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Perceptions and Experiences of Online Learning and Synchronous Communication

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Perceptions and Experiences of Online Learning and Synchronous Communication

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Perceptions and Experiences of Online Learning

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Submitted in partial fulfillment

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Doctor of Education

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Michelle Fry

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Member, Capstone Committee

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Member, Capstone Committee

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Member, Capstone Committee   Date Approved

Abstract

High-quality and effective online education is essential to the continuous growth of higher education. As online higher education grows in professional programs, it is especially pertinent to investigate learning designs for their effectiveness in supporting the acquisition of professional skills. Drawing upon the Community of Inquiry (CoI) and the Practice-Based Teaching (PBT) frameworks, this research investigated the effectiveness of one online graduate program designed for practicing teachers to learn new skills (i.e., diagnostic assessment and differentiated instruction) in teaching reading to elementary students. The learning design introduced a new component of virtual presence (i.e., synchronous communication) at strategic points in the online learning process during a three-course clinical sequence in which the teacher participants engaged in field learning experiences. The study used a case study approach to investigate teacher participants' perceptions of the factors that enabled their online learning during the clinical course sequence. Findings indicated that the teacher participants perceived their online learning environment to be generally high in the CoI factor. They also appreciated that the learning environment incorporated opportunities for authentic, hands-on and practice-centered learning through the use of multiple representations of artifacts, encouraged engagement and clearly identified critical features that can be practiced and applied, with the opportunity to enact these practices learned while in the field. Teacher participants further indicated the critical importance of synchronous communication (virtual presence) component in supporting their learning of the teaching practices in field settings. Implications of these findings are discussed for the expansion of online higher education and applications to other professional learning environments.

keywords: online, virtual presence, practice based learning, community of inquiry

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A special thank you to my committee, Sophie Degener, Ryan McCarty, and Nathaniel Cradit and especially my committee chair, Diane Salmon. Your experience and dedication to help me convey the importance of my passion, online learning, was truly inspiring. I could not have completed my dissertation without your guidance and continuous support.

Lastly, another special thank you to my colleague, Dr. Mary Hoch. Your educational insight and continual support were truly motivating, and much appreciated. Thank you for your honesty and willingness to mentor me throughout my journey, I will be forever grateful for your encouragement.

Dedication

This research is dedicated to my beloved family, my husband Nathan and my children Isabella, Gabrielle, Colin and Cameron with the encouragement to plant the seed of lifelong learning. Sometimes in life our educational journey may seem impossible to reach but with love and support from family that journey is within our grasp.

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CHAPTER ONE: INTRODUCTION

Background of the Study

The demand for online learning has required all higher education institutions to examine not only offering online programs but to develop a comprehensive, high-quality online curriculum. According to Lederman (2017), university and college enrollments would decline without online education. He further shared that the Education Department's National Center for Education Statistics found a 5.7% growth, which was 350,000, of students who took at least some of their courses online. He further stated the proportion of students that exclusively took online courses increased from 14.7% in 2016 to 15.4% in 2017. This equates to about one in six students who choose to solely take online courses. Some institutions have decided to take advantage of this demand by offering "quick" degree programs that typically lack the quality of education required for students to succeed in their career path. The need for rigorous quality assurance oversight is an ultimate priority for a truly successful online learning format at any higher education institution.

Statement of the Problem

Growth in the number of online learning higher education institutions has multiplied. These institutions have developed online programs that are more easily accessed by potential students. Graduate programs for practicing teachers have been around for decades, but a key challenge for the graduate reading program is the practicum experience required by the state of Illinois and could be difficult to replicate in the online environment. The practicum experience requires reading program teacher candidates to work with students, which includes observation of the reading teach candidate interacting with their students by a field supervisor. National

Louis University (NLU) recently took on this challenge and created an online clinical sequence that offers its first online practicum sequence.

Knowing the on-campus program has been successful for numerous years, the online developer was challenged with the following: (a) creating a clinical sequence that mimics the on-campus courses to ensure the same level of quality and (b) effectively assessing skill development of program candidates. One solution was to use digital technology to enhance the student experience with the same level of quality as the on-campus program that would provide the opportunity for instructors to assess program candidates. Both programs are measured using the same program outcomes and key assessments. NLU's new clinical course sequence for reading endorsement has allowed students to take two clinical courses online as well as the final practicum course where program candidates tutor younger and older students at a location of their choice rather than in a controlled setting. The use of digital technology allowed program candidates to record tutoring sessions, which improved the practicum experience by incorporating a human contact component. Live video conferencing allowed course instructors to watch both asynchronously and synchronously, thereby creating a virtual presence during the tutoring sessions. This research used a case study approach to investigate how perceptions and experiences of candidates in the reading teacher program, specifically the online clinical course sequence called the Diagnosis and Assessment of Literacy, Instructional Strategies for Literacy Assessment and Practicum: Literacy Interventions for Elementary and Secondary Students.

Purpose of the Study

In today's technological age, we are in the midst of constant change in the field of education due to constant innovation that changes this environment. Online learning is the wave of the future; it is important we incorporate digital technology to enhance the online environment

and ensure students are enrolled in effective and quality assured online courses. According to the Online Learning Consortium (2017), about 5.8 million students were enrolled in online courses in 2016 equating to a 263% increase since 2004. With the plethora of programs and platforms available, it is critical that we understand how reading teacher candidates and instructors view the online environment and whether synchronous communication is beneficial to persistently engage, motivate, and support students. According to the Online Learning Consortium, "90% of the students surveyed felt online learning is either the same or better than the traditional learning experience" (p. 1). Unfortunately, that doesn't mean online learning is suited for every student to expect if there was a virtual way to support these students.

This research used a qualitative intrinsic case study to frame the study, analyze the research questions, and examine assertions. Stake (1995) defined an intrinsic case study as research that is completed by the researcher due to a genuine interest in the case. The purpose of the qualitative intrinsic case study was to examine the perceptions of reading teacher candidates and instructors regarding the online clinical course sequence offered at NLYU, particularly the use of synchronous communication in the practicum sequence. Understanding the perceptions of reading teacher candidates and instructors and their experiences with the use of synchronous communication could give insight into the effectiveness of the online clinical course sequence within the reading program at NLU.

Research Questions

The research studied the case of reading teacher candidates' and instructors' perceptions and experiences with online learning in order to understand the effect of synchronous communication within a clinical course sequence. The research combined whole group and

3

individual case studies to improve validity. The study addressed the following research

questions:

1. How did the reading teacher candidates perceive the online clinical course sequence?

2. How did the reading teacher candidates and instructors utilize and perceive virtual

   presence during the clinical course sequence? How did the virtual presence

   experiences support candidates to enact and learn reading core practices?

Relevant Research and Significance

The creation of online learning programs has made higher education available to a larger

population over the past two decades. According to Online Learning Consortium (2017), the

Internet was created in 1969 by the Department of Defense and was available to the rest of the

world in 1991 as the World Wide Web. With the development of "the Web," the world was

presented to the possibility of distance education. Distance education was first presented through

mail correspondence courses that evolved into online learning in the mid-1990s. In 2002, over

1.6 million higher education students were enrolled in at least one online course, and by 2008

this number nearly tripled (Online Learning Consortium, 2017). The U.S. Department of

Education's National Center for Education Statistics found in the fall of 2017, 6.7 million

students were enrolled in at least one distance education course. This number represents 33% of

the total student population and is an increase from 31% since 2016 (IES: National Center for

Education Statistics, n.d.). Online learning allows students from all over the world to attend a

higher education institution.

Students take online courses for a variety of reasons including flexibility, location and

reduced travel time (Dutton, Ryznar, & Long, 2019). A majority of the students perceive online

learning as a positive and were satisfied with their learning experience. For students to succeed

in their online courses, they need to be self-motivated and the study found that 71% of students who were unsatisfied were so because of lack of communication (Perry & Pilati, 2011). According to Chen, Ko, Kinshuk, and Lin (2005), "The trend of online learning is towards a blended model combining asynchronous and synchronous delivery, which increases flexibility" (p. 1). Faculty members are more reluctant to adopt a new way of learning and fewer than one-third of the faculty surveyed saw the value and legitimacy of online learning (Perry & Pilati 2011).

Online learning requires more work than simply posting notes and a major concern of faculty members is that online learning does not achieve the same learning outcomes as on-campus courses. According to Chen et al. (2005), as cited in Hwang, Shadiev, Kuo, and Chen, (2012), synchronous instruction can outperform traditional face-to-face and asynchronous education. Hwang et al. claimed "real" synchronous communication provides the teacher an opportunity to give "live" feedback for evaluation. The online learning environment is unique and involves the instructors to engage with students remotely encompassing the necessity to implement distinctive teaching tools (Dutton et al., 2019).

Utilizing synchronous communication creates an opportunity for students to build relationships with their instructors and classmates. Data shows students value online courses, which includes a reality component, and they succeed when an instructor delivers high-quality instruction in conjunction with an authentic learning experience (Dutton et al., 2019). It is important that the instructor creates an online environment that is engaging, organized, and furnishes opportunities for students to practice real-world skills and provides an assessment of their learning through feedback on their activities (Dutton et al., 2019).

NLU is highly reputable for providing a quality education program and according to Tsai (2013), it is crucial that teachers adapt to innovative teaching methods and make sure their online courses are designed to help develop student knowledge and skills. This relates to the other research by demonstrating the importance of having an instructor who designs online courses that are engaging; the instructor encourages an environment of motivation and course usage increases student performance (Tsai, 2013). This research demonstrated the importance of educating faculty members on online learning through professional development.

Online teaching is not always the first choice for many veteran professors, and this may be due to misinterpretations of the implementation of online learning. Veteran professors were concerned students would not learn as well in the online environment because there is no face-to-face instruction between student and instructor. Instruction in a face-to-face environment allows both the instructor and student to ask questions and have conversations in real-time. These visual interactions provide assurance of student understanding of the material being taught. Veteran professors fear this visual assurance could be lost in an online classroom.

One of the most important components of an instructor's job is to ensure they have developed an effective online environment that is conducive to student success. According to Nguyen (2015), the online learning classroom can be just as effective as the traditional face-to-face classroom. To verify the quality of each program, this study demonstrated how essential it is that the online classroom mirror the on-campus classroom. Nguyen's experimental study documented the numerous benefits of online learning, which included the importance of educating students and offering professional development—both of which can be accessed by anyone with internet access and the desire to learn at a potentially lower cost. The outcome of this study exhibited that students had positive learning outcomes based on the measurement of

test scores, student engagement, and perception of the online learning environment. The students shared they felt a stronger sense of community in the online classroom and fewer students failed or withdrew from the course. Based on Nguyen's findings, he was able to conclude that 92% of online learning education was just as effective, and in some cases better, than the traditional face-to-face courses. The study recognized the issue of selection bias and lack of rigorous methodology of the previous studies may have obscured the data. Thus, more rigorous research is needed.

Theoretical Perspective

To closely examine data, a case study methodology was used and allowed the researcher to study real life phenomenon through whole group and individual case studies. Yin (2018) defined the method of case study research as an empirical method that, "investigates a contemporary phenomenon (the "case") in depth and within its real-world context especially when the boundaries between phenomenon and context may not be clearly evident" (p. 14). This case study relied on multiple sources of data for evidence therefore the data was triangulated to increase validity.

This qualitative case study made subjective meanings based on perceptions and experiences of instructors and reading teacher candidates in a graduate reading program. The intent was to interpret these findings and to make meaning from those perceptions on an online clinical course sequence and the importance of virtual presence in an online environment. This intrinsic case study used multiple data sources to construct assertions from the experiences, perceptions, and observations of the participants. According to Yin (2018) the use of multiple cases strengthens the overall findings through pattern-matching, which increases the validity of

the research. According to Creswell and Poth (2018), the goal of collective case study was to generate a pattern of meaning to see if there are overall themes of the participant responses.

Theoretical Frameworks

The two frameworks that guided my research were the community of inquiry (CoI) and practice-based teaching models. Online learning environments parallel with a constructivist pedagogy to promote learning and teaching processes (Maidment, 2006). According to Maidment, (2006), "Constructivism provides a framework to develop curriculum and inform the process of student learning on-line" (p. 2). The constructivist theory allowed the researcher to use Bruner's theoretical framework to look at the participants as active learners who construct new ideas constructed on their past experiences (Culatta, 2019).

According to Creswell and Poth (2018) "The Constructivist Grounded Theory incorporates the researcher's views; uncovers experiences with embedded, hidden networks, situations, and relationships" (p. 316). Applying this theory and combing the two frameworks, CoI and practice-based teaching shaped an understanding of what an effective online teaching program consists of and allowed me to create a tool to evaluate components of the online environment to confirm quality and student success. CoI helped me determine what essential components were necessary to promote student success in the online environment, which were social, teacher, and cognitive presence. The practice-based teaching framework revealed the importance of identifying a set of core practices and teaching those practices using carefully scaffolded and authentic learning experiences.

