through email. She did share, though, that she is the type to ask questions of her professor before moving forward so not to waste time on an assignment. Jessica indicated she liked going directly to the instructor because she felt like they were the content expert. Jessica also shared that she perceived students did not go directly to the instructor because students would then have to “admit that you don’t know everything.” She called this “being vulnerable in your learning.” In Jessica’s perception, not all students were capable of that vulnerability in the BLC. She, however,

admitting to showing vulnerability in her learning even in front of her peers; she reported that she often demonstrated she was not afraid to ask for help.

Students interviewed for this study reported that when courses were not properly designed, or when the knowledge of the instructor lacked in the area of course management, they felt uneasy and struggled with course expectations. Kristen described the online environment as one that can be good or bad, depending on the professor's delivery of the content. She referenced an instructor from a past course that was not tech-savvy, and the students had difficulty understanding the expectations as well as how to navigate the course. She said she loved the instructor, but the course was not enjoyable because of all the technical difficulties. Kristen also reported that another instructor, "admitted that she was not great with technology, that that it wasn't her strong suit, so that really made the class hard." Cindy reported that one professor posted their course and "everything was outdated by a whole year, and it was confusing."

### **Student External Networks**

Though the SNA survey was a free-choice response survey, respondents did not indicate external relationships in regard to the survey questions. However, through interviews, all students spoke of the importance of external relationships in their success as a BLC member.

The four women interviewed for this study all mentioned having conversations with family members, most often spouses, to discuss the changing roles and responsibilities at home while they pursued their degrees. The women in the study all reported their families and spouses as supportive of this change. Specifically, Kristen said she had to have a "serious conversation with [her] husband about covering" and "about



his role in [the] household increasing significantly.” Jessica stated that if it were not for her “husband’s support and for his understanding about her needs” she does not think she “could balance it all.”

Data from the SNA survey showed that Cindy and Chris had few to no reported connections among her peers in the BLC. However, in interviews, both Cindy and Chris referred to the importance of relationships with people outside of the cohort, which they felt supported their graduate work. Cindy and Chris both shared a sense of trust when they spoke about these key people in their lives. Cindy spoke of her husband, parents, and sister as her support system in the program. She stated it is their support of her academic pursuits that keep her organized and driven.

In his interview, Chris talked about the role one of his former college professors had on his life, and it is her role in his education that he felt most contributed to his success. She still helps him today to understand what is expected in his courses and assignments, and she listens to him when he needs to share things about his life. “I have a professor I go to and, you know, ask her what do you think? I don’t need the OK from anybody, like, what you’re doing is great and just stay with it. So, as long as I’m praying, I don’t need anybody else.”

### **Summary of Part I**

Part I presented the data collected from SNA surveys, interviews, observation and document review. It also provided a description of the case: students within one online course within a blended learning cohort at Middle University. Part II follows and provides the major themes that emerged from the data analysis and an analysis of the data through the theoretical framework, Garrison’s (2017) Community of Inquiry framework.

## **Part II: Analysis of Data**

### **Major Themes**

The iterative qualitative analysis process used in this study led to the major themes presented in the following pages. Patterns were identified among initial codes, and categories were developed. Categories were read, reviewed, and organized into four themes: trust, time, digital networks, and perceived utility of online structures.

#### **Trust**

Trust is a major theme that emerged from the data analysis. Daly and Chrispeels (2008) define trust as “the extent to which one engages a relationship and is willing to be vulnerable (willingness to risk) to another based on communication and the confidence that the latter party will possess: (a) benevolence, (b) reliability, (c) competence, (d) integrity, (e) openness, and (f) respect” (p. 33). Although the students interviewed for this study did not always explicitly address trust when describing relationships with other BLC members, their answers often included the concepts of trust from the Daly and Chrispeels (2008) definition. Specifically, in this study, students interviewed placed importance on ‘competence’ and ‘vulnerability’ as the most important factors of trust and two of the major contributors to building relationships with peers.

**Competence.** The concept of competence appeared in the data when referring to personal competence of interview participants, perceived competence of BLC members, and competence of instructors. It was apparent from the observations and interviews that students had high expectations for themselves and others within the BLC. All five interview participants mentioned their own personal responsibility for success, though Kim and Chris were the only two interview participants to directly state that they

preferred to work alone. Kim, specifically, stated that she did not go to other classmates because they probably would not have any more information than her. This idea of self-competence was also apparent in the students' hesitancy to notify the instructor for what Jessica referred to as fear of appearing unknowledgeable.

Because students stressed personal competence so highly, it appeared that students' decisions to make connections and built networks were predicated on the perceived competence of others. For instance, Kim and Kristen directly stated that they fostered relationships with other BLC members in the class based on the perceived work ethic and values. Kristen even stated that she carefully chooses whom to work with and contact for course assignments and selected only those that closely resembled herself in "professional habits and traits." Conversely, students also mentioned that they often judged a student's competence based on discussion board posts. Kristen admitted that she would often read student's posts and purposefully not comment on them because she perceived them to either not be adequate or reflect values or ideas that did not resonate with her.

Two students admitted to feeling incompetent in their coursework. Not surprisingly, these were Cindy and Chris, who also identified few or no connections on any of the SNA survey questions. They were also not identified by their classmates as a connection in any of the four areas of the survey. Cindy admitted that she "felt bad" when students did not reply to her post, and Chris perceived himself as "different" and, therefore, unapproachable in the cohort.

This idea of competence also appeared in interviews in relation to the instructor. Students stated clearly that the competence of the instructor made an online course good

or bad. When speaking of negative experiences in the BLC, students often referred to the instructor's lack of technology skills, outdated coursework, or repetitive assignments. Further, though students did report contacting their instructor infrequently during the course, most interactions occurred through email or other digital communications. No student interviewed shared any face-to-face support or assistance from the instructor. As a result, the students interviewed did not refer to the instructor of any course as an instrumental function to their growth and learning or relationship building, but as a transactional relationship to gather or gain information.

**Vulnerability.** In addition to competence, students interviewed often referred to 'vulnerability' as both a facilitator and an inhibitor of building relationships with BLC members. In her interview, Jessica stated that, unlike some of her peers, she enjoys collaborating with the other students in her courses. However, she also intentionally kept her network in the cohort small. She explained that students in the BLC did not go directly to the instructor or a larger group of peers for support, because you have to, "admit that you don't know everything." According to Jessica, she and other students in the cohort felt it was difficult to be vulnerable in their learning; it showed lack of competence or ability. If students did need to be vulnerable, Jessica reported, students often went to a small group of peers first. It is important to note that Jessica is a central actor in all four sociograms from the SNA survey. She also had a relatively high number of reciprocal relationships compared to the other relationships reported. Jessica is also the only student who shared that she was unafraid to be vulnerable and to model that vulnerability for her peers. Kristen was the other central actors in the four sociograms. Though Kristen did not explicitly use the word vulnerability, she did imply that she was

open to vulnerability, not only in coursework, but in building relationships. She was the only student to comment on the cohort structure as a benefit of the BLC stating that she had an “opportunity to build relationships” in the smaller class size. She is also the only student to admit that she had not fully leveraged the possible connections with the group, but saw the benefit in doing so.

### **Time**

The theme of time manifested in multiple ways in this study. First, interview participants indicated time was a major factor in selecting to become a member of the BLC at MU. However, interview participants also indicated that time was also a major factor in their ability to retain relationships with current relationships and family members and to connect with other BLC members inside and outside of the course structure.

**Time and the BLC.** Each of the five students interviewed indicated that the flexibility of the program was one of the driving forces for selecting the BLC program. For some students, enrolling in a BLC better promised the balance of personal and professional responsibilities than a fully face-to-face cohort. All five students interviewed mentioned the convenience and flexibility as one of the major contributing factors to their decision to enroll in the BLC. Jessica mentioned that the cohort schedule fit into her personal calendar. Kim highlighted the time savings in online courses with not having to drive to class, park, walk, and sit in class for the designated time. Kristen equated time with flexibility and autonomy, two components she valued in her learning. Cindy remembered how much time her Dad spent getting his masters degree and saw the BLC

as a viable alternative, and Chris had a personal timeline for his PhD, and the BLC helped him to stay on track to meet his goal.

Because these students stressed the value of time, many of their interview answers demonstrated that they did not appreciate assignments that they felt were a waste of time. Specifically, students interviewed expressed an aversion to group work assigned outside the formal classroom. Except for Cindy who saw the group work as a way of building stronger relationships with BLC members, interviewed students found group work difficult; it was a challenge to schedule time to meet, a challenge to communicate effectively, and a challenge to ensure that all students were progressing with their assigned parts. Students also expressed that face-to-face classes were often collaborative, but the assignments were sometimes ill-prepared or designed for low-level thinking. Students felt there were other ways they could be spending their time during these sessions.

**Time and external relationships.** Interview participants discussed time and relationships in two ways. Although the interview questions focused on relationships with BLC members, many of the interview participants referred to time in relation to other relationships, such as marital relationships or parent/child relationships. It appeared from the interview data that these students were overwhelmed with responsibility, hence selecting a masters program based on online availability.

As mentioned, all four women who interviewed for this study shared that they had formal conversations with the members of their families to discuss the changes graduate school would cause. Jessica and Kristen both credited their husbands' support for their own abilities to succeed in the BLC. Both Jessica and Kristen explicitly mentioned

sacrifices they or their spouses had to make in regards to time in order for them to participate in the BLC. Kristen even referred to her graduate program as a “season” that she had less time for her children and family, but that it would pass soon.

**Time and BLC relationships.** Interview participants also referred to time when discussing social interactions with other BLC members. Kristen said she had only engaged in social relationships with two of her cohort peers, but she admitted that life was very hectic as a graduate student and social opportunities were limited. Students also indicated that built-in coursework that should have provided time for BLC members to interact were not effective. Interview participants stated that projects and group work conducted outside of class lacked the flexibility they were seeking in the BLC coursework. They saw their peers’ schedules as barriers that proved to be challenging in managing their own. Time, these interview respondents said, was a factor in this lack of connection. The sociograms in Figure 1 and in Figure 4 support this report of lack of peer engagement inside and outside of the course.

Although the students interviewed who had built relationships with other BLC members did view their class connections as important to have during the degree program, none of the students interviewed necessarily saw these BLC relationships as important in the future. Most of the reported relationships between BLC members in this study appeared to be time-bound. Both Jessica and Kim admitted in their interviews that they did not see the relationships they had built within the BLC as viable after graduation. As Jessica said, “my guess is that we’ll probably move on from each other quite quickly.” Though Kim did see the importance of relationships for a building leader, she did not see the connection between building relationships with her current BLC

members and her future position as a principal. This short-term concept of relationships was echoed in interviews with Cindy and Chris who both did not actively seek connections with fellow BLC members because they did not see them as beneficial in the longer term.

### **Digital Networks**

The SNA survey administered to BLC members elicited responses about connections between cohort members in the areas of coursework, frustrations related to coursework, understanding each other as people, and social interaction outside of work. Students who responded to the survey were not limited in their choice of whom to identify to answer survey questions and were not instructed that connections had to be conducted face-to-face. Connections in these areas as reported by the 10 survey respondents were sparse. However, in interviews with five BLC members, it was apparent that students connected with one another more often than they perceived. These connections, though, were described as digital or virtual, and it was apparent from the data that students did not always consider these digital or virtual connections as relationships or networks.

While the sociograms related to coursework and frustrations about coursework (See Figures 3 and 4) showed limited connection, four of the five students interviewed mentioned a group text for BLC cohort members where students asked questions about coursework, sought clarification, and sometimes shared frustrations about the courses and graduate programs. Further, students who answered the survey did not report many connections with other students who understood them as a person. However, these same students reported social media connections (such as being Facebook friends) in which



they portrayed themselves in their daily lives as opposed to as professionals or cohort members. It was clear during data collection and analysis that students did not perceive these digital or virtual connections as either important or integral to their connections as BLC members.

### **Perceived Utility of Online Structures**

Another theme that emerged was the students' perceived utility of the online structures for collaboration. Specifically, the theme centers on the difference between the instructors' perceptions of the utility of these structures and the students' perceptions.

Research on online learning indicates that interactions between students in blended learning environments are vital to student success (Kurucay & Inan, 2017). Additionally, effective facilitation of collaboration in online environments can build cultures of trust between students and increase student satisfaction (Garrison, 2017). Some of the tools recommended for online course design are discussion boards and small group work. In this study, the instructor of the course included in this case did employ these strategies. Specifically, the instructor used discussion boards to encourage collaborative discussions around classroom content. However, the students interviewed for this study saw the utility of these tools differently than their instructor.

While the MU instructors of BLC coursework did integrate discussion board in their blended learning classes, students saw discussion boards and group work as less than ideal for fostering collaboration. Students interviewed in this study mentioned the repetitive nature of online coursework, and referred to discussion boards as a checklist, a waste of time, and a repository for student learning on a topic. Jessica directly stated that she did not see discussion boards as engaging, and Kristen stated that had it not been a

requirement, students would not take the initiative to read others' posts. In terms of group work, as mentioned under the theme of Time in this chapter, students interviewed did not perceive utility in its usage. Kim felt the assignment of groups was random and did not see purpose or intent in making the assignments group projects as opposed to independent assignments. Kim even admitted that she preferred discussion boards over group work due to the anxiety it caused her in scheduling and managing the work of her group members.

While it appears the intent of the instructors in the BLC were aligned with research, through analysis of data, it became more clear that students either did not see how online structures were designed to build relationships between students or these strategies were inadequate for this particular group of students. It is to be noted that in review of the syllabus and in the classroom observation, there was little evidence that the instructor was actively involved in facilitating the discussion board or in supporting group work.