The CoI model is a framework that has influenced online instructors for the past 20 years. According to Garrison, Anderson, and Archer (2000), "An educational community of inquiry is a group of individuals who collaboratively engage in purposeful critical discourse and reflection to

construct personal meaning and confirm mutual understanding" (p.1). The foundation for the CoI is to embed cognitive presence, teaching presence and social presence through teacher and student collaboration. Teaching presence integrates how the course is facilitated through the guidance of the instructor as well as through course design. Cognitive presence includes how students construct meaning from continual reflection and how they interpret discourse. Social presence merges the encouragement of communication by the individuals within the community or course of study to enhance interpersonal relationships (Garrison, Anderson & Archer, 2000).

According to Redstone, Stefaniak, and Luo (2018), a systematic review of the CoI model and the use of the CoI survey was conducted through a 24-peer-reviewed study from 2008-2017 and was analyzed for validity and reliability. The purpose of the study was to examine the ways the CoI survey has been utilized for online and blended teaching and learning and how the model contributed to the design and implementation of courses. The study evaluated four areas of the survey, which were (a) validity and reliability, (b) measurement of CoI presence in multiple environments, (c) relationships between the elements, and (d) potential revisions. According to Redstone et al. (2018), "The reviewed studies suggested viewing the three presences in CoI framework as three interrelated and interdependent constructs rooted in collaborative constructivist learning to guide and better inform practices in online and blended learning" (p. 6 as cited in Amemado & Manca, 2017; Armellini & De Stefani, 2016).

The practice-based learning framework was proposed by Grossman, Compton, Igra, Ronfeldt, Shahan, and Williamson (2009) to improve the relationship between clinical preparation and higher education. These arguments were the groundwork that led to the improvement regarding how we educate our future students who are preparing to be professionals. One way to improve student education is by providing additional opportunities

and time to participate in actual practices of the profession (Rose, 1999). The practice-based learning framework assimilates these suggestions and promotes preparation in authentic settings. The goals of the framework include teaching how to talk, make decisions, support, guide, and assess like a professional through hands-on practice, whether it is with classmates or in the field. This framework has provoked higher education institutions to reevaluate their programs to embrace or improve the professional practice-centered model.

Grossman et al. (2009) established the need to instruct all teacher candidates on essential components to ensure they are mastering the critical skills of teaching. These components are learned through authentic practice on how to respond to certain situations that arise in a classroom setting by reflecting, providing feedback and learning how to create a productive classroom environment (Grossman, Hammerness, & McDonald, 2012). The core practice-based approach to instructing teachers outlines four crucial components: representations, decompositions, approximations, and enactments. Representations provide a model of the practice to be learned as a whole, decompositions comprise identifying the practice into its essential features, approximations allow the student to practice or rehearse the skill under conditions of reduced complexity, and enactments involve opportunities for reading teacher candidates to implement the practice with learners in the field and include guidance and targeted feedback.

Practice-centered approaches are increasingly endorsed in teacher education that focuses on teaching high-leverage practices. High-leverage core practices are a set of core fundamental capabilities that teachers must be educated in to develop into a responsible teacher and are the basic skills necessary for teaching. These core practices are critical to understanding because they are used constantly throughout the school day and help students identify and learn important

content. The high-leverage core practices can be used across content areas, grade levels, and contexts. These practices help teachers learn how to support a student's emotional and social development. According to the goals of the program, the core practices necessary to learn in the reading program are (a) diagnosing a student's literacy level and (b) differentiating instruction to match the needs of students. According to Cabello and Topping (2018), the simulation of relevant teaching practices and the application of constructive feedback improve the preparedness to teach. The study concluded the importance of increasing student-centered teaching approaches in teacher preparation programs, which includes implementing high-leverage teaching practices.

High-leverage core practices were designed to help shape, inform, and initiate a dialogue about the necessary skills needed for educator development, which prompted teacher preparation programs to realize skills cannot be developed in isolation (Sayeski, 2018). According to Sayeski (2018), "Ample practice is essential for skill acquisition, generalization, and long-term adoption" (p. 1). Providing opportunities for practice high-leverage core practices of literacy is an important component of the online clinical course sequence. It is important to provide modeling and feedback on the enactment of the high-leverage core practices (Sayeski, 2018).

Empirical research lends support to qualities highlighted in both the CoI and practice-based teaching frameworks. According to Shea, Gozza-Cohen, Uzuner, Mehta, Valtcheva, Hayes, and Vickers (2011), online learning is experiencing a period of rapid growth inspiring many higher education institutions to implement online programs that (a) offer a quality curriculum, (b) are effective, and (c) encourage a collaborative learning environment. The study compared two online courses based on their learning processes and the number of collaborative learning outcomes. The research was conducted over a 1-year timeframe. The first online course

purposely had a lower teaching presence within the discussion forum and the other course had a higher teaching presence. At the end of the duration of the courses, data was collected and compared based on the importance of teacher presence within the online discussion forum. This research concluded the necessity for quality feedback from the instructor, as well as the guidance, to master the skills presented within the course. The delivery of teacher presence can be visible in multiple ways such as video conferences, emails, course announcements assignment feedback, and in-course video presentations. According to Dutton et al. (2019), "Students equate a quality course with on that engages students with course content" (p. 497); for example YouTube videos, concise engaging lectures, or other social media. Students also equated quality with instructor feedback or teacher presence (Dutton et al., 2019).

National College of Education Practice-Based Teaching

Out of the four colleges that comprise NLU, the National College of Education (NCE) is the largest and oldest of the four colleges. The NCE has been in operation for over 130 years and continues to be proactive and promote innovation in all programs offered. The NCE is extremely diverse and has partnerships and collaborations with schools, nonprofits, and agencies around Illinois. According to Best Schools, NCE's programs were ranked in the top 15% of education schools in the United States (NLU, n.d.). The NCE offers flexible programs to meet the needs of the students that need to balance their work and family life by offering evening, weekend, online and on-campus courses. The programs are intended to fit the needs of all potential students with an end goal for students to be career-ready upon graduation.

With NLU's rich history in education, the NCE is considered a pioneer in teacher preparation and is thought to be one of the oldest colleges that offered a formal education program in the country. Founded by Elizabeth Harris in 1886, the NCE was among the first 4-

year institutions preparing teachers at the time. The NCE is one of the most innovative colleges and continually asserts that research supports the most effective teaching methodologies. Teacher preparation programs have been under redevelopment since the field of teacher education is undergoing an immense shift from focusing on teaching important theories, foundations, and methods classes without application to focusing on teaching novice teachers how to apply high-leverage core practices during instruction (Core Practice Consortium, n.d.).

The NCE began to incorporate its own approach to practice-based teacher education based on research and theory. Faculty members identified the need for methods instruction to focus in-depth on a set of core practices and noted the need to provide multiple opportunities for reading teacher candidates to engage in these core practices and to receive explicit feedback on performance. In 2014, through design-based research, an NCE faculty team experimented with a practice-based teaching model using video coaching to improve the way teachers were prepared and to ensure they were able to meet the unique needs of all learners. Drawing from the research on practice-based teaching, the faculty team designing the model identified a set of discipline-specific instructional practices (e.g., word study, math problem solving) and cross-discipline practices (e.g., instructional discourse) that could be developed through cycles of (a) lesson planning, (b) lesson implementation, (c) lesson analysis, and (d) synthesis of assessment data and observer feedback. This process was intended to help familiarize each reading teacher candidate with multiple types of lessons, reflect, and then refine their teaching skills accordingly (National College of Education, n.d.). This practice-based teaching approach, known as the adaptive cycles of teaching (ACT) curriculum model, was designed for undergraduate elementary education. The ACT model highlights the importance of learning through teaching and is centered around reading teacher candidates learning through multiple cycles of planning, implementing various

teaching skills with the use of digital technology, and analyzing their instruction and their student's learning through the reflection of the cycle (Hiebert, Morris, Berk, & Jensen, 2007).

The implementation of the ACT program resulted in a 95% first attempt pass rate on the edTPA exam, which is required to obtain a professional educator's license. Recent research by the NCE showed that the cooperating teacher's perceptions of their student teachers are what they would expect for first-year teacher's performance. This proven success can help the NCE's newest endeavor—the online practicum experience—become another quality program offered at NLU.

The NCE's graduate reading program is designed for teachers who already hold a professional education license and have a desire to improve or further develop their literacy knowledge in teaching or are looking to become a reading teacher. The reading sequence follows the state of Illinois guidelines for the preparation of reading teachers. The program offers a graduate degree and is not a stand-alone endorsement. To be accepted into the program, the candidate must pass the test of academic proficiency. The reading program consists of 32 semester hours and students who receive more than one "C" are dropped from the program. Each course is 11 weeks in length and the online program is just starting its second year. The average number of students is 16 and with two instructors in both RLR 510 (Diagnosis and Assessment of Literacy) and RLR 511 (Instructional Strategies for Literacy Interventions) due to the newness of the program. The RLR 592 (Practicum: Literary Interventions for Elementary and Secondary Students) needed three instructors as each program candidate tutors two students per state guidelines.

The courses in the clinical sequence are RLR 510 (Diagnosis and Assessment of Reading), RLR 511 (Instructional Strategies for Literacy), and RLR 592 (Practicum: Literary

Interventions for Elementary and Secondary Students). Course RLR 510 introduced the reading teacher candidates to essential diagnostic assessments and provided opportunities for authentic interaction with students of their choice and involved writing a formal report of their selected student's results. Course RLR 511 furthered the program candidates' diagnostic skills, which involved choosing the students they worked with during their practicum experience. Course RLR 592 was the course the reading teacher candidates conduct their practicum.

I used a qualitative approach through intrinsic case study methodology introduced by Robert Yin to investigate how reading teacher candidates and instructors perceive the online clinical course sequence and the implementation of synchronous communication (virtual presence). I concentrated on the graduate reading program offered through the NCE. The reading program at NLU is designed for educators who already hold a professional educator license and are interested in expanding their knowledge in literacy or becoming a reading teacher. The curriculum sequence follows the Illinois state guidelines for the reading teacher endorsement. In this study, I collected data to compile, analyze, and triangulate the data from six sources: (a) reading teacher candidate interviews and (b) surveys, (c) instructor interviews, (d) course assignment (final report), (e) key assessments, and (f) my field notes. Yin (2018) recommended collecting at least six different data sources for purposeful sampling. The data was holistically analyzed and pertinent assertions that focus on a few key points regarding online learning and synchronous communication within the data were identified. Then I performed a thematic analysis. Finally, I developed naturalistic generalizations and processes to gain insight through the reflection of the descriptions and details presented in the case, including analyzing the data to allow transferability of the findings related to online learning and the implementation of virtual presence in online courses (Creswell & Poth, 2018).

Summary

The purpose of this research was to examine the experiences of reading teacher candidates in an online clinical course sequence in the reading program. Using a qualitative intrinsic case study approach, the goal was to better understand how the perceptions of online learning and synchronous communication or virtual presence in support reading teacher candidates to learn the core instructional practices, differentiation, and student diagnoses.

CHAPTER TWO: LITERATURE REVIEW

Introduction

According to the Sloan Consortium Report in 2011, over 65% of higher education facilities offer online learning for their students. This suggests that an increasing number of college and graduate school students are opting for online learning options. What makes these learning environments effective? How does online learning promote deep learning? The purpose of this literature review was to study the question of how we can conceptualize and recognize high quality online learning for the preparation of future professionals, especially teachers. We need to know if and how accredited online programs are successfully providing educators with the necessary tools, techniques, and understanding of the core practices for teaching that are needed to be effective classroom teachers.

Higher education institutions are moving toward online learning because the programs can be more efficient and tuition costs can be lower for students than attending an on-campus program. One major concern in online learning is whether or not the program offers the same high-quality curriculum and learning as a face-to-face course. (Dutton et al., 2019). This concern is growing due to the creation of new online higher education institutions and the fear of these institutions being diploma mills, an institution or organization that grants an education degree without high-quality education (Dictionary.com, n.d.). In addition, we need to understand how learners develop proficiency with career-ready skills in online environments, which is an issue that is particularly critical in online professional education programs for in-service and pre-service teachers.

This literature review examined two theoretical frameworks that could inform learning design and instruction in online environments. The CoI model is a well-researched framework

that has provided guidance to online instructors for almost 20 years. The practice-based teaching model emerged more recently and is a framework to guide design and instruction in professional preparation programs. Together these frameworks provide a theoretical lens for the critical analysis of empirical research on effective online instruction.

For the past decade, higher institutions have been placed in the spotlight due to the growing concern that a college degree is not worth the price. This concern has forced colleges and universities to redefine their degree programs to fit the needs of the current economic environment. In order to develop programs that are relevant, higher education institutions must first explore and define what theoretical frameworks could help guide the curriculum to meet the professional needs of the degree programs. Two current theoretical frameworks are particularly relevant to the focus of this research: the CoI framework in online higher education research and the practice-based learning framework in the field of teacher education.

Community of Inquiry

The continued advancement in technology joined with the collaborative-constructive theories made the creation of distance education possible (Garrison et al., 2000). Higher education institutions have seen a transformational shift due to the development and progression in the field of distance education (Garrison et al., 2000). Technology has allowed asynchronous and synchronous education possible to a community of collaborative distance learners since as early as the 1980s. As technology continues to advance, so do the enhancements in online learning environments (Garrison & Akyol, 2013). With the advancement in online learning, a new theoretical framework emerged called the CoI.