### **Analysis through Community of Inquiry Framework**

The case and data presented as well as the major themes that emerged through data analysis in the previous sections of this Chapter informed the analysis of data in the following section. The theoretical framework for this study is Garrison's (2007) Community of Inquiry Framework (CoI). CoI focuses on three necessary elements for a successful educational experience: social presence, cognitive presence, and teaching presence. In the Community of Inquiry theory, the interaction of the three elements, social, cognitive, and teaching presence, assist equally in the creation of a quality online

learning environment. The following section analyzes the data for this study through the lens of these three elements.

### **Social Presence**

Garrison (2017) writes, “social presence is concerned with connecting people through both personal and academic communications that will build group cohesion and a commitment to purposeful inquiry” (p.38). Social presence is essential in creating strong networks of learners in an online learning environment. While the term ‘social’ may be misconstrued as recreational or entertaining activities, Garrison (2017) asserts that the more effective means of building social presence are to intentionally develop opportunities for students to interact with academic content in a collaborative manner during the lesson or course. In time, the interaction around content will build trust and a sense of shared purpose among group members leading to stronger interpersonal relationships.

In this study, there were some intentional attempts at building social presence. The instructor for the course observed included discussion boards in the online modules to facilitate conversation and created learning spaces and activities meant to engage students in conversation. Students also reported that previous instructors attempted to build social presence by assigning group projects and structuring face-to-face activities that kept students transitioning from student to student. However, the students interviewed for this study indicated that these structures did not always meet the intended objective. Students saw discussion boards as less of collaborative spaces and more of tasks to be checked off an assignment list. Some students interviewed also shared that group work was a waste of time or caused high amounts of anxiety for students who

feared group members would not fulfill their obligations to the rest of the group. While these formal structures had positive intentions for building relationships and networks between BLC members, the students interviewed did not report them as having that affect.

Students did, however, report stronger social presence through informal and more organic methods such as social media. It was through Facebook, group text, and peer-to-peer text that allowed the students interviewed to build stronger connections among their peers. Unlike the seemingly high-stakes environment of the LMS discussion boards where students could feel intimidated by other students or not confident in their abilities, social media and group text were low-stakes where students felt safer to appear as a person rather than a high-performing graduate student and professional. Additionally, one student reported that she built the foundation for peer relationships during a group project outside of class, but that the relationships continued and grew in other informal spaces such as social media and text. As mentioned in the themes, however, students did not clearly connect these online connections with face-to-face connections or appear to weight them equally when answering the SNA survey questions.

It is important to note that while Garrison (2017) states that social presence is integral to an effective learning environment, some students interviewed reported a more intentional attempt to keep their professional or graduate school life separate from their personal life. It was apparent in data collection that some students in the cohort drew conclusions about other students based on the types of discussion board posts, engagement in class, and overall perceived commonalities around work ethic and values. It was also apparent that at least one student interviewed felt that his answers were not

respected or valued by his peers, and he had intentionally withdrawn himself from much of the course interaction in both formal and informal structures. It did not appear through interview or observation that other students in the cohort made attempts to better understand this student or his experiences beyond those he shared online. While this student did report that he preferred not to engage in social presence, given the limited scope of this study and data collection it is difficult to ascertain what impact this isolation has on his performance in his degree program or the community of learners as a whole.

As indicated by the themes that emerged out of data analysis, trust may be a factor in the development of social presence in the BLC. According to Akyol et al. (2001), social presence can be measured through how comfortable students feel about conversing through the online system, participating in course discussions, and interacting with other course participants. Students interviewed for this study described a BLC culture where trust to be vulnerable and feel less than competent was not developed. In fact, two students directly expressed their discomfort with interacting online for fear of judgement. Specific to social presence, students should feel supported in projecting themselves as real people online, participating in activities that would allow them to display their personalities as well as address coursework. Given the strong emphasis on competence that the students interviewed for this study possess, it is not apparent that students feel vulnerable enough to allow their individual personas to be reflected in discussion board posts. Both competence and vulnerability are aspects of trust (Daly & Crispeels, 2008).

### **Cognitive Presence**

Cognitive presence is focused on encouraging inquiry of learners. “Inquiry is a self-correcting process where members of a community challenge beliefs, suggest

alternative perspectives for exploration, and negotiate to understand content” (Garrison, 2017, p. 51). The course activities as described by the students interviewed and observed in this research study did show that students are provided some opportunities to reflect on their future practice and apply the content learned in class. However, across all assignments, exchange of discourse between the students was lacking, preventing the necessary cognitive connections within the community. By the accounts of students interviewed, the discussion boards and group activities were intended to help students develop a deeper understanding of the content and build connections between, but most students interviewed reported these learning experiences felt to be more about allowing them to show what they had learned. As students described the activities included in online modules and face-to-face classes, most of these experiences described were about exchange of information. Most students spent time in these experiences worried about how this would affect their performance in the course, or they analyzed their peers based on interactions. The classroom observation where students took keywords related to the topic and categorized them with their peers is a good example. One or two students in each group took charge of the note placement, while others in the group looked up the information. The activity focused on the exchange of information, and less about the exchange of ideas, rationales, applications, and tested theories. The cohort activities, as reported by the students, did not engage them in cognitive presences in the course.

It is important to note, however, that when students did feel a cognitive dissonance or were challenged by content not easily understood, students reported feeling uneasy or uncomfortable. While this discomfort is part of a learning experience, students stated, instead, that it was a reflection of their competence or ability in the course. While

cognitive dissonance is an integral part of cognitive presence, it was not apparent that the instructors or the degree program had developed a trusting culture where students felt comfortable not knowing the correct answer.

Time may have impacted the development of cognitive presence. Students in this study selected the BLC for their degree program explicitly because of its blended and online learning options. All students addressed needing flexibility and autonomy in order to enroll in the program. Additionally, four of the five students interviewed stressed the time taken away from their families to complete the coursework. It appears from the data that students do not perceive they have the time to devote to intense discourse or reflection regarding coursework, and it is not apparent that the instructors provide these opportunities through their structured coursework, either online or face-to-face.

### **Teaching Presence**

Teaching presence can be described in many ways, but simply stated it is, “the design, facilitation, and direction of cognitive and social processes” (Garrison, 2017, p. 71). Teaching presence is found in the design of a course and emphasizes the facilitation of discourse between learners where structures intentionally shape constructive conversations between students (Garrison, 2017). In this study, the instructor of the blended learning course taking place during the semester of this study would be responsible for developing teaching presence in the BLC course.

While the students did appreciate the overall design of the degree program and online and blended course flexibility, students’ perception of teacher presence in individual courses varied. According to students, online modules were repetitive. Perhaps this indicates that the instructors relied too heavily on previously created course layouts

when designing curriculum. There was also a disconnect between what the instructor felt they were providing to the students and the student perception of experience. For instance, the instructor for the blended learning course in this study included discussion boards to facilitate student conversation. However, students did not perceive discussion boards as collaborative spaces and did not find the structure of them conversational.