A CoI is defined as "a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual

understanding" (Garrison et al., 2000, p. 1). The CoI framework includes three essential qualities, which are social presence, teaching presence, and cognitive presence, through the process of creating a collaborative learning experience (Garrison et al., 2000). Social presence encourages individuals to identify with the community or course of study through communication in a trusted environment to help advance inter-personal relationships. Cognitive presence refers to how students construct meaning through the constant reflection and understanding of discourse. Teaching presence leverages the social and cognitive presences in the course design and how it is facilitated to help students personally recognize and see the meaning and education behind the learning outcomes (Garrison et al., 2000).

Research was conducted regarding online learning and how cognitive elements were promoted to support higher-order thinking (Garrison & Akyol., 2013). Another key element examined in the 1990s was the role the instructor played in the learning process. Roxanne Hiltz was one of the first to promote "virtual classrooms" around the same time Paulsen and Rekkedal introduced the idea of implementing new technology to generate more efficient learning circumstances and did not think replicating the traditional classroom would be beneficial (Garrison & Akyol, 2013). Another early researcher was Kaye who incorporated collaborative learning that goes beyond information exchanging but encouraged the possibility of computer conferencing or discussions. Kaye argued to adopt constructivist learning approaches to include collaboration and though that online education represented a unique interaction (Garrison & Akyol 2013).

In 1992, Henri began to provide a framework that included the elements of social and cognitive dimensions (Garrison & Akyol 2013). Feenberg, Gunawardena, Kaye, and Fabro and Garrison created the core of the CoI framework form the three essential elements of social,

cognitive, and teaching (Garrison & Akyol 2013). According to Garrison and Akyol (2013),

"Garrison, Anderson, and Archer (2000), constructed a comprehensive conceptual framework

designed to capture the educational dynamic and guide the study of online learning effectiveness

in higher education" (p. 3). The development of the CoI framework ensured online learning was

effective and through this study, I continued use of this framework as a guide by utilizing the CoI

survey to gain insight into reading teacher candidate perceptions of the online learning

environment. Figure 1 illustrates the original CoI model.
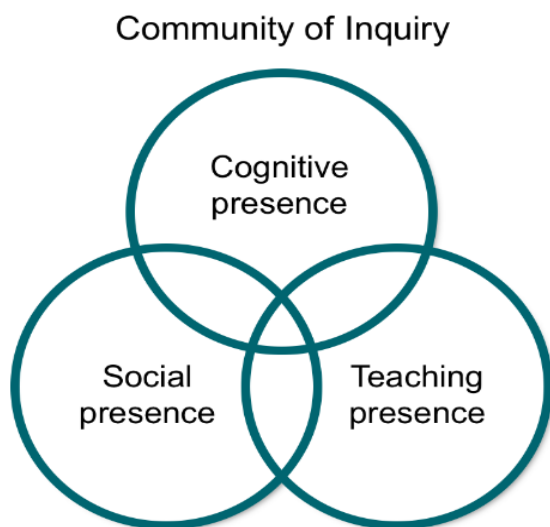
Figure 1. Original community of inquiry framework.

Community of Inquiry Framework in Action

According to Shea et al. (2011), online education is in a period of rapid growth and

acceptance within the higher education world and investigated teaching and learning in online

courses by employing both the CoI and the structure of observed learning outcomes (SOLO)

taxonomy. Two online courses were evaluated to see the quality of collaborative learning

outcomes and learning processes. The study measured learning outcomes and inputs through

analyzing quantitative content on the CoI framework as well as the quality of student learning

and the instructor-assigned grades. The research was conducted over a 1-year span and one of the online courses had a lower level of teaching presence in the discussion forums and was compared to the second course, which had higher levels of teaching presence in the discussion forums.

The study concluded that the majority of teaching presence was seen outside of the discussion forums and found in instructor feedback on assessments of student work. Even though one instructor was nearly absent from one of the courses, the cognitive presence of the two courses was still similar suggesting further research into this concept. One reason behind this might be students were still cognitively present through the stimulation of what their peers had posted which correlates with social presence in the online environment. Further research was suggested on social presence. The study also noted that the instructor-assigned grades can be predicted through collaborative learning processes which can be seen in CoI and SOLO concepts.

According to Armellini and De Stefani (2016), teaching and cognitive presence have become social and based on the identified patterns of this study, it was suggested to adjust the CoI framework to express how social presence was more prominent within cognitive and teaching presence than originally proposed. To be successful in the online environment Garrison and Anderson (2003) identified three key components—social, cognitive, and teaching presence–– needed to be successful in the online environment (Armellini & De Stefani, 2016). After reviewing this study, it was evident there is a correlation between teaching presence and cognitive presence because of the communication piece between participants within the online environment. Figure 2 represents the CoI framework where the three presences overlap.

Community of Inquiry

Supporting
Discourse

SOCIAL
PRESENCE

COGNITIVE
PRESENCE

**EDUCATIONAL
EXPERIENCE**

Setting
Climate

Selecting
Content

TEACHING PRESENCE
(Structure/Process)

Communication Medium

Figure 2. The community of inquiry framework. (Armellini & De Stefani, 2016)

Consistent with the digital age, this overlap indicates that online courses can still offer

social presence in the educational experience and suggests that the learners can find themselves

taking on the instructor role at times (Armellini & De Stefani, 2016). When we think of teaching,

we know that instructors who are facilitating classrooms are experts in the area they are

instructing. The best way to demonstrate understanding is to teach the concept to someone else,

which is why teachers have students complete group work and presentations. In the online

environment, learners are asked to participate in discussion questions and the results from the

study show that students benefit from observing the practices of their peers and can take on the

role of discussion leaders. This interaction promotes higher order thinking and allows the

instructor to see who has mastered the material presented. Armellini and De Stefani (2016)

stated, "Some studies have suggested that social presence is not a separate construct, but a core element within the teaching dimension" (p. 1205).

The qualitative study was conducted in Uruguay from 2007 to 2010. The goal was to construct the role of cognitive, social and teaching presence in the area of professional development of English language teachers. The study had 40-English language teachers, two men and 38 women, who voluntarily enrolled in a professional development program. None of the teachers had formal teaching training or any online experience. The learning platform used was Moodle, which offered three key functions, space for the participants to experiment, exchange ideas and resources for English language teaching (Armellini & De Stefani, 2016).

The conclusions of the study were that social presence did not operate alone and was, in fact, part of cognitive and teaching presence. Figure 3 illustrates a suggested new version of the CoI framework. This figure depicts the three presences overlapping and student learning is at the heart of cognitive, social, and teaching presence. Teaching and cognitive presence both have become social and ensures the student's learning experience is the center for their diverse online experience. This new model is constructed of six areas: (a) interactions for learning, (b) socialization of content, (c) community of development, (d) course design, (e) self-study, and (f) learning experience, all of which intertwine with social, cognitive, and teaching presence. The study suggested further research around the six areas identified (Armellini & De Stefani, 2016).
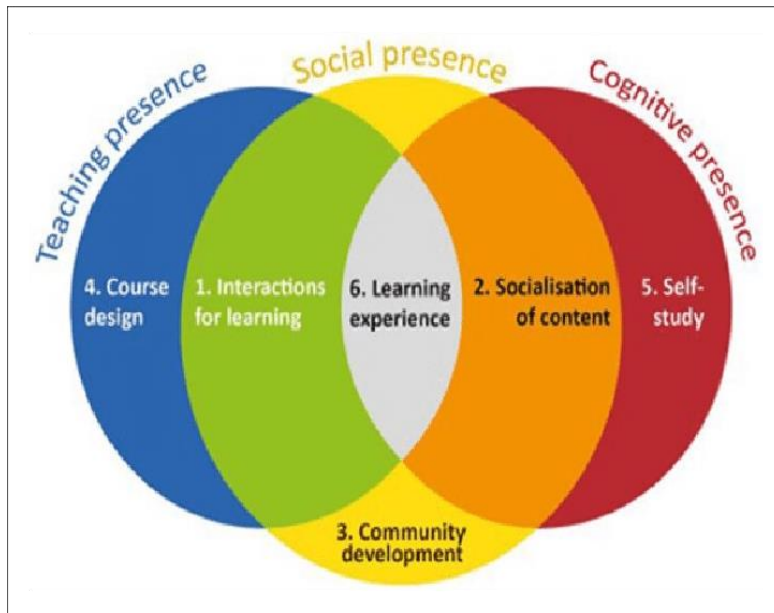
Figure 3. Community of inquiry 2018.

A recent study reviewed the recommendation of the integration of the three presences in the CoI framework, proposed by Amemado and Manca (2017) and Armellini and De Stefani (2016), as interdependent concepts that are embedded in collaborative constructivist learning, which could better guide the online environment. The study suggested incorporating innovative tools to enhance the online environment to assist teaching and social presence and noted the correlation of the integration of the three presences. According to Redstone et al. (2018), the research supported the significance of incorporating synchronous communication to online courses to increase social presence.

Instructor presence. Online teaching has been around for the past two decades and, when it was first introduced, had a negative connotation (Ferrer, 2019). Adjuncts were typically used to teach courses that were pre-developed by faculty members. The problem with this was the adjuncts may not have received much online training and may not necessarily be experts in their field. Higher education institutions are using more and more adjuncts to teach and adjuncts

who teach face-to-face may not have the capability of teaching online due to the lack of professional competency in the online environment (Smith, 2019). There are numerous teaching platforms available for colleges and universities to choose from and ensuring all faculty and adjunct members can successfully navigate and utilize all the tools within a platform is important. With online learning on the rise, increased professional development of the online environment will be essential.

The ability to teach in the online environment at a higher education institution is not always the first choice for many veteran teachers. Sheffield, McSweeney, and Panych (2015) discussed what teachers think about online learning. This article depicted what teachers' thoughts are regarding online learning since they are the ones facilitating the classes. One concern of veteran higher education professors is how much information the students are actually learning online. The article had graduate students enrolled in an online course and complete both pre- and post-course questionnaires. The questions were directly focused on the students' attitudes, awareness and competence in online learning. The research showed the students could recognize how beneficial online teaching can be for our future teachers, but they did prefer the face-to-face environment (Sheffield, McSweeney, & Panych, 2015).

The research was conducted with 42 students enrolled in a non-credit 12-week course entitled *Teaching and Learning in Higher Education*. The course was designed by Dalhousie University's Centre for Learning and Teaching because more students were seeking online courses. The course content specifically sought to address topics such as, "Online teaching also includes increasing workloads, lack of resources, compensation and intellectual property issues, inadequate technological skills and training, anxiety about or lack of confidence with technology, and pedagogical concerns for the effectiveness of student development" (Sheffield et al., 2015, p.

3). The conclusions were challenging because most of the students still preferred face-to-face learning, but with the continued work on creating positive attitudes towards online learning and teaching within our future instructors the researcher hopes to "see this kind of teaching as an integral part of their lives as teachers in the future" (Sheffield et al., 2015, p. 11).

Student perception in online learning is important for any higher education program to be effective. Armstrong (2011) conducted a qualitative study on students' perceptions of online learning and the instructional tools available in the course. This study was relevant to my research because the purpose of the study was to investigate students' perceptions of the instructor and their experience of online learning. Data was collected through interviews, observations and online focus groups (Armstrong, 2011). The article discussed how online learning had significantly increased over the past decade; specifically, the number of online students between 2002 and 2007 increased 145% from 1,602,970 to 3,938,111. The focus of the study was to examine how student perceptions influence their actions in the online environment. The article highlighted the decrease in higher education funding and the increase in colleges and universities allowing students more choice, resulting in soaring competition between higher education institutions. It is imperative to ensure that the programs at the universities and colleges are providing high-level learning environments for their respective students.

One downfall of the study was that it only consisted of 16 undergraduate students that were enrolled at one of two religiously affiliated universities. Most of the students were in their mid-20s and 10 were women and 11 were men. Another downfall was that all the students did not participate in all three data-collection methods, which reduced the validity of the study. All the participants stated their main reason for taking an online course was for the flexibility and self-control they had in this type of learning environment. The convenience of taking an online

class was expressed, but they did note that they lost direction and communication from the instructor. This is why teacher presence is a crucial part of student success. The instructors need to follow up with students, promote discussion, and be present in the online environment to help the students stay on track with assignments and course readings. Supplying checklists, course maps, and digital communications helps students visually see what is expected from them week to week.

According to Moreillon (2015), developing "hands-on" experiences for students in the online environment through the implementation of digital communication tools help learners become more engaged in the course and materials presented. The study implemented the ApprenNet tool, which provides students with a four-part unique learning experience. The first part was an instructor video and the students responded with a video. The second part was peer reviews from classmates. The third part was to review their feedback from their instructor. Finally, students were able to read feedback from their peers and view the top five videos. Sixty-five percent of the students said they liked this type of video discussion, but 75% felt using the ApprenNet tool was more difficult than the learning management system. The study concluded that there is a correlation with the social constructivist learning theory and encouraging students to interact with the teacher to make meaning with the course content. New digital tools increase the amount of interaction, or teacher presence, can increase student focus, interactivity, and motivation (Moreillon, 2015). Although employing new digital communication tools to enhance teacher presence can be beneficial, it is important for the students to be comfortable using them.