The participants in this study also did not see their instructor as an engaged partner in their learning experiences. Although the instructor built in structures to encourage conversation, the facilitated discourse from the instructor was not present by the accounts of the students interviewed. The students did not see the discussion boards and activities as a way to engage with others to deepen their understanding or broaden their concepts. The active engagement of the instructor in these conversations could have assisted in shaping direction and building understanding. Garrison (2017) refers to these as “Direct Instruction Indicators” (p.76), and when used by the instructor they can foster the right environment for both social and cognitive presence (Garrison, 2017). The lack of scaffolding around the practical inquiry phases (Garrison, 2017), and the instructor’s lack of engagement in the course could have played a role in the lack of teacher presence.

### **Summary**

The two parts of Chapter IV presented the data collected in this case study, presented the major themes that emerged through data analysis, and provided analysis through the theoretical framework for this study. Part I included thick, rich description of the context for Middle University, the Blended Learning Cohort, and each of the interview participants. Data were also presented through the types of networks identified in this study; Peer Networks, Student-Instructor Networks, and Student External



Networks. Organization through the identified connections added depth of understanding to the networks being studied. Part II of this chapter provide an analysis of the major themes that emerged through the coding and theming process. The major themes included, a second analysis through the lens of the Community of Inquiry (Garrison, 2017) was also included. Chapter V will provide the findings, conclusions, recommendations, and reflections based on this analysis.

## CHAPTER V

### FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The rate of college courses using hybrid and online (blended learning) programs is increasing, and higher education is adopting these models at an accelerated rate (Seaman et al., 2018). These programs of study are moving to online formats often with a basic understanding of the way the courses need to be designed (Dabbagh et al., 2012; Garrison et al., 2000; Owston et al., 2013) and limited thought to understanding the perceptions of students about these blended learning environments (Dziuban et al., 2013; Owston et al., 2013) and the reasons students select these types of learning environments (Winn et al., 2014; Wu, et al., 2010). In Chapter 4, I presented the data from the study and the major themes that emerged from data analysis. I also provided an analysis through the lens of CoI. In Chapter 5, I answer the research questions that guided this study, identify the implications for research, theory, and practice, and suggest ways to build upon the limited research on the social connections among students who engage blended learning environments.

#### **Findings**

The purpose of this qualitative study was to explore the social networks of a cohort of students who are participating in blended learning environments within an

educational leadership graduate program. Community of Inquiry theory was used as a lens to better understand how these networks may contribute to student success.

1. What does blended learning look like in the selected graduate program?
2. What are the underlying social networks of students participating in the blended learning environment?
3. How do these students describe the role of their social networks in the blended learning environment?
4. How does Community of Inquiry theory explain the above?

In review of the collected and analyzed data from Chapter IV, the research questions for this study are addressed below:

**Research question one - What does blended learning look like in the selected graduate program?**

Participants in this study describe a blended learning environment where much of the class participation is online, with monthly face-to-face meetings each semester. Students in the BLC refer to their online portion of their course as online and the in-class portion of their course as face-to-face. Traditional course design would describe this as a hybrid model or blended learning (BL) model. For the online portion of the BL model, participants in this study report that each online course was repetitive in structure; each course included videos, reading material, websites, discussion boards, projects, and assignments as part of the learning experience. This could be partly due to the university support program for online design. This program has established course shells and rubrics for instructors to use while developing their courses online. These elements were managed in an online learning management system, known as an LMS. This LMS

allowed students to engage with all of their course content, peers, and instructor during the course of the semester.

Students in this study reported that the structure of the course design was primarily developed to provide them with an opportunity to show evidence of their learning, and not necessarily to deepen their relationships and connections among peers. Some students drew on the value of other perspectives in discussion boards, and they reported that this was the primary way in which students interacted. While they did work on assignments and projects, they did not associate these experiences with the development of a culture of learners or as an opportunity to build social capital with peers; they described these group projects as tasks and outcomes required by the course.

Participants reported the face-to-face portions of their courses as consisting of classroom activities, group projects, and lectures. The face-to-face meetings were very traditional in that most instructors provided some type of lecture. These lectures were not as well received, considering most students in this group felt like the dissemination of information could be successfully delivered online. While there were some reports of group projects and activities during these face-to-face meetings, most students did not see this as a worthwhile investment of their time. While some students did appreciate the time to gather with their cohort to work and collaborate, most did not see the interactions as opportunities to strengthen the trust within the group and build upon discourse and inquiry with their peers.

Interestingly, all students in this study intentionally chose the BLC at MU for its online learning options. All five students interviewed indicated that the autonomy and flexibility of the BLC was an attractive reason to join the cohort. However, when

discussing the BLC and the blending learning courses, many students indicated their expectations with learning were not necessarily met. Students still felt that some of the face-to-face time was wasted, that discussion boards were not effective collaboration tools, and that group projects worked more like a defined list of tasks for each student. Additionally, though MU intentionally designed the BLC as a cohort model, students in this study did not seem to credit the cohort model to their success. Though some students had developed connections with small groups of peers, all students interviewed indicated that these relationships would probably not be sustained after the degree program and did not see the benefit of building a professional or social network with the other BLC members beyond getting assistance with coursework.

**Research question two - What are the underlying social networks of students participating in blended learning environments?**

The responses to the SNA survey revealed limited connections between students in the BLC. These connections were represented by the sociograms created from the students' survey results (Figures 3-5, & 7). The sociograms indicate a high number of isolates compared to the number of students who responded to the survey. This means that for each sociogram, there were a number of students who took the survey that did not report a relationship with a cohort peer or were not identified by a cohort peer as part of a relationship. In fact, in the fourth sociogram referring to social interaction outside of class, more students were identified as isolates than reported having connections. The sociograms also revealed few reciprocated relationships. This means that a student may have identified a relationship with a peer, but that same peer did not identify the same student as part of a relationship. This could indicate weak social ties or transactional

relationships where one individual is receiving more information than the other. The sociograms shed light that two students in the cohort have the most connections with and among each other; they would be considered the most central. These two students represent the ongoing channels of communication and interaction of their BLC cohort. Through interviews and observation, it was further indicated that these two individuals were power brokers of communication within the BLC.

Beyond the sociograms, data revealed the presence of peer networks, student-instructor networks, and student external networks. Through interviews, students did verbally indicate limited relationships with peer cohort members and did demonstrate social connection through real-life events. Students interviewed reported that some of the BLC members were connected through social media and group text. Additionally, small groups of BLC members met infrequently for coffee or to discuss classroom assignments. Most often, students interviewed referred to 'relationships' through the lens of assistance with coursework. Students interviewed often shared that they built relationships with students based on perceived competence and abilities because they saw these relationships as important to their success in the degree program. Though all students interviewed did report that they did not feel strong connection with other cohort members, their actions during one of the courses did demonstrate that they had at minimum respect and caring for each other as cohort members. When a cohort member was expecting a baby and the other cohort members heard that she was in need of baby items, the cohort members used the digital connections they had built (email, group text, and social media) to organize a baby shower to be held after a face-to-face class.