Social presence. A recent study conducted by Goldman, Goldboy, and Weber (2016), affirmed that students need intrinsic motivation to succeed in learning. The study concluded that "personalized education can fulfill students' psychological needs and encourage their intrinsic

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motivation to learn" (Goldman, Goldboy, & Weber, 2016, p. 186). To develop a personalized education plan for online students, instructors are going to have to take the time to get to know their students. Some ways faculty members can get to know their students include having students provide introductory videos that outline their personal and educational goals, instructors posting videos to show who they are, and offering Zoom or Skype meetings to discuss current topics or answer questions in real-time.

According to Lim and Kim (2003), the learner must be motivated to be successful in the online classroom. This study aimed to identify the types of motivation and characteristics that undergraduate students apply when taking an online course. The study used qualitative and quantitative approaches, which helped strengthen the overall results of the study. When an online classroom encourages social presence, students are intrinsically motivated to be visibly present in the course through discussions, teamwork and social cafes.

Lim and Kim (2003) noted that online learning is like that in traditional classrooms. A lack of understanding in what motivates students and how their learning characteristics can impact their application of what is being taught can diminish the effectiveness of learning online. The study was an important initial effort in this area. The author had previous research studies to help authenticate the effect of motivation and learner characteristics based on traditional learning environments and at the time there were few studies done to examine online learning environments. However, more current research is needed to further examine the question.

Lim and Kim (2003) concluded that female students learned better than males in an online environment, which suggested that gender does play a role in a learner's motivation. In terms of employment, those who were unemployed, full-time students struggled with learner application, demonstrating that work experiences may enhance a student's ability to apply their

work-related knowledge to their schoolwork. A final finding was students were more motivated by the course they were taking online if the course was relevant to their employment or future employment. This finding argued for an expanded notion to utilize the knowledge and skill they acquire in the course. This expanded on the notion that social presence is important because it helps the student transfer knowledge and skills learned to their profession.

Social presence can be evident in numerous forms, quizzes, discussions, and communication methods. According to Dutton et al. (2019), professors can deliver live lectures and call on students the same as in a face-to-face classroom. Another form of social presence through online quizzes or the use of webcams to monitor testing sessions (Dutton et al., 2019). The study shared the benefits of synchronous online courses allow students to participate in a course from multiple geographical locations and increasing the opportunity to interact with peers. Students from the study shared advantages of (a) synchronous courses, (b) immediate feedback, (c) the feeling of being in a classroom, and (d) feeling involved in real-time. Dutton et al. (2019) shared the challenges of this type of course as (a) the chat feature enabled students to ask unlimited questions, which required the teacher to answer these questions while talking, (b) the webcam did not allow the teacher call on a specific student, especially if there were too many students in the course, (c) technical challenges, and (d) lack of flexibility.

Nye (2015) found that students in the online learning environment want to have the same interaction with the higher education institutional community as the on-campus students, validating the original conception of the CoI's concept of social presence. Students from the study wanted to see the creation of an online space for undergraduate students to utilize to help them connect with the higher education institutions as a community. The "Lounge" was designed to mimic on-campus locations like the lunch area, common area, hallways, and student lounges.

Nye stated, "to encourage disciplinary discussions, threads were created with metaphorical titles-alluding to lounge furniture and a specific discipline" (p. 118). The idea of creating a "Lounge" might encourage students to be more involved in their classroom and improve student usage in the online environment as well as improve student success. NLU has a Cyber Café in each course, the number of times it is used may be fewer than expected, which may be because students do not realize the purpose of the link and how it can be beneficial to the students. Faculty members should encourage students to use the Cyber Café to help create a connection to the online classroom.

Cognitive presence. Creating an effective classroom in the online environment is essential to the students' success. In order to accomplish this, the instructor must be competent in the nuances of online learning. Nguyen (2015) looked at the effectiveness of online learning to examine how effective online learning was when compared to the traditional face-to-face classroom. The study stated the importance of having online programs mirror the on-campus programs to ensure the quality of each program. The study looked at both online classes, hybrid courses, and courses that met face-to-face.

One example Nguyen (2015) used in his article was a student who needed to fulfill a general science requirement and dropped out of the face-to-face course because he did not perform well. The student took a hybrid course, which allowed him to work and process the material at his own pace. The materials found in the online classroom were more engaging and improved student perception of learning. This article supported the conclusion on the importance of implementing cognitive presence in all types of online learning. This important aspect of cognitive presence must be evident in a flexible manner to allow students to work at their pace while understanding the clear expectations of learning outcomes and deadlines.

One way to know if a student is comprehending material presented in an online classroom is to administer a formative assessment. These assessments demonstrate competency for a learning course curriculum, in essence providing cognitive presence. A key factor of cognitive presence is to understand if a student is able to read or watch course curriculum and successful complete an online assessment. A recent study by Ogange, Agak, Okelo, and Kiprotich (2018) investigated student perceptions regarding how effective different types of formative assessments were in the online environment. A 31-closed-ended questionnaire was sent out to gather the opinions of 100 students, and 72 students responded. The students were undergraduate students between 20 and 24 years of age. The first set of data revealed that a majority of students favored multiple-choice and true and false questions over matching quizzes and fill-in-the-blank assessments. The second set of data revealed that students had positive opinions on discussion forums and peer-assessed assignments over formative assessments. One interesting finding was that the students felt more positively about computer-marked assessments, assessments that prompted immediate feedback, and peer-marked assessments over teacher-marked assessments, which validated the CoI's cognitive presence. The students indicated that the teacher-marked assessments were less likely to have feedback from the instructor. Students preferred getting timely feedback they could use in their learning. This study clearly indicated students like to enroll in online courses where there are discussion forums, peer-assessed assignments, and immediate feedback. The study concluded that students overall had a positive perception of online learning. (Ogange, Agak, Okelo, & Kiprotich, 2018). Student perception of online learning aligns with the increasing number of students taking online courses.

Students choose online learning for flexibility, reduced travel time, and the ability to move at their own individual pace. One study conducted by Squires (2014) discussed the

advantage of mobile technology and how students can use virtually any mobile device to complete their online courses. The use of multiple modalities increases the amount of learning or cognitive presence. This study introduced the idea of using augmented reality and computer-generated images to increase student engagement. According to Squires, "One of the biggest questions what educators and instructors face is how to engage learners in the digital age as technology evolves" (p. 6). With the creation of new technology, students could be more inclined to complete all the course content available (Squires, 2014). The findings showed that future development for mobile learning looked promising and interactive design was a key factor. Another finding was mobile connectivity would help connect students with ideas and learning solutions through interaction and implementation of applications to be utilized in the real world as well as the online learning environments. This could help students connect with one another validating the importance of social presence.

Problem-based learning mirrors practice-based learning by providing students the opportunity to learn through investigation and authentic scenarios (Garrison et al., 2001). Cognitive presence encourages students to construct meaning through practical approaches. Chen (2016) examined a course that incorporated problem-based learning and reviewed how problem-based learning was conducted in an online format. This study looked at the student perspective of Practice Based Learning (PBL) in an online environment and was interpreted by the use of the cognitive load theory. One limitation was the use of the online platform, Blackboard, and technological proficiencies. PBL is one of the numerous delivery models of online education leading to the purpose of the study, which was to gain an understating of student insight of using PBL online. The students were undergraduates in their senior year of

nursing school. The strength of this study was that 52 students were part of this study making the results more viable. This article was useful because it examined effective online delivery models.

According to Chen (2016), "Attempts to translate an in-class PBL experience to an online setting, however, requires that the instructor also understands how the online environment introduces additional or different cognitive load burdens on learners" (p. 196). This information shows how important it is to make sure our online instructors are fully trained in how to navigate an online platform before teaching. This includes faculty members to be "trainers" to make sure the quality of the online program is not compromised. In order for higher education institutions to be fully successful with their online programs, they need quality assurance of the curricula, which would include educated staff and the use of the most updated technological tools.

The author noted that PBL online did have more distractions and some students lacked the technological experience necessary to effectively use PBL online, but most students online PBL was just as effective as an in-classroom PBL. The author also concluded that the online platform can be a hindrance if it does not allow the students to use the desired features. Overall, the use of online PBL was just as effective as PBL in the classroom correlating with the CoI framework's cognitive presence by having the students construct the meaning of the material through higher-order thinking. The platform can include elements of the educational experience desired to learn to help give a visual to the students to help move through the cognitive processes of understanding, applying, evaluating, remembering, evaluating, and creating the material (Armellini & De Stefani, 2016).

In conclusion, the online classroom environment is growing every year, but how higher education institutions continue to advance with technology to offer the most innovative coursework available will be the key to their success. Higher education is seeing more students

chose online learning in some fashion while obtaining their undergraduate degree. Current universities and colleges must reevaluate their current degree programs and ensure that the students learn the same material online as the material offered in the classroom. The CoI model and related empirical research offer a generative framework to guide learning designs and effective online instruction. Higher education institutions are adopting the CoI framework as a guide to the creation of their online programs.

Practice-Based Teaching and Teacher Education

Over the past two decades, researchers investigated how to effectively train teachers on "core" or "high-leverage" practices; specifically, identifying essential teaching practices for novice teachers to ensure candidates are fully qualified to assume the role of a classroom teacher independently (Forzani, 2014). The development of pedagogies that align with effective training for novice candidates emerged. According to Foranzi (2014), "Teacher educators are experimenting, for example, with the practices of modeling and rehearsals and other "approximations" of practice and with the use of video and other artifacts of teaching for representing and decomposing practice" (p. 1). From this work, an increased amount of "practiced-based" professional training emerged as an attempt to focus on the performance of teaching instead of teaching methods and theoretical views in isolation which may only marginally mimic the reality of the classroom.

The correlation between this endeavor and the online reading program is considerable. The core practices identified for this study were successfully understanding how to diagnosis students and to differentiate strategies based on individual needs. The online reading program prepares reading teacher candidates on how to diagnose students and differentiate instruction to create successful instructional plans.

The practice-based teaching framework provides professionals with authentic engagement of complex teaching techniques to support professional preparation. Grossman et al. (2009) suggested that method courses that reading teacher candidates take may not be preparing them for clinical practice. The courses are often taught by a shadow faculty that may be mainly comprised of adjuncts or those instructors that do not hold a tenure-line position. The study looked at three occupations that require the student to build relationships with individuals or groups as part of their profession, clergy, clinical psychologists and teachers. The article concluded that these occupations needed to attend a clinical of practice to practice and develop the necessary skills. Another important aspect of the article argued that teacher educators needed a program that was organized around a set of core practices to prepare novice teachers (Grossman et al., 2009).

According to Grossman et al. (2012), teacher preparation programs must re-conceptualize how higher education institutions prepare students to teach. It was proposed that teacher preparation programs develop a set of core practices that allow students authentic hands-on learning right from the start of their educational career. Teaching is a complex practice and one challenge higher education institutions face is how to prepare teachers for the vast array of scenarios that arise during the school day. Traditionally higher education institutions would offer coursework in foundations and methods classes without exposing the correlation between these two important concepts of learning. Confirming NLU's online graduate reading program provides high-leverage practices in their online environment will ensure the program offers high-quality education and can be deemed as an effective reading program.

Historically teacher education preparation programs divide their curriculum into foundations courses and method courses creating a division in teaching foundational knowledge.

Grossman et al. (2012) stated, "Such knowledge would include knowledge of learners and learning, from educational psychology; knowledge of the purposes of the school, taken from history and philosophy of education; and knowledge of school and classroom structures" (p. 274). Methods courses are typically designed to teach students strategies and develop tools for teaching that they can apply in their future classrooms focusing on learning about what are good instructional methods and not how to perform these strategies or practices. The downfall is that these tools are taught in theory and not applied and in some cases, the theories and practices are not well connected with the program which can cause difficulties for candidates to do the conceptual integration (Grossman et al., 2012).

The division of theory and practice led to Grossman et al. (2012) to identify high-leverage practices that would help better prepare reading teacher candidates to be successful in their own classroom. According to this approach, a focus on fewer high leverage practices in a program creates the opportunity to explicitly connect the theory and practice of good teaching. One example of a high leverage practice is leading a discussion. To develop proficiency with this complex practice, teachers must identify and generate questions that activate higher-order thinking, listen carefully to students' ideas, and follow-up to push their thinking on key ideas. In order for reading teacher candidates to be effective at this task, they need authentic practice and guidance from teacher educators. Grossman et al. stated, "From our perspective, teacher educators will need to provide greater assistance to preservice teachers as they begin to learn the conceptual and practical tools of any specific practice" (p. 278). Reading teacher candidates learn through practice and the ability to rehearse possible student responses allows the reading teacher candidates to respond in the moment. Reading teacher candidates gain authentic practice with how to respond to students and provide feedback as well as learn how to create a productive

classroom environment and incorporate these techniques learned through the various curricula (Grossman et al., 2012). The core practices approach includes three critical components: representations, decompositions, and enactments. Representations provide a model of the practice to be learned as a whole. Decompositions involve identifying critical features of the practice important to student learning. Enactments create opportunities for reading teacher candidates to implement the practice with learners in the field and include guidance and focused feedback. Prior to enactments, reading teacher candidates benefit from engaging in approximations of the practice or rehearsals.