The students indicated a weak network between BLC cohort members and the course instructors. The students interviewed did not identify any instructors or MU staff as connections in any of the four SNA survey questions. Through interviews, they did identify instructors as someone they go to for assistance with basic course information such as clarification on assignments, schedules, or content. When referring to relationships with instructors, students described relationships as transactional based on one-way sharing of communication. Students did not describe relationships as interacting with instructors in either face-to-face or online learning environments. Though the instructor of the course scheduled during the semester of this study did attempt to create a welcoming atmosphere with coffee, snacks, and group activities. The students either did not see these as relationship building, or they were inadequate to meet the needs of the students in facilitating collaboration.

Students who responded to the SNA survey also did not identify individuals outside of the BLC as someone they would turn to for coursework, frustrations with coursework, understanding as a person, or social interaction outside of class. In interviews, however, all five students interviewed spoke about the importance of their external relationships. These relationships included spouses, families, and children, and even a previous professor. Though these external relationships were not the focus of this study, students, particularly the female students, stressed the importance of these external relationships in their overall success.

### **Research question three - How do these students describe the role of their social networks in the blended learning environment?**

#### **Peer Networks**

Most students interviewed did not report their peer social network with other BLC members as significant to their success in the degree program or their future professions. In fact, the majority of students interviewed address success as a personal responsibility. Though four of the five students interviewed admitted to having one or more cohort members to text or to turn to for course advice, they did not explicitly express utility of these networks beyond basic help with course assignments. The interview answers provided by the students indicated that the relationships built with cohort-members were time-bound; they would expire at the end of the degree program. Additionally, students who did express having a social relationship with another BLC member most often referred to those relationships in terms of how the relationship may benefit the student interviewed on assignments in the future. The students interviewed indicated that they preferred to build relationships with other students who mirrored their own work ethic or demonstrated high performance in the class. Even the two students that were observed as more central connections in the overall social network of the BLC did not see their value in the group beyond the performance of the course. Though these two students appeared to play important roles in their BLC--setting up group text messaging, sending Facebook invitations, and planning baby showers--they did not refer to the development of these social connections as being important to the larger degree program.

Beyond being helpful in coursework, some of the students interviewed indicated that their peer connections allowed them to express frustrations, clarify course and



instructor expectations, and talk through their understanding of course content. Overall, however, most relationships described by students interviewed could be best described as transactional, meaning relationships used to transact information or knowledge.

### **Student-Instructor Networks**

The student-instructor networks identified in this study were also described as transactional. As indicated in Research Question Three, students reached out to instructors mostly for basic information on the course. Students tended to speak of instructors in isolation, connecting the instructor with the specific course taught. Students did not provide information about instructors providing any other type of support or resources. Additionally, students did not refer to the student-instructor network as critical to course success. In terms of success, students perceived that the instructor's competence and technological skills determined if the course was going to be "good or bad." Similar to peer relationships, no student interviewed shared the benefit of student-instructor networks outside of the course or in a future profession.

### **Student External Networks**

All five students did indicate one type of network did play a role in student success, student external networks. The four women interviewed for the study all admitted that they had conversations about enrolling in graduate school with their spouses and/or families. They shared that they would not be able to be successful in the program without spousal and/or familial support. Two of the women directly stated that without the support of their husbands, they could not continue in the program. The male student in the study was also the only student in the study to not have any connections in the SNA survey. This student admitted to not needing relationships with his cohort

members to be successful. However, this same student did identify one important relationship, an external relationship with a previous professor. He still sought out this professor for course questions and general advice about his program.

#### **Research question four - How does CoI Theory explain the above?**

Community of Inquiry proved to be an appropriate theoretical lens for this study. Analysis through the elements of social presence, cognitive presence, and teaching presence provided additional language for the findings and structure for deeper analysis.

CoI posits that the three elements of social presence, cognitive presence, and teacher presence are equally important in an online learning environment (Garrison, 2017). At the intersection of these three elements, is the educational experience. Effective educational experiences in online learning, then, rely on all three elements being effective.

#### **Social Presence**

According to CoI, social presence is defined as the ability of learners to participate in an online learning experience as a real person. This means that as the students interact around the content of the course, they also project their personalities into the interactions (Garrison, 2017). Social presence also refers to levels of communication and group cohesion (Garrison, 2017). Ultimately, research shows that learning experiences with increased social presence result in increased student satisfaction and retention (Garrison & Akyol, 2013).

In this study, there was little intentional social presence. Though MU did create a cohort structure to better support students as they progress through graduate work, only one of the students interviewed referred to the cohort structure as a benefit of the BLC.

Students interviewed also did not display a high amount of group cohesion. Sociograms and interview responses indicated sparse, weak connections between students in the BLC. Further, although there were structures in place in the learning experience designed to facilitate the growth of social presence, the perception of the students was that these structures were a waste of time or were not facilitated in a manner to encourage collaboration.

### **Cognitive Presence**

Cognitive presence refers to the ability of students to engage in inquiry and critical discourse within and outside of the learning experience (Garrison, 2017). In order for cognitive presence to be fostered, there is a need for a facilitator to shape the opportunity for discourse and encourage learners to work together (Garrison, 2017). It is also important that while cognitive presence may be established in an online course, there is often a need for students to collaborate in other spaces such as face-to-face (Garrison, 2017).

In this study, there was little evidence of facilitated cognitive presence. Students referred to online coursework as repetitive, following a similar structure from course to course. While students did report the use of discussion boards, students referred to these discussion boards as checklists or wastes of time. One student interviewed even stated that absent course requirements, students would not read discussion board responses. While discussion boards are web-based tools that can facilitate cognitive presence, there was no evidence in this study that course instructors took an active role in the discussion boards to encourage collaboration or explain to the students the purpose or relevance. In the face-to-face environments, the instructor observed for this study did attempt to create

a space for collaboration by setting the room up in tables, transitioning the students to groups, and assigning group work. However, the assignment observed was a recall assignment at the lowest level of Bloom's taxonomy. While Group One expanded the assignment to connect the recalled information to real-world application, this was an individual group decision, and the other groups in the course did not participate in the higher-order thinking activity.

### **Teaching Presence**

Garrison (2017) refers to teaching presence as what the teacher does to create an effective and meaningful educational experience. Teaching experience includes course design, setting the climate and culture for the course, and selecting content (Garrison, 2017). Teaching presence also refers to the intentional action taken by the instructor to facilitate both social and cognitive presence in the learning environment (Garrison, 2017).