In 2011, Pamela Moss suggested adding one more component to the practice-based teaching framework, conceptions of quality. According to Moss (2011), "Conceptions of quality are entailed in articulating learning goals, monitoring progress, giving feedback, and deciding when novices are ready to practice on their own" (p. 64). Moss compared numerous case studies and acknowledged the headway Grossman and her team made in developing a common language to help promote comparison among multiple professions to help improve how professionals improve and learn their own practice. In her case study, Moss discussed the importance of giving novices feedback or helping them understand their errors in order to improve their learning. With these in mind, she describes the importance of conceptions of quality where professionals can bring their practice full circle by reflecting on what went well and what they may need to improve upon. Moss introduced the idea of learning trajectories to help novice teachers lead discussions on learning and performance.

One case study Moss (2011) analyzed was Kucan et al.'s (2011) 3-year study that collected reading teacher candidate data on their participation in a three-module course on the application of the practice-based framework. From this case study, Moss stated, "I wondered

about the closeness of the fit between the analysis of novices' responses to the video viewing task and the rubric that the novices were asked to use in the other approximations" (p. 2890). This demonstrated the importance to reflect after completing a specified task. Feedback is a crucial part of learning and how the feedback is applied can help novice reading teacher candidates be successful in the classroom.

In another case study, Moss (2011) included demonstrating the importance of conceptions of quality Boerst et al. in which the study followed a learning trajectory that focused on enactments of discussions to improve novice's questioning techniques. Asking purposeful questions is an important part of teaching but may not come easily to novice teachers. The study was based on approximations to enhance the likelihood of success through the anticipation of students' responses. Novices planned discussions and analyzed subsequent responses but did not reflect on the actual discussions.

The studies Moss (2011) analyzed affirm the practice-based teaching framework and defended her argument to include conceptions of quality as the fourth component with representations, decompositions, and enactments. To what extent do these four components of the practice-based teaching framework seem to be evident in the research on effective online learning?

Practice-Based Teaching Framework in Action

Literacy is an essential part of education and is evident in every part of a school's curriculum. Literacy can be seen in science, social studies, math, art, music, computer classes, language arts, and many other classes students take over the course of their lives. Literacy contains aspects of reading, writing, and speaking. Knowing that literacy is a fundamental skill for all students indicates its importance for higher education institutions to successfully prepare

professional educators to teach literacy in their classrooms. Instructing teachers on the processes of representation, decomposition, and approximation/enactments of core practices helps build the teacher's conceptual knowledge of teaching and learning, as well as their instructional toolbox. Similarly, providing education professionals with effective representations of literacy instruction as well as opportunities to deconstruct and enact these practices is central to effective practice-centered teaching.

Kucan et al. (2011) described the application of the practice-based framework. The purpose of this 3-year study was to collect data from reading teacher candidates who participated in three online modules that focused on building the teachers' resources on how to successfully enact representation, decomposition, and approximation in their classroom. The study had nine teacher-educators from eight institutions who taught grades third through sixth focusing on using informational texts. The reason behind choosing these grades was "Because of the widely acknowledged fourth-grade reading slump, a phenomenon in which student who was making satisfactory progress in their reading development begin to show signs of lagging in their reading achievement" (Kucan et al., 2011, p. 2,900). The first module was created to help support the candidates in understanding theories specific to reading comprehension. The second module was set up to help support the acquisition of the specific knowledge needed to analyze texts and plan discussions based on the texts. The third module was designed to help the teacher candidates enact their planned discussions and then to evaluate the discussions. All three modules demonstrated how the teacher candidates were using representation as a method to practice their learning (Kucan et al., 2011). Throughout the modules, the teacher candidates experienced multiple representations that would enhance student learning through the use of authentic scenarios; for example, how to position students while they are in a discussion or reader-text

interactions. The findings showed the importance of the instructor and a vast amount of representations, the teacher candidates were able to learn how to plan and analyze text-based discussions that would expand their student's literacy skills with the exposure to many different types of tools to utilize while conducting their own lessons. The study concluded that the practice-based teaching framework created by Grossman (2009) and her colleagues provided a practical approach in teacher preparation. Comprehension of informational text can be challenging and an important representation for the reading teacher candidates to take back to their classroom was to ensure that they understood what they learned (Kucan et al., 2011).

Gibbons and Cobb (2017) discussed the importance of literacy coaching as an important component of a teacher's professional development. According to Gibbons and Cobb, "Coaching involves teachers working with a more accomplished colleague as a primary form of job-embedded support to improve instructional practices" (p. 1). Instructional coaches can be found in the school district around the country and can be just as effective in the higher education classroom. Moss (2011) suggested a fourth component be added to the practice-based teaching framework, which was conceptions of quality with evidence to support the importance of reflection. Literacy coaches can help support novices and professionals develop, and improve the skills needed to be successful in their career path. Gibbons and Cobb intended to identify coaching activities that would be potentially productive and answer the question, "What does high-quality instructional coaching look like?" (p.1).

Literacy coaching can be a useful tool for higher education teacher preparation programs, especially when teachers are in the field. According to Gibbons and Cobb (2017), "Identifying potentially productive activities that coaches can enact with the teachers to support their development of high-quality instructional practices" (p. 421). These activities can help teachers

reflect on their own ability to create lesson plans and teaching. Gibbons and Cobb noted that it is important to identify high-quality activities before enactment and conclude more research was needed. Research on effective online or virtual coaching is particularly important given the increase in online professional programs for educators. Teachers in a higher education programs, such as the education program at NLU, are required to engage in a series of teaching cycles throughout their studies.

National Louis University's College of Education pioneered an online coaching model, ACT, to improve upon how future teacher educators learn to teach. The program was first established in the undergraduate elementary education program. The ACT model focuses on a small number of core teaching practices, provides candidates with representations of each practice, supports candidates to identify critical features of the practice, and scaffolds candidates' enactment the practices in the field. Virtual coaching is providing through online tools. Candidates complete multiple teaching cycles in the field gathering and analyzing evidence of student learning with each cycle. This process helps to teacher candidates gain proficiency with multiple practices and to learn to analyze and refine their teaching skills based on student performances (Salmon, Freedman, Degener, Rossman, Ko, Phillips, & Hilsabeck, 2015). The implementation of the ACT program resulted in a 95% first attempt pass rate on the edTPA exam, which is required to obtain a professional educator's license. Recent research by the College of Education showed that the cooperating teacher's perceptions of their student teachers are what they would expect for first-year teacher's performance.

Teacher preparation programs have been under scrutiny for the past decade. According to Ball Loewenberg and Forzani (2009), the need to improve educational outcomes has been a challenge. "With a system of schooling that has never delivered high-quality education to all

students, policymakers and educational leaders are calling for more complex and ambitious goals to prepare youth for the demands of the 21st century" (p. 1). The article argued for more effective teacher preparation including the use of innovative technology and collaborative work to ensure our professionals are prepared for the classroom. In particular, the authors argued for practice-based approaches to provide more opportunities for teacher candidates to enact teaching practices while receiving focused feedback and ongoing coaching. They further suggested higher education institutions shift their instructional goals to identify core tasks of teaching.

Online Reading Practicum

According to Lilienthal, Potthoff, and Anderson (2017), there is a need to create professional growth opportunities for in-service teachers, especially in largely rural states. With the continued advancement of technology and increasing number of universities offering courses and programs online the opportunity to reach students nationally and internationally is finally an attainable goal, but the quality of the online courses is a concern. One specific type of online course is a class that is considered a practicum field experience or internship in education. Simpson (2006) pointed out, "despite the increasing inclusion of online course delivery in teacher education programs, relatively little research has been done on the effectiveness [of] facilitating the practicum component of teacher education online" (as cited in Lilienthal, Potthoff, & Anderson, 2017, p. 2). Students entering the education field need to apply what they have learned throughout their program during a practicum field experience which is an integral part of their education. The practicum field experience is a culminating module that helps the student create an important link between theory and practice and encourages the student to self-reflect as a professional in an authentic setting (Lilienthal et al. 2017).

The purpose of the study was to describe the process that was taken to develop the online practicum. An important issue was the delivery of a high-quality practicum experience and how the practicum course was originally designed based on the face-to-face practicum requirements. Within those requirements were two main assignments, an analysis of the teaching context and a lesson plan. In 2013, program faculty within the National Council for Accreditation of Teacher Education (NCATE) department met to improve student learning through the revision of course assignments and instead of requiring two main assignments they combined the two into one larger unit assignment. The new unit assignment would focus on developing critical thinking skills and incorporated four lesson plans which would be submitted to a data collection program for accountability purposes. To create communication and ensure students were understanding the new unit assignment a template was developed. Lilienthal et al. (2017), stated, "The unit assignment required a minimum of four quality lessons developed and taught by the advanced reading teacher candidates following the unit template" (p. 6). The graduate students shared their thoughts on the unit assignment on a discussion board and the researchers found they were able to support the online supervision model of a graduate practicum successfully. Due to the geographical location of the students, the possibility of having an onsite supervisor was limited. The online learning environment allowed students to further their education no matter their geographical location (Lilienthal et al., 2017).

A future recommendation of the study included the submission of a VoiceThread video that would be peer-evaluated. This recommendation was tested during the spring of 2017 with 14 students who taught at various grade levels ranging from preschool to high school. The findings discussed 13 out of the 14 students had a favorable opinion of adding a video recording of their teaching. The researchers felt the template was the most valuable part of the practicum course

and suggested that adding a frequently asked questions folder would also be beneficial. The peer evaluation portion of the practicum was highly regarded because students could learn from their peers, a finding consistent with social presence in the CoI framework. The authors suggested adding real-time webcams via Zoom or Skype, a suggestion in harmony with the current investigation.

Personal Reflections and Literature Synthesis

In my collective experience as an online instructor and as an online student, I recognized the need for improvement to ensure student development. The first step in creating my own working theory of student development in this area was to look at what student development truly involved. According to Rodgers (1990), student development was defined as "the ways that a student grows, progresses, or increases his or her developmental capabilities" (as cited in Pargett, 2010, p. 1). This development correlates with higher education enrollment. The more students enrolled in higher education increases the development of a student's competency through education. From my perspective, student development is a process a student goes through to help them understand and make meaning from the experiences they encounter and then apply those situations to better understand and navigate the complexity of life. This process helps the students learn how to confront challenges head-on and adjust their learning based on the situation they are encountering.

The theoretical frameworks reviewed, CoI and practiced-based teaching, elaborated on the notion of high-quality education in the online environment. Learning designs need to implement practice-based teaching methods in conjunction with social, teacher, and cognitive presence to promote authentic learning. While the online environment may provide different sorts of learning opportunities than the traditional on-campus environment, online courses should

still provide students with cognitive presence, meaning the opportunity to see representations, decompose them, and enact the skills learned to assess authentically. Instructors should be present in the online environment as much as possible to provide ongoing coaching and feedback that create instructor presence. This can be accomplished through (a) utilizing discussion forums, (b) providing timely return of and focused feedback on assignments, (c) creating weekly in-class videos and/or the ability to meet via Zoom or another communication program, (d) returning emails within a 24-hour time frame, and (e) providing as many facets of learning to support all learners. Social presence should be encouraged through group work, peer feedback, social lounges/cafes, or social media sites and the discussion forums. Instructors should monitor the discussion boards to see if intervention is needed. The greater the number of students in the online environment, the greater the encouragement for student interaction and support.

From my research on the two theoretical frameworks, practice-based teaching and CoI, there was a clear correlation to how students learn in the online environment and how putting in place practice-based teaching elements strengthened the online learning experience. Forzani (2014) discussed the importance of professional education programs to look at the "core" or "high leverage" teaching practices found in the higher education courses. It is important for the graduate reading program to incorporate "high leverage" practices in order to be a successful online program because these practices create the necessary foundational skills of what the professionals need to be effective in their own classrooms.

The research showed that teacher, social, and cognitive presence is not only important but necessary in any online environment. Teachers should provide timely feedback on assignments and be visible in the discussion forum. Rubrics with clear expectations should be available for students to see before completing assignments. Providing weekly videos with captioning helps

create social, teaching, and cognitive presence in order to help all students succeed. Creating a suggested course schedule can help those students who may lack motivational skills by keeping them on track and on time with their learning. Prompt responses via email, question forums, or phone calls are imperative to a successful online program. Instructor consistency is also an element that should be found not only in a course but throughout the entire program. Providing a student lounge can help develop and encourage the social presence in an online course. This may be for student use and can be used to share articles, ideas, ask questions, or simply be an area for conversation. Incorporating core practices for learning is important and can be implemented with modern technology. For example, a student may record a repeated reading and share a video in the discussion forum for feedback. This provides authentic learning and promotes cognitive, social, and teaching presence. All of these suggestions help create a high-quality and effective online course and program.

Conclusions

From my literature review, the importance of having teacher, social and cognitive presence in the classroom has been deduced. Teacher presence is essential and can be accomplished through the use of videos, Skype or Zoom, emails, discussion correspondence, timely feedback, or weekly updates. The teacher should facilitate learning through the use of multiple modalities of learning. This promotes cognitive presence through the use of representation. Instructors can use PowerPoint presentations, videos, articles, or other materials to model the necessary skills need to achieve the course and program outcomes. Cognitive presence is essential and can help stimulate the decomposition process where students have the ability to identify the critical features of student learning. Cognitive presence also involves enactments that allow professionals to practice with peers or students in the field. This leads to

social presence, which is seen in cognitive and teacher presence as well. It is important for professionals to interact with classmates, colleagues, and fellow professionals to practice skills as well as to gain feedback and guidance through literacy coaching.

Creating an engaging online environment is another cognitive presence component of student success. This encourages student commitment. The course should be user-friendly and easy to navigate. The course should include a course map, schedule, or checklist to help students clearly see and understand course assignments, due dates, and goals. Online courses should include multiple materials for learning to ensure all types of student learners can be successful. All coursework should be uploaded to a Dropbox and made easily accessible to students in order to see instructor feedback. Another way would be to create a student lounge or café to increase social presence. The instructor should promote the lounge or café at the beginning of each course.

Finally, assignments and activities should be authentic and meaningful and allow students to apply their knowledge from the course to their profession. The transfer of knowledge from the class should be a natural transition. Instructor presence in the discussion forums is necessary to help ensure students are on task and learning the necessary materials to meet the course requirements. Core practices should be modeled, rehearsed, and enacted throughout an online program. Reflection and coaching are essential to student understanding. Literacy coaches can provide feedback to students that will allow them to reflect on the quality of their practice of a given skill set as well as to set future goals.

From these findings I want to ensure online courses meet these components; therefore, I propose a new framework, the collaborative online learning framework, which incorporates the basis of the CoI and practice-based teaching frameworks and includes four key components of

course design, engagement, presence (derived from the CoI Framework), and core practices (derived from the practice-based teaching framework). To further develop this framework, I created a checklist that can be utilized to evaluate the effectiveness of online courses throughout three stages, pre-course set-up, during the course, and after the course.

CHAPTER THREE: METHODOLOGY

Research Design Overview

The purpose of this investigation was to explore the experiences and perceptions of instructor and reading teacher candidates regarding the online clinical course sequence to evaluate both virtual presence as well as enactment of the core practices of literacy. The study focused specifically on the clinical sequence involving the RLR 510 (Diagnosis and Assessment of Reading), RLR 511 (Instructional Strategies for Literacy),RLR 592 (Practicum: Literary Interventions for Elementary and Secondary Students), and the use of virtual presence in these courses. The cases in this research study were on the three reading teacher candidates' and three instructors' perceptions of virtual presence in the online forum. The first part of the research set the stage for how the whole group perceived the online clinical course sequence and their enactment of the core practices of literacy. The research then moved into the individual case studies to further examine the use of synchronous communication during the practicum course. This in-depth analysis supported the suggestion of including virtual presence to an online course to enhance the reading teacher candidate's overall attainment of the core practices of literacy through an online environment. Both reading teacher candidates and instructors provided evidence of the positive correlation of virtual presence and online learning.

To address the research questions for the study, I used qualitative approach with the application of the case study research method for a number of purposes. According to Creswell (2007), "Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning that individuals or groups ascribe to a social or human problem" (p. 42). First, I applied two theoretical frameworks, practice-based teaching and the CoI, as the basis of my research. These frameworks

helped inform and make meaning of student and instructor perceptions and experiences in an online clinical course sequence.

Second, qualitative research methods are helpful in discovering and understanding how specific events impact an individual's experience. A qualitative approach supports research questions that require exploration and often begin with, "how or what", allowing the researcher to gain an in-depth understanding of the study (Patton, 1987). A qualitative approach allows the researcher to collect data in a natural setting, which is sensitive to participant conduct, and data collected can be analyzed to establish themes (Yin, 2006). The study incorporated a student survey as well as one-on-one student and teacher interviews.

Third, a qualitative multimethod design approach within the case study method was applied to collect data and make meaning of instructor and student perceptions. Specific data was related to a thought processes as well as reading teacher candidate performance during the online reading program clinical course sequence. This was measured by utilizing the practice-based CoI (PB-CoI) tool as a questionnaire guide to reading teacher candidates' and instructors' perceptions on online learning and synchronous communication within an online environment. Case studies should include multiple sources of data to establish conclusions from the chain of evidence to validate findings and which allow the researcher to explore corollaries such as the effectiveness of an online program. The sources should include archival records, interviews and documentation, and participant observations (Alpi & Evans, 2019).

Finally, employing a case study as a qualitative methodology allowed the researcher to act as an instrument during the inquiry process and investigate real-life cases through a detailed and in-depth collection of multiple sources of information and report the findings in a case-themed description (Alpi & Evans, 2019). In this study, the researcher played a dual role as both

teacher and researcher. As a researcher, I compiled, analyzed, and triangulated data from six sources: (a) data generated through key assessments; (b) data generated through final reports; (c) reading teacher candidate surveys; (d) interview data from three reading teacher candidates; (e) interview data from three instructors who supervised the tutoring sessions online; and (f) observations and field notes from my own participation in the online courses as an instructor and supervisor utilizing virtual coaching.

Case study methodology enabled the researcher to examine multiple correlating factors that produce a unique outcome, generate a contextual analysis and a comprehensive description (Corcoran, Walker, & Wals, 2004). Collective case studies allowed the researcher to investigate a phenomenon, online learning, in a real-life context with the use of multiple cases and sources of data. These case studies explored reading teacher candidates' experience of the online reading teacher clinical sequence using two theoretical frameworks, which were the practice-based teaching and CoI. In addition, the study investigated how reading teacher candidates perceived the use of virtual presence or synchronous communication within the online clinical sequence. The online reading program had just completed the second cycle of teaching and therefore I hoped to gain further insight into the effectiveness of this online reading program and how it can be improved.

As an instructor in the program, I taught RLR 501, which is the first course in the reading program and a prerequisite to the courses concentrated on in this study. I also co-taught the entire clinical course sequence of RLR 510, 511, and 592. For this reason, there was less objectivity than a traditional outside researcher role. To safeguard against my bias entering into the data collection and analysis, I used two research-based frameworks to build the data collection tools: the practice-based teaching and the CoI frameworks. Specifically, the reading teacher candidate

survey is a well-researched tool, based on the CoI framework ("CoI Survey | CoI,"

2018)Interview questions were designed around the practice-based teaching framework as well

as the CoI framework. A researcher designed protocol, the practice-based community of inquiry

tool (See Appendix B), combines these two existing frameworks for the purpose of examining

existing course data. In this context, the insider perspective can also be beneficial in

understanding how a design works in the teaching/learning process. Data sources were gathered

from different perspectives, candidates and other instructors, and triangulated to ensure the

validity of interpretations and conclusions.

Research Questions

1. How did the reading teacher candidates perceive the online clinical course sequence?

2. How did the reading teacher candidates and instructors utilize and perceive virtual

   presence during the clinical course sequence? How did the virtual presence

   experiences support candidates to enact and learn reading core practices?

Methodology

The case study methodology addressed the what, why and how of the phenomenon

"virtual presence" within its real-life context, "online environment" for this research. Herriott

and Firestone, as shared by Yin (2018), described the value of analyzing multiple case studies is

more compelling and robust. Case study methodology was best suited for this study because it

examined perceptions and experiences of reading teacher candidates and instructors to better

understand the implementation of virtual presence in online courses.

Context of the Study

The reading program at NLU is designed for postgraduate educators who possess a

professional educator license and who are interested in expanding their knowledge in literacy or

becoming a reading teacher. The curriculum sequence follows the state of Illinois guidelines for reading teacher endorsement. Recently the Reading Program Director, Dr. Mary Hoch, was asked to transfer the course to the online environment. The fall of 2017 was when the first diagnostic course was offered at NLU.

The first course in the sequence is RLR 510 (Diagnosis and Assessment of Reading). The course introduces students to diagnostic tools used to identify student specific reading difficulties. The course incorporates the implementation of multiple types of assessments to complete a diagnosis. Program candidates learn how to administer and interpret formal and informal assessments to primary and intermediate students as well as complete a formal write-up. The second course in the sequence, RLR 511 (Instructional Strategies for Literacy Interventions), introduces students to a theoretical perspective regarding how to correctly instruct using innovative teaching techniques with students in grades 1-12 that may be experiencing difficulty in literacy. The final course, RLR 592 (Practicum: Literary Interventions for Elementary and Secondary Students), requires candidates to tutor two students, one younger and one older, for 20 one-hour sessions per student for a total of 40-practicum hours. Data was primarily drawn from RLR 592 since this is where the majority of the virtual presence occurred. During the first two courses, RLR 510 and RLR 511 reading teacher candidates were taught the necessary strategies and skills required to successfully facilitate student progress during tutoring sessions.

During RLR 592 the students were required to set up tutoring and observation schedules that needed to be approved by their assigned supervisor. The tutoring schedules were planned during the 11-week session and showed the exact date and time reading teacher candidates met with their students. Once the tutoring schedule was approved, reading teacher candidates created an observation schedule for the four sessions for which their supervisor would provide explicit

feedback. In the first and last sessions, the reading teacher candidate was required to record their teaching for 30 minutes, which could be at the beginning or the end of the tutoring session. The videos were then uploaded to the course and the assigned supervisor watched the video and provided explicit feedback on the observation rubric. The second or third tutoring session of choice was done live, in which the assigned supervisor used Zoom (virtual presence) to stream into the session. This was done in the second half of the tutoring session and once the student left the supervisor provided explicit coaching and feedback to the reading teacher candidate. The second or third tutoring session of choice was completed when the teacher candidate recorded the session and within 24-hours the supervisor watched the recording. The supervisor then conducted a synchronous meeting (virtual presence) with the reading teacher candidate to provide explicit coaching and feedback on the lesson.

Reading teacher candidates were required to set up a Google Docs folder with their assigned supervisor. This folder contained their implementation plan and goals as well as each lesson plan. Reading teacher candidates were required to complete a reflection after each lesson and this reflection was reviewed by the assigned supervisor. Reading teacher candidates were required to have their lesson plans pre-approved before working with each student. This allowed the supervisor to view the lesson in Google Docs and make comments on the plan. The reading teacher candidates were required to post lesson plans to their Google Doc folder 24 hours prior to teaching. This helped to scaffold reading teacher candidate learning and enable them utilize supervisor feedback to enhance student understanding.

The specific case of study was how the implementation of virtual presence in an online clinical course sequence facilitated the capabilities of reading teacher candidates to learn and enact the core practices of literacy. The research used a sequenced description approach to

analyze the data, looking for pattern matching to empirically compare responses from a whole group reading teacher candidate and instructor perspective using the pattern matching technique for analyzing strengthened the internal validity of the research (Yin, 2018). To ensure construct validity, the research gathered multiple data sources to be examined in two distinct manners, whole group and individual interview responses.

The whole group survey results gave the research insight into the perceptions of the online clinical course sequence and the implementation of three key research-based elements of the CoI framework of teacher, cognitive and social presence. The CoI model has become a prevalent framework for online course development (Anderson, 2018). The survey created the first pattern using the question, How did reading teacher candidates perceive the online clinical course sequence? With this information, further in-depth analysis was necessary using the question: How did the reading teacher candidates enact the established core practices of literacy, differentiation, and diagnostic testing? These data led to the final pattern matching using the question, How did the reading teacher candidates and instructors perceive synchronous communication or virtual presence? After gathering the data for these three areas, pattern matching was determined and data triangulation was completed to ensure construct validity.

Participants

The study was conducted with 11 graduate reading teacher candidates and three NLU instructors. I asked two NLU instructors to participate in one-on-one interviews, both consented, and the final instructor was myself. The reading teacher candidates were required to have at least two years of teaching experience before entering the program. Ninety-four percent of the reading teacher candidates are female and range in age from 26-50 years. Four reading teacher candidates, whom I was supervising, were asked to participate in one-on-one interviews. These

interviews allowed for more in-depth perception on their experience with virtual presence, only three candidates consented to these interviews.

The first interview conducted was with the Reading Director, Dr. Mary Hoch and the second interview was with an adjunct instructor, Dr. Jana McNally. Hoch has been employed by NLU for seven years and has co-authored practice-based publications that discuss instructional strategy design and implementation. McNally is a reading adjunct instructor with NLU. I am also a reading adjunct instructor with NLU and my role in this study was as the participant researcher. My experience in the reading program motivated this research to examine the overall quality and effectiveness of the online course sequence. I have been an online adjunct instructor with NLU for three years.