There is some evidence that the instructors of the BLC at MU are intentionally creating experiences for students to both interact as people (social presence) and grow as learners (cognitive presence). For instance, during the class observed, the instructor provided time for students to enjoy coffee and donuts while interacting socially before class. As mentioned previously, this instructor also designed a face-to-face class with group activities to facilitate collaboration among BLC members. This same instructor also allowed BLC members to host a baby shower for a student and even provided time at the break to decorate. Additionally, students interviewed reported that the instructors for the BLC used online discussion boards and group work to encourage students to discuss content and collaborative solve problems.

However, student perceptions of these strategies did not match teacher intention. As mentioned earlier in this chapter, students interviewed did not report that discussion boards or group work outside of class were effective collaboration strategies for them. There is also little evidence from the data in this study that instructors consistently take an active role in encouraging collaboration. No students reported instructors moderating discussion boards or monitoring group work. Students also reported that interaction with the instructor was usually via email and focused on basic course information. No student interviewed shared an experience of substantial interaction with an instructor or staff member of MU.

Central to CoI are also several pedagogical approaches that are necessary to develop a community of inquiry and meaningful educational experiences. These approaches include open communication and trust, sustain respect, and established community (Garrison, 2011). The themes of this study indicate that there have been little intentional attempts to build trust, respect, or community beyond the normal expectations of a graduate cohort. In absence of these approaches, there appears to be a lack of trust and cohesion within the BLC that would allow social networks to develop and be sustained over time. Students in this study indicated that time is a major factor in their decision making processes, and without intentional, appropriate structures built into the BLC and continuously fostered by instructors, it is unlikely that students will have the ability to develop social networks on their own. Without these social networks to support the social and cognitive presences, according to CoI, it is also unlikely that a community of inquiry or effective, meaningful learning experience will be established within the BLC.

## **Conclusion**

Research shows that learning is a social experience. Research done on learning and social networks has been conducted in traditional classroom environments, where students and teachers are face-to-face the majority or entirety of the learning time. With the growth of online learning, however, traditional face-to-face methods of relationship building are not always effective. Additionally, online relationships often manifest differently than in-person relationships. If learning is social, but traditional methods will not always work, what then are online instructors to do to ensure an effective learning experience for virtual learners? Garrison (2017) proposes developing a Community of Inquiry where social presence, cognitive presence, and teacher presence intersect to create an effective educational experience. As part of this intersection, it is the responsibility of the instructor to set the climate, support discourse, and select content (Garrison, 2017).

The data in this study indicate that there are few social connections between students in this blended cohort. Of those relationships that do exist, they are often one-way and transactional. These relationships are often built on trust as defined by competence and, in some cases, vulnerability. Because relationships are built on the perception that the other person can be of assistance in coursework, there is very little utility for social interaction outside of class, and there is a sentiment among cohort members interviewed that the relationships built during this BLC are not sustainable beyond graduation. Though formal structures built into the BLC are intended to encourage student community and collaboration, students report that these tools are limited in their ability to build relationships. Students interviewed credited more informal

methods of relationship building for the few relationships that they have built with peer BLC members.

Data analysis indicates that there is little to no intentional work in the areas of social presence, cognitive presence, or teaching presence. While MU has developed a cohort model to encourage relationship building, there does not appear to be any support from MU in fostering a cohort climate for the students. In each course, curricula appear to be developed in a prescribed pattern, a pattern recognized by the students as repetitive. While instructors are using discussion boards and group projects, teacher facilitation throughout the assignment appears to be lacking, resulting in student anxiety and, oftentimes, students assigning roles as a checklist instead of collaborating. Because social presence, cognitive presence, and teaching presence are not evident in this study, it may explain why students do not feel the need to build relationships or see the importance of networks beyond their coursework.

It was evident from the data collected that the students in this study valued their time. They sought out a blended learning degree program precisely because of the lack of time they felt they had to hold down professional jobs, have a personal life, and seek an advanced degree. Therefore, when course activities were perceived by students to be an infringement on their time, they reported a negative perception of the course. This was evident in the way they spoke about activities wasting their time, or how group schedules for outside class activities were hard to manage. Students interviewed appeared to compartmentalize their degree program from the other parts of their life, and the overlap of the two was not met warmly.

## **Implications**

### **Implications to Research**

Research does indicate that a student's social network plays a role in their current and future success. The following suggestions regarding research would provide a deeper context and broader view of the student learning experience as it relates to their network and its potential connection to student success.

One suggestion would be to apply this same study to another cohort of graduate level students in an educational leadership program to see if the same themes emerge. Additionally, this study could be replicated with other fields of study to see if similar characteristics and perceptions remain or change based on the sought degree by the student.

Another suggestion for research would be to redesign the SNA to be bounded to the students in the cohort and listing the instructor as an option in the network responses. This change would allow the researcher to determine if the students perceive the role of their instructor any differently. A future study could also include more students than what was selected for this research study to gather additional perceptions regarding their learning environment.

A future research suggestion that would require a significant change to this study would be to interview the instructor of the studied cohort to gain the instructor's perspective and provide another viewpoint of the case. Based on the findings of this research, the voice of the instructor could serve to provide a very important perception as to the intention behind the lesson design, their level of comfort with online and hybrid instruction, and the manner in which they choose to engage in the course.



### **Implications to Theory**

This study used the CoI framework (Garrison et al., 2000) to explore the social networks between students in a blending learning environment. The lens of social, teaching, and cognitive presence was used to analyze the data collected. Though this framework has been used to analyze online learning environments previously, this study adds to the literature on this theory because it combines social network analysis and the CoI framework to attempt to better understand not only the connections between students but how those connections play a role in student perceived success. The two appeared to work complementarily in this study, but more research pairing the two is warranted.

### **Implications to Practice**

The findings of this study are beneficial to educational leaders in both K12 and higher education institutions. As universities across the nation compete for student enrollment, understanding how students determine success in courses and the social constructs that help make them successful could serve as an essential framework for course and program design. The results of this study may inform graduate level educational leadership programs as they develop courses to prepare future school leaders.

The findings of this study shed light on the importance of the instructor in an online and hybrid course. The instructor in an online course is more than a moderator. The responsibility to design relevant, real-world, authentic experiences where students can wrestle with the content and concepts, and use the power of their community to help make collective decisions is vital to a healthy learning network. Course design for an online learning environment for educational leadership, then, should take into consideration what students need to build trust and build ongoing communities

meaningful to adult learners. Additionally, K12 environments should consider how this same type of course design and structure for building COI can benefit professional development programs in schools.

The findings of this study indicate there is a need for intentional course design that fosters a COI. Existing research indicates that adults learn and work best in social networks and have higher satisfaction when their social needs are met (Knowles, 1984). This research points to the importance of course design and instructor interaction (Teaching Presence), as it relates to both identity of self (Social Presence), and deeper learning experiences (Cognitive Presence). These types of socially connected environments do not naturally develop unless the students seek to foster these connections out of personal need. As such, it is not merely enough to develop a cohort model of learners. The *build it and they will come* approach is not supported by this study. Instead, universities relying on a cohort model for graduate level coursework should be mindful that the coordinator or instructor role may include fostering the development of professional relationships and assisting the students in seeing the value of these relationships both in coursework and in the larger professional world. Considering many of the students in this study did not see the connection of these collaborative relationships, learning, and future success, it is important for programs to leverage research of shared leadership to help design courses that meet the needs of this unique group of students.