Data Sources

Community of inquiry survey (reading teacher candidate perceptions). The CoI Survey (see Appendix A) addressed research question number 1. This survey assessed the three components of the CoI framework: teacher, cognitive, and social presence in the online environment. The survey had nine different categories with a total of 34 questions that were graded on a 5-point Likert Scale. The sections correspond to factors comprising each presence and included (a) design and organization, (b) facilitation, (c) direct instruction (teaching presence factors), (d) affective expression, open communication, and group cohesion (social presence factors); and (e) triggering event, exploration, integration, and resolution (cognitive presence factors). The CoI questions specifically focused on the students' experience of the online environment and helped to evaluate their perceptions of online learning (i.e., research question #1).

Reading teacher candidate interviews. To address question number 2, three one-on-one reading teacher candidates I supervised during RLR 592 were interviewed via Zoom. The purpose of these interviews was to gain insight into the reading teacher candidates' perceptions of overall clinical course sequence to acquire core practices. The interview questions were designed around the CoI-PBT tool (see Appendix B) to probe reading teacher candidates' experience relative to the components of the CoI Framework and practice-based teaching approach. The interview questions were created based on the PB-CoI tool, which was originally created as an online course checklist to examine if the reading teacher candidates perceived the online environment encompassed the necessary components of each frameworks. Reading teacher candidates were also asked to discuss their experiences of synchronous communication (virtual presence) and how it may have helped or hindered their learning.

Instructor interviews. To further address research question number 2, instructors teaching in the online reading teacher program were interviewed to explore their successes and challenges in teaching a clinically oriented course sequence in a fully online environment. As with the reading teacher candidate interviews, the CoI-PBT tool was used to guide the interview process. All interviews were conducted via Zoom.

Through the interviews, I further examined students' and instructors' perspectives on the process of online learning and the online program itself with particular attention to the role of synchronous communication (virtual presence) in learning core literacy instructional practices. One-on-one student and faculty interviews were conducted via Zoom. I recorded comprehensive notes of each participant's responses and allowed further clarification when warranted (see Appendix C).

Data on candidate learning: Observation rubrics from RLR 592 (Practicum:

Literary Interventions for Elementary and Secondary Students). The observation rubric (see

Appendix D) was a tool used to provide feedback to three reading teacher candidates'

performance on the enactment of the core practices of literacy during their practicum experience.

The observation rubric was used to assess each candidate during the tutoring sessions. Reading

teacher candidates were required to tutor a younger and older student for 10 one-hour sessions

and were responsible for four observed tutoring sessions with both the younger and older

student. The reading teacher candidate had to record and send in two 30-minute student tutoring

sessions for both the younger and older students who were assessed through the use of an

observation rubric. The reading teacher candidate also had a live tutoring observation, which was

followed up on with a synchronous meeting with the instructor. One recorded tutoring session

was assessed and followed up with a live synchronous instructor meeting. These 30-minute

tutoring sessions totaled two hours of observation time for both the younger and older students.

The observation rubric had eight criteria to guide the evaluation: (a) content of the lesson

demonstrates understanding of literacy processes; (b) materials used are appropriate; (c) tutor

uses appropriate language; (d) tutor listens to the student and responds appropriately; (e) tutor

provides appropriate scaffolding; (f) student understands what s/he is doing and why; (g) the

lesson is paced well; and (h) tutor has good rapport with the student. These criteria were graded

on a three-point scale of 3 as proficient, 2 as basic, 1 as unsatisfactory, * as not observed. The

final section of the rubric allowed the instructor to point out strengths and make

recommendations.

Key assessment data. Key assessment data (see Appendix E) was analyzed to examine

reading teacher candidates' performance of enacting the core practices of literacy. Key

assessment data was found in the final course, RLR 592. This assignment was a rubric-based final assessment required to evaluate each reading teacher candidate's overall tutoring performance throughout practicum. The eight areas of competency were Illinois State Standards that corresponded to the observation rubric criteria. The key assessment rubric evaluated teacher candidates on content, materials, language, listens, scaffolds, metacognition, pacing, and rapport.

The first area examined the content of the lesson plans. For each tutoring session, reading teacher candidates were required to submit their lesson plan 24 hours in advance to a Google Docs folder to be evaluated. The plans demonstrated an understanding of the literacy processes.

The second area examined whether the materials used during the practicum course were appropriate. This included the reading teacher candidate using a wide range of materials and online resources. These materials could be interactive computer programs or e-books to enhance student success in reading with technology. This area ensured that the materials were grade-level appropriate and that the reading teacher candidates knew how to differentiate their student's learning based on each tutoring session.

The third area examined language and assessed whether the reading teacher candidate used appropriate language to motivate and scaffold the student's learning. This area included looking at how the reading teacher candidates incorporated content area and academic vocabulary to enrich their student's tutoring experience. The reader teacher candidates created a binder that included anchor charts, word walls, and journal activities to promote the use of specific vocabulary that the student would hear in their classroom.

The fourth area examined how the reading teacher candidate listened to the student and responded appropriately to support and modify instruction, which included the teacher

candidate's using motivating conversation, giving redirection when needed, and knowing when the student is struggling.

The fifth area examined how the reading teacher candidate scaffolded the tutoring sessions. The reading teacher candidate was required to use varied and appropriate instructional approaches to develop the student's literacy skills. This area allowed reading teacher candidates to enact the numerous skills and strategies they learned throughout the program, such as incorporating total physical response (TPR) to enhance vocabulary.

The sixth area examined how well the reading teacher candidate developed the student's metacognitive processes to develop literacy and motivate student learning. This area evaluated how the reading teacher candidate enacted higher order thinking questions while tutoring. Reading teacher candidates were encouraged to develop lesson plans that included high-level thinking questions prior to each session as a reminder. Reading teacher candidates were told to explain to the students why they were learning a particular skill or strategy, and at the end of each lesson, they were encouraged to ask the students to tell them why they worked on those skills or strategies. This was an informal way for the students to show the reading teacher candidate they understood the lesson. Reading teacher candidates were also encouraged to teach students how to use appropriate skills and strategies while reading, monitor their own comprehension, self-assess, and correct based on their own evaluation of their progress.

The seventh area examined the pacing of the tutoring session in regard to the routine and approaches being varied and well-paced. During the first tutoring session, reading teacher candidates should have developed an established routine with their students, which included sharing the expected schedule of activities and throughout the sessions. The reading teacher

candidates were asked to incorporate gradual release of responsibility and allow the students to choose what activities they wanted to work on first.

The final area examined the reading teacher candidate's rapport with their student. It was expected that there is an excellent rapport throughout practicum. Reading teacher candidates were encouraged to establish a teacher-student relationship, which included getting to know the students as individuals and their interests.

Final report rubric-RLR 592 (Practicum: Literary Interventions for Elementary and Secondary Students). The final report was used to provide parents with important information about their child's progress, as well as the instructional strategies that were used during his/her tutoring program. This was the final clinical course sequence assignment and allowed the reading teacher candidates to demonstrate mastery of the learning program outcomes (see Appendix F).

Data was collected from course RLR 592 on the final report, observation rubrics, key assessments and the researcher's field notes. The final report required reading teacher candidates to complete a report on the students they tutored throughout the session and evaluate how well the reading teacher candidate initially diagnosed their students and facilitated student progress over the twenty tutoring sessions. The observation rubrics and key assessments demonstrated growth over the 10-week session and evaluated how well the reading teacher candidate (a) enacted the core practices of the clinical course sequence, (b) diagnosed their student, and (C) differentiated their instruction during their tutoring sessions. Table 1 summarizes the data sources used in this study as they correspond to the research questions.

Table 1

Overview of Research Questions, Data Sources, and Procedures

Research Question	Data Sources	Data Analysis
1. How did the reading teacher candidates perceive the online clinical course sequence?	• CoI electronic survey • One-on-one teacher reading candidate interviews	• Descriptive statistics on PB-CoI survey • Thematic analysis of interviews using PB-CoI framework
2. How did the reading teacher candidates and instructors utilize and perceive virtual presence during the clinical course sequence? How did the VP experiences support the candidates to enact and learn core practices?	• Reading teacher candidate (3) and instructor (2) interviews • Tutoring artifacts – lesson plans and observation rubrics (Used with the implementation of virtual presence) • Key assessment data to examine how the reading teacher candidates enacted the core practices of literacy and was virtual presence needed for support (RLR 592) • Final Report to examine how the reading teacher candidates enacted the core practices of literacy and was virtual presence needed for support. (RLR 592) • Instructor/coach field Notes	• Triangulation of different data sources including tutoring artifacts, field notes, candidate interviews, instructor interviews, and final tutoring report to identify themes and the relative value of virtual presence. • Within-case analysis of the reading teacher candidate's in-depth interviews.

Data Collection Procedures

After obtaining permission from the NLU Institutional Research Review Board (IRRB) for this research, I contacted reading teacher candidates in RLR592 via their NLU email to complete the electronic CoI survey. I reposted a message twice in the announcements during RLR 592 asking for reading teacher candidates to participate in the survey. I contacted the four reading teacher candidates at the end of May 2019 via Gmail to ask if they would be willing to participate in a one-on-one interview about their clinical course experience and perceptions of virtual presence.

Data was collected over a 10-week time frame. Reading teacher candidate survey consents were sent out on May 22, 2019 and the last survey was completed on June 25, 2019. Three reading teacher candidate interviews ranging from 30- to 45-minutes were done on June 3, June 20, and June 26. These interviews were conducted after all course work was completed in their final course RLR 592. Two instructor interviews ranging from 45- to 60-minutes were completed on May 23 and May 28 after all tutoring sessions were completed. My field notes were compiled during the 10-week practicum course. After all course work had been completed for the program, I gathered data from the reading teacher candidates' observation rubrics, key assessments and final report grades from D2L, Google Docs, and LiveText.

According to Yin (2006), data triangulation of multiple sources of evidence and data can be condensed into common themes derived from the findings as they develop from the research. The evidence collected from the case study was depicted in figures and tables with pertinent interview quotations to support the discoveries presented.

Data Analysis

According to Merriam (2009) a qualitative multi-case study aims to construct generalizations across the cases and further explains while data is being collected the analyzation begins to guide the need for additional data attainment. According to Yin (2009) a holistic analysis allows the researcher to look at the entire case data. A three-stage analysis was preformed to analyze the multiple cases; first, a thematic analysis of the whole group short answer responses from the CoI survey, second, a within-case analysis of the six individual case studies, and finally a cross-case analysis of the whole group thematic analysis and the within-case analysis were examined (Creswell & Poth, 2018). According to Stake (1995) and Yin

(2009) in Creswell and Poth (2018), cross-case analysis, "involves examining themes across cases to discern themes that are common and different to all cases" (p. 322).

The researcher explored, in-depth, the individual case studies by looking for patterns within the responses. During the within-case analysis the case study data used significant statements to organize the phenomenon of virtual presence that was experienced. The six individual case studies were organized in a re-storying framework (Creswell & Poth, 2018). The cases were presented in a narrative framework to familiarize the reader with the details about the reading teacher candidate, student and the tutoring environment. After the in-depth interviews the researcher began to open code the data into major categories of information. According to Creswell and Poth (2018), "Coding involves a data aggregating and meaning making process described as doing analysis and denoting concepts to stand for data" (p. 85). The researcher first coded the data and then cross-cased analyzed the data from the thematic analysis with the phenomenon, virtual presence.

RQ1. How Did the Reading Teacher Candidates Perceive the Online Clinical Course Sequence?

The CoI survey was analyzed using descriptive statistics to obtain a clear picture of the range of opinions candidates experience regarding their online learning experience. Individual interviews of reading teacher candidates further elaborated and deepen the survey data by examining their perceptions of specific course components. The CoI-PBT tool was used as an analytical framework to support a thematic analysis of the candidate interviews (see Appendix B). The CoI-PBT tool was originally designed to be a checklist for instructors to make sure they had their online classrooms set up. There were sections for pre-course, mid-course and after-courses, all of which were more geared for adjuncts who did not design the courses they were

teaching. During the development of this checklist it became evident that it could be used as a guide for all faculty and adjunct instructors to make sure their online courses were set up in an engaging, innovative and productive manner. The CoI-PB tool became an analytical framework to use as a guide the interview questions in a systematic way that incorporated the two overarching frameworks of my research, CoI and practice-based teaching.

I analyzed the open-ended responses on the CoI survey through multiple re-reads to delineate important recurrent words, phrases and sentences to create a coding system (Creswell & Poth, 2018). Five common phrases, codes, were seen in all of the responses: (a) online environment, (b) video communication, (c) immediate feedback, (d) meaningful discussion, and (e) live feedback. From these phrases overlying common sentences were extracted to define each assertion. *Online environment* was defined as the comfort of being in your own environment. *Video communication* was defined as conversation on feedback instead of reading it. *Immediate feedback* was defined as in-the-moment feedback. *Meaningful discussion* was defined as build relationships with instructor and classmates. And *live feedback* was defined as live chat to discuss learning. From these assertions, three main themes were identified in connection with the definition of synchronous communication and how it is implemented in the online environment. These themes were (a) virtual presence provided flexibility, (b) virtual presence encouraged collaboration, and (c) incorporation of virtual presence was an effective way to learn.