## Summary

This study represents the social network of graduate students, enrolled in an educational leadership program with experience participating in blended learning environments. The results of this case study shed light on social networks of students, their perceptions of the learning environment, their connections with peers, and how they attribute this peer network to their course success.

In the case study, the role of the instructor as an agent in the process of building a community of practice seems vital. This engagement goes beyond the creation of course materials and suggests that the intentional design focus on real-world application for students preparing for their future jobs is essential. These assignments and activities need to be designed in a way that aids in building a community of inquiry among peers. The ongoing presence of the instructor in this engagement and experience seems needed to help the community see connections between the groups, build on community strengths, and help students think more in-depth about the curriculum and the needed connections.

Chapter I of this study included the purpose of the study and the research questions that guided this researcher's inquiry. The exploratory case study (Merriam, 2001), in conjunction with an SNA, was used to collect the necessary data for this study. The data were analyzed through the lens of Community of Inquiry (Garrison et al., 2000) to see what realities existed.

Chapter II provided a review of the literature, which aided the background and understanding of the studied research topic. This literature review provided research related to blended learning, university adoption, benefits to students, student success, barriers to adoption, adult learners, social connections, and contributions to learning.

Chapter III provided a detailed description of the qualitative research study describing the method and procedures followed during this study. This chapter included information on how the participants of the study were selected, how the data were collected, analyzed, themed, and coded. This chapter also provided information on the methodical stance of myself, including the trustworthiness and the limitation of this study. This study focused on one blended learning community where 15 students were invited to participate in the research. Out of the 15 students, 10 students opted-in as participants in the online SNA survey, and it was the results of this survey that provided the research with sociograms to review. These sociograms provided context to the information shared by the five cohort students interviewed for the study. The data from the study was conducted during one semester and focused on one course the students were enrolled in during that specific semester. The data from this case was analyzed and coded for themes, with a lens of CoI (Garrison et al., 2000) applied during the process.

Chapter IV presents the findings of the research and a description of the data reviewed. The data collected through the SNA sociograms, the classroom observation, the visual documentation, and the interviews of the participants provided me with the necessary information to glean realities of the experiences and perceptions of the cohort students from the case study. The gathered data were analyzed through the Community of Inquiry (Garrison et al., 2000) theoretical framework.

Chapter V concludes the findings of the study. The goal of this study is to provide in-depth research regarding student's social networks in educational leadership blended learning programs, in the hope of proving school traditionaries and university leaders

with vital data related to how students interact and the potential influence on their current and future success. Finally, the future recommendations for this research were outlined.

### **Reflections**

It became clear after starting my job at a university a few years back that my lack of understanding of the research behind blended learning environments put me at a considerable disadvantage. I started researching information regarding the design and development of online learning and moved to understand the perceptions of students in these types of online and hybrid structures. I wanted to continue to learn how I could help prepare future school administrators and leaders for their roles while producing quality learning experiences in an online environment. Over the past few years, I began to gather answers to some of my questions but found there were still many more questions related to the topic of online learning environments. Through my literature review, I discovered the work of Garrison, Anderson, and Archer (2000). It is through their framework for creating a CoI where I felt my topic come into focus.

While my research did not draw any direct connections between these two characteristics, as reported by the participants, it did confirm for me the importance of the instructor in the role of blended learning. It also confirmed for me the importance of course layout and module representation, in addition to the discussion boards and assignment activities designed for learners. Many university online design support departments focus on the structural layout of the course instead of the creation of authentic learning experiences that can be presented in online formats. While many professors know their content, they may not be comfortable with shifting their content in

a way that will best meet the needs of adult learners, and aid in the creation of a connected learning community.

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# APPENDICES

## Appendix A INSTITUTIONAL REVIEW BOARD APPROVAL



COLLEGE OF EDUCATION, HEALTH AND AVIATION  
Educational Leadership and Policy Studies – School Administration

### CONSENT/PARTICIPANT PERMISSION FORM

Social Connection of Students and Its Role in Blended Learning Environments

#### **Key Information**

**Study Purpose:** The purpose of this qualitative study is to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership graduate program. Community of Inquiry Theory will be used as a lens to better understand how these networks may contribute to student success.

**Major Procedures of the Study:** As a participant in this study, you will complete one survey. The survey will ask about the relationships with other members within the blended learning cohort. It will take approximately 30 minutes to complete the survey. Participants may be asked to participate in one 60-minute interview in which you will be asked about your social networks, learning experiences, and also provide documents relevant to the scope of the study. Documents and artifacts may include student work, participant communications, images, course documents, syllabi, and evidence of interactions. Some participants may be asked to conduct a follow-up interview for clarification. Follow-up interviews will last approximately 30 minutes. If you participate in all three steps of the study, your total time commitment will be two hours.

**Duration of Participation:** Total time commitment for a participant is approximately 2 hours during the Spring semester.

**Significant Risks:** There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

**Potential Benefits:** There are no expected benefits for participation in this study.

**Compensation:** Subjects will not receive compensation for participating in this study.

#### **Background Information**

You are invited to be in a research study regarding social network of students in blended learning environments. You were selected as a possible participant because of your enrollment in a blended learning educational leadership cohort. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation is entirely voluntary.

**This study is being conducted by:** Dawn M. Pearce, Education Leadership, Oklahoma State University, under the direction of Jacki Mania-Singer, Educational Leadership, Oklahoma State University.

#### **Procedures**

**If you agree to be in this study, we would ask you to do the following things:** As a participant in this study, you will complete one survey. The survey will ask about the relationships with other members within the blended learning cohort. It will take approximately 30 minutes to complete the survey. Participants may be asked to participate in one 60-minute interview in which you will be asked about your social networks, learning experiences, and also provide documents relevant to the scope of the study. Documents and artifacts may include student work, participant communications, images, course documents, syllabi, and evidence of interactions. Some participants may be asked to conduct a follow-up interview for clarification. Follow-up interviews will last approximately 30 minutes. If you participate in all three steps of the study, your total time commitment will be two hours.

**Participation in the study involves the following time commitment:** Total time commitment for a participant is approximately 2 hours during the Spring semester.

#### **Risks and Benefits of being in the Study**

**The study involves the following foreseeable risks:** There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.



Approved: 03/25/2019  
Protocol #: GC-19-1

## Appendix B INSTITUTIONAL REVIEW BOARD APPROVAL

**The benefits to participation are:** There are no direct benefits to you. More broadly, this study may help the researchers learn more about Blended Learning in Educational Leadership Programs and may help future populations with a similar issues/future researchers design interventions to help with a topic.

### **Compensation**

You will receive no payment for participating in this study.

### **Confidentiality**

Each participant in the study will be assigned a randomized code to use on the survey. Randomized codes will only be shared individually, and no other participant in the research will have access to your code. Only the researchers will have access to the document linking the randomized code to participant names. This document will be kept secured in a locked file cabinet and destroyed after the duration of the research project (no longer than one year.) Names will not be used in the publication or presentation of data. Interview participants will be assigned a pseudonym. Data for the study will be stored on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. All data will be destroyed three years after the study has been completed.

### **Voluntary Nature of the Study**

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. The alternative is to not participate. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time. Your decision whether or not to participate in this study will not affect your academic standing in your program.

### **Contacts and Questions**

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at 405.641.1143, dawn.pearce@okstate.edu. If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu). All reports or correspondence will be kept confidential.

*You will be given a copy of this information to keep for your records.*

### **Statement of Consent**

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements: I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

Indicate Yes or No:

I give consent to participant in the online survey

Yes  No

If selected for an interview, I give consent to be audiotaped during this study.

Yes  No

If selected for an interview, I give consent to provide documents and artifacts relevant to the scope of the study.

Yes  No

I give consent to be contacted for follow-up in this study:

Yes  No

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_

Date: \_\_\_\_\_



Approved: 03/25/2019  
Protocol #: GC-19-1



## Appendix C RECRUITMENT EMAIL

A research study is seeking participants of research being conducted on the graduate educational leadership program cohort.

### **Research Study Title**

Social Connection of Students and Its Role in Blended Learning Environments

### **Purpose**

The purpose of this qualitative study is to explore the social networks of a cohort of students who are participating in blended learning environments within an educational leadership graduate program.

### **Participation in this Study Includes:**

- Completing one online survey (approximately 30 minutes)
- Participating in one interview (if selected) (approximately 60 minutes)
- Participate in document sharing (if selected)
- Participating in one follow-up interview (if needed) (30 minutes)

Total time commitment for a participant is approximately 2 hours during the Spring semester.

Included in this email is a link to the survey inviting you to provide your consent to participate in the online survey and potentially invite you to participate in a one hour interview. If you wish to participate in the research study, please click the following link, fill out the consent section of the Qualtrics survey, and then continue to the next page of the survey to complete the questions.

Attached to this email, you will find a copy for your records of the consent form found in the following Qualtrics link.

[LINK TO QUALTRICS HERE]

As a reminder, you have the option to opt out of this study at any time. Additional clarification and information may be directed to:

Dawn M. Pearce  
Principal Investigator  
Oklahoma State University  
405-641.1143  
[dawn.pearce@okstate.edu](mailto:dawn.pearce@okstate.edu)

Appendix D  
**QUALTRICS SURVEY – SOCIAL NETWORK ANALYSIS**

Participant: The purpose of this survey is to determine the social connections and relationships you may have with other students in the educational leadership program, participating in blended learning courses. Please read the prompt and identify the person with whom you interact based on the question provided. The resulting data and representations of this survey will not identify you in anyway. (This survey was administered online).

**Social Network Analysis**

1. In your current BL online course, to whom do you go to for assistance with course questions or assignments?

Person 1	Person 2	Person 3	Person 4	Person 4

2. In your current BL online course, to whom do you go to for sharing your frustrations?

Person 1	Person 2	Person 3	Person 4	Person 4

3. In your current online course, who do you feel understands you as a person?

Person 1	Person 2	Person 3	Person 4	Person 4

4. In your current BL online course, whom do interact with on a social level outside of class?

Person 1	Person 2	Person 3	Person 4	Person 4

Appendix E  
QUALTRICS SURVEY – DEMOGRAPHIC INFORMATION

**Demographic Information:**

Choose from the following provided answers:

5. How many semesters have you completed in the program?
  - This is my first semester.
  - 1-2 semesters
  - 3-4 semesters
  - 5-6 semesters
  - More than 7 semester
  
6. How many years since the completion of your undergraduate degree?
  - 3-5 years
  - 6-10 years
  - 11-15 years
  - 16-20 years
  - 21+
  
7. With which gender to you identify?
  - Female
  - Male
  
8. What is your age range?
  - 20-29
  - 30-39
  - 40-49
  - 50-59
  - 60+

Appendix F  
INTERVIEW QUESTIONS

1. Describe a typical lesson in your online/hybrid course.
2. What does interaction or communication between students look like in this online/hybrid course?
3. What does interaction or communication with the instructor look like in this online/hybrid course?
4. For what reasons do you often find yourself communicating with your peers/instructor?
5. How would you describe your level of success in this online/hybrid course?
6. How does your experience in this online/hybrid course compare to other graduate courses you have taken?
7. Who do you turn to for help or guidance in this online/hybrid course? What does asking for help look like?
8. For what reasons do you often find yourself communicating with your peers?
9. What role does your interaction with peers play in your perceived success in the program?
10. What role do you play in the course success of your peers?

## Appendix G OBSERVATION PROTOCOL

Researcher: Dawn Pearce

Online Course Observation:

Date:

Log In Time:

Log Out Time:

**Setting**

### **Participants**

- What is the specific setting?
- Who is in the setting?
- Describe the participants.
- What are the roles of the participants?
- Who is allowed to participate? Who is participating?

### **Activities and Interactions**

- What is going on in the setting?
- What are the participants doing?
- What are the participants saying?
- How do the participants interact?
- How are people and activities connected and interrelated?

## VITA

Dawn M. Pearce

Candidate for the Degree of

Doctor of Philosophy

Dissertation: SOCIAL CONNECTION OF STUDENTS AND ITS ROLE IN  
BLENDED LEARNING ENVIRONMENTS

Major Field: EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Biographical:

### Education:

Completed the requirements for the Doctor of Philosophy in Educational Leadership and Policy Studies at Oklahoma State University, Stillwater, Oklahoma in December, 2019.

Completed the requirements for the Master of Science in Instructional Media, Applied Technology at the University of Central Oklahoma, Edmond, Oklahoma in 2004.

Completed the requirements for the Bachelor of Science in Elementary Education at the University of Central Oklahoma, Edmond, Oklahoma in 1992.

### Experience:

Project Director, University of Oklahoma, K20 Center – Dec. 2018 - Present  
EDU-Innovator & Instructor, Educational Leadership, UCO, May 2016 - Present  
Executive Director, OKASBO, Oklahoma, May 2015 - May 2016  
Co-Project Director, OU, K20 Center – Aug. 2013 – May 2015  
Chief Information & Edu Officer, Yukon Public Schools, May 2009 – Aug. 2013  
Director of Operations, A+ Schools, UCO, Jan. 2008 - May 2009

### Professional Memberships:

American Educational Research Association, (AERA)  
International Society for Technology in Education (ISTE)  
Southern Regional Council on Educational Administration (SRCEA)  
University Council for Education Administration (UCEA)