RQ2. How did the Reading Teacher Candidates and Instructors Utilize and Perceive Virtual Presence During the Clinical Course Sequence?

For this analysis, I examined how reading teacher candidates and instructor perceived and experienced opportunities for synchronous communication afforded by the virtual presence in relation to their learning in the online environment and tutoring performance through in-depth

interviews. The in-depths interviews were conducted one-on-one via Zoom. A within-case analysis was conducted based on the participants responses. This analysis involved examining each individual case study to identify how each participant perceived and utilized virtual presence in an online classroom. I looked for key words or phrases that overlapped in each narrative that corroborated the three overall themes, namely *virtual presence provided flexibility*, *collaboration*, and *effective learning*. Finally, I synthesized the descriptive data and produced a story or retelling of the participants' experiences. The data was used to further define synchronous communication and its effect in the online environment based on specific participant responses. Quotations were embedded in the narrative case studies to create a comparative structure allowing data to be alternatively compared (Yin, 2018).

Observations rubrics, key assessment data, and the final report provided evidence for the reading teacher candidate's tutoring performance. These assignments were required and demonstrated reading teacher candidate proficiency in enacting literacy skillsets of diagnosis and differentiated instruction. I specifically analyzed the four sets of observation rubrics, key assessments and final reports from the four reading teacher candidates that I supervised. This data was analyzed for the role virtual presence played in supporting the enactment of core literacy instructional practices. Finally, I triangulated multiple data sources, observations, field notes, tutoring artifacts, candidate interviews, instructor interviews, and the final tutoring report and identify overall assertions, themes, and the relative value of virtual presence. Triangulation was a way to establish creditability among the findings and corroborates the evidence to provide validity (Creswell & Poth, 2018). The data was triangulated by first examining the reading teacher candidates' responses from the CoI survey.

To ensure reading teacher candidate success of enacting the core practices of literacy, Key Assessments and Final Reports were analyzed. These two main assignments gave insight as to how successful the reading teacher candidates were in applying the core practices during their practicum experience. Finally, a cross case analysis of the six case studies was conducted to divulge deeper into the reading teacher candidates' and instructors' perceptions and experiences with synchronous communication.

Limitations of the Study

Given the research design, the findings cannot be widely generalized beyond the context of the study. The purpose was to investigate this context and how students learn under these circumstances. However, the insights gained can apprise similar online contexts, particularly those utilizing the CoI model and practice-based teaching approaches. I utilized the CoI survey to obtain student perceptions of their experience in the online clinical course sequence. This survey has been validated by Ben Arbaugh, Marti Cleveland-Innes, Sebastian Diaz, D. Randy Garrison, Phil Ice, Jennifer Richardson, Peter Shea, and Karen Swan (Athabasca University). The results of the CoI survey were presented at the Sloan-C Conference in 2008 and the survey was deemed a stable instrument with the capability to be used in a variety of studies.

The CoI survey is commonly used to study online learning environments and was used in a manner consistent with previous research. The number of participants in the study was small and did limit findings to illuminating different perspectives and experiences rather than drawing firm conclusions. An additional challenge was with the case study and the collection of adequate data to avoid the researcher bias since one of the data sources was the researcher's observations and field notes (Creswell & Poth, 2018). Data collected in this study was triangulated to increase validity, decrease researcher bias, and help delineate the overall theme depicted from the data. A

final limitation was the information obtained during the three reading teacher candidate interviews and what they were willing to share based on their perspective and experience.

<h3 style="text-align:center">Researcher Positionality</h3>

The perspective of my positionality is a combination of two philosophical lenses—natural setting and researcher as a key instrument. Natural setting allows the researcher to talk directly to their people and see how they behave in this context. (Creswell & Poth, 2018). Although my natural setting was virtual, I was able to have "face-to-face" interactions with my participants, which demonstrated the value of virtual presence in research while in a natural online environment setting. The characteristic of the researcher as a key instrument correlates with my positionality because it allows the researcher to collect their own data. Creswell and Poth (2018) shared data can be collected through, "examining documents, observing behavior, and interviewing participants" (p. 43). I incorporated these data collection tools and did not rely solely on instruments developed by other researchers. I was able to apply what I have learned as an online instructor to create my own instrument to drive my interviews which provided me perspectives and experiences to authenticate my theory of the significance of incorporating virtual presence in an online course.

As an adjunct for NLU, I am continually looking to improve the online learning programs because of my passion for teaching in the online environment. Each week, I witness new online programs emerge from higher education institutions across the United States, which confirms the importance of NLU embracing online learning and investing in the creation of innovative programs for future students. I have not only taught online courses at both the undergraduate and graduate level, but I have also taken online courses at the graduate level. My first online courses were research courses offered at NLU in 2005. Those were the only courses available online at

the time. I admit I initially found these online courses to be quite challenging, but once I was comfortable using the online environment, I was successful. I was highly motivated to do well in the online environment because I had two children at home and finding daycare and driving 40-minutes to an on-campus course was not feasible. From the moment I took those two courses, I knew online learning was an ideal option for working adults with children who had geographic or other commute limitations. Once I started teaching in the online environment, I knew that online learning was going to be a prominent way of the future for higher education.

While taking online courses I found one area of learning I missed was the face-to-face interactions among peers. I missed the comradery and wondered how could this be combined in an online course. Through my years of teaching online as well as taking classes online I kept a notebook with ideas on how to improve an online course. In the courses I taught I began to utilize a program where I created a virtual teacher who resembled myself. I would record weekly messages for my students and the animated virtual teacher would talk for me, but after a while I felt this was not enough. I then began recording videos for my students. The videos could not be too long, or I would have trouble uploading the recording to the online course. When I began teaching at NLU we had a video program embedded in our D2L platform, which made recording simpler. I have also integrated recorded Powerpoints to represent teacher presence. All of these are effective ways to show students you are in the online forum, but it did not seem like enough to replace the face-to-face interaction I know I missed in my courses. Then the idea of virtual presence began to emerge, and my research began.

Summary

The goal of this chapter was to outline the theoretical grounding, methodology and methods for this study, and the ways the data was collected and analyzed. This chapter also

disused the procedures of the study, outlined the participants involved, and identified interview protocols and data analysis. This chapter provided rationale for the case study methodology to illuminate how the online clinical course sequence is working and in particular, the role the virtual presence plays in a candidate's learning experience. The purpose of this study was to identify perceptions synchronous communication and when it best occurs within a clinical course sequence to facilitate candidate learning of the core practices of reading diagnosis and the differentiation of instruction. This chapter concluded with the discussion of limitations of the study. The goal of Chapter 4 is to provide the results of the study and to demonstrate the outlined methodology was followed from Chapter 3.

CHAPTER FOUR: FINDINGS

The purpose of this research study was to examine student perceptions of online learning and synchronous communication (virtual presence) in an online clinical course sequence. The information compiled can be used to improve the effectiveness of online clinical courses. For this study, I gathered both quantitative and qualitative data through key assessments, one-on-one interviews of instructors, one-on-one interviews of reading teacher candidates, and surveys to obtain their perceptions on online learning and synchronous communication (virtual presence). The quantitative and qualitative data provided insight into what was needed to improve the online clinical course sequence and how effective the use of synchronous communication was during the practicum experience. The survey and interview responses that informed this study were used to answer the following research questions: (a) How do reading teacher candidates perceive the online clinical course sequence? (b) How do the reading teacher candidates and instructors utilize and perceive virtual presence during the clinical course sequence? How do the virtual presence experiences support candidates to enact and learn the core practices of a reading teacher?

The data collected was analyzed in two distinct manners—whole-group and through individual case studies. This allowed me to gain a general overall perception of the online clinical course sequence and how well the reading teacher candidates were able to enact the core practices. The first section depicts my analysis of the CoI survey responses to gain insight into the overall perceptions of the online clinical course sequence. This data allowed me to see variation in the responses based on the main factors of teacher, social and cognitive presences. To further investigate this data I examined the reading teacher candidates' short answer responses on their online learning experiences. Following this analysis, I evaluated the reading

teacher candidates' short answer responses on their perceptions of synchronous communication or virtual presence in the online clinical course sequence.

From the qualitative survey responses, I was able to establish naturalistic generalizations, producing five distinct assertions in regard to virtual presence. These patterns assisted in the emergence of three overall general themes on the implementation of virtual presence in the online environment. Following this analysis, I examined the 11 reading teacher candidates' overall enactment and understanding of the core practices by evaluating key assessments and the grades on final reports. To triangulate this analysis, I examined the perceptions of the online clinical course sequence and virtual presence of the two instructor interviews, and, as the third instructor, my descriptive field notes.

Finally, to further investigate the reading teacher candidates' learning experience in the online clinical sequence, I conducted three individual case studies. These case studies offered a naturalistic generalization of online learning and virtual presence and allowed me to analyze the academic impact of reading teacher candidates' understanding and enactment of the core practices.

Background on Reading Teacher Participants

The participants of the study were comprised of two instructors and 11 reading teacher candidates from NLU, a non-profit higher education institution located in Illinois. The reading teacher candidates were all practicing teachers seeking an advanced degree in teaching reading. They ranged in age from 26 to 50 years old and one participant was a male and 10 were female, listed in Figure 4. The grade levels taught by participants are depicted in Figure 5.
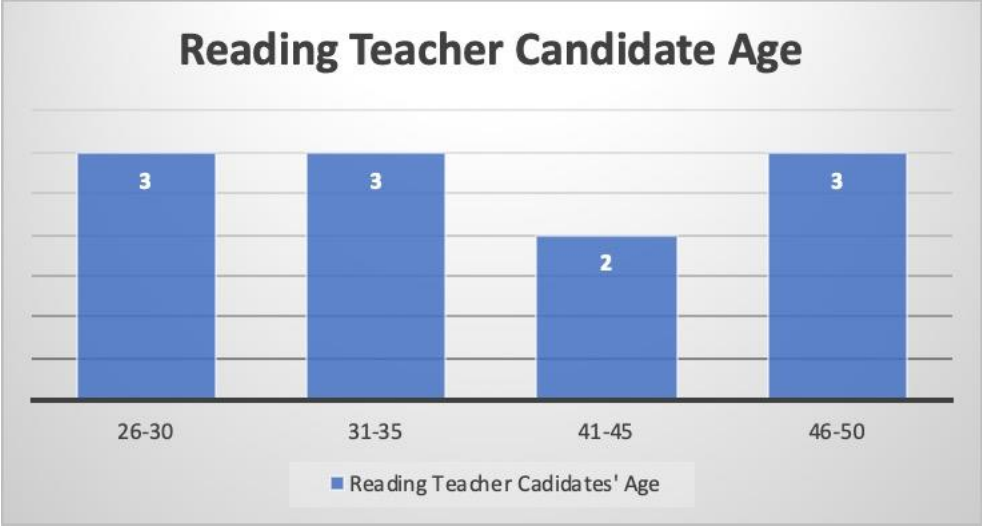
Figure 4. Age range of reading teacher candidates.
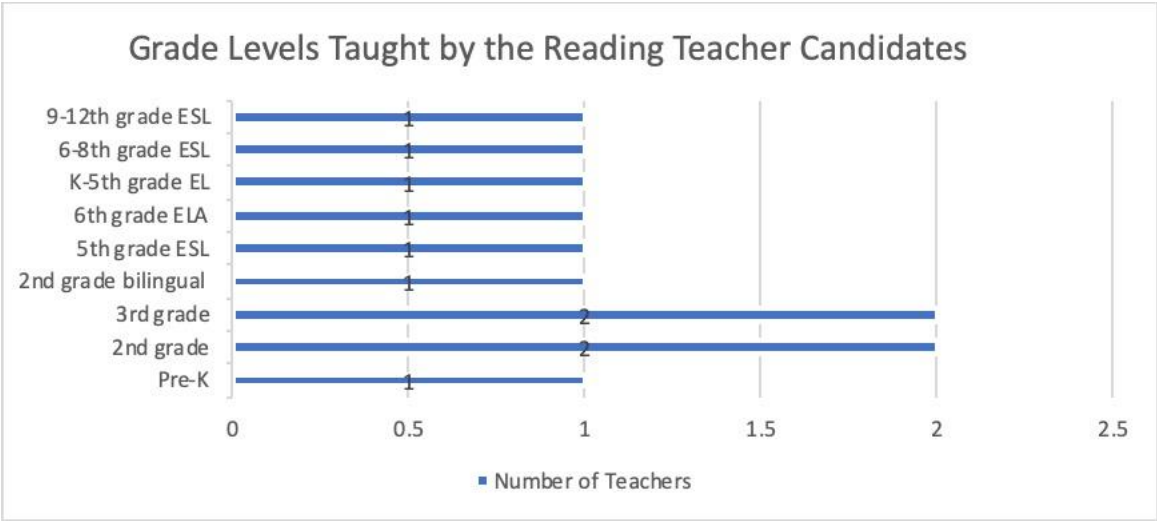
Figure 5. Grade levels taught.

Seven participants stated this was their first online experience with an online program, while four participants stated it was not their first online experience, shown in figure 6.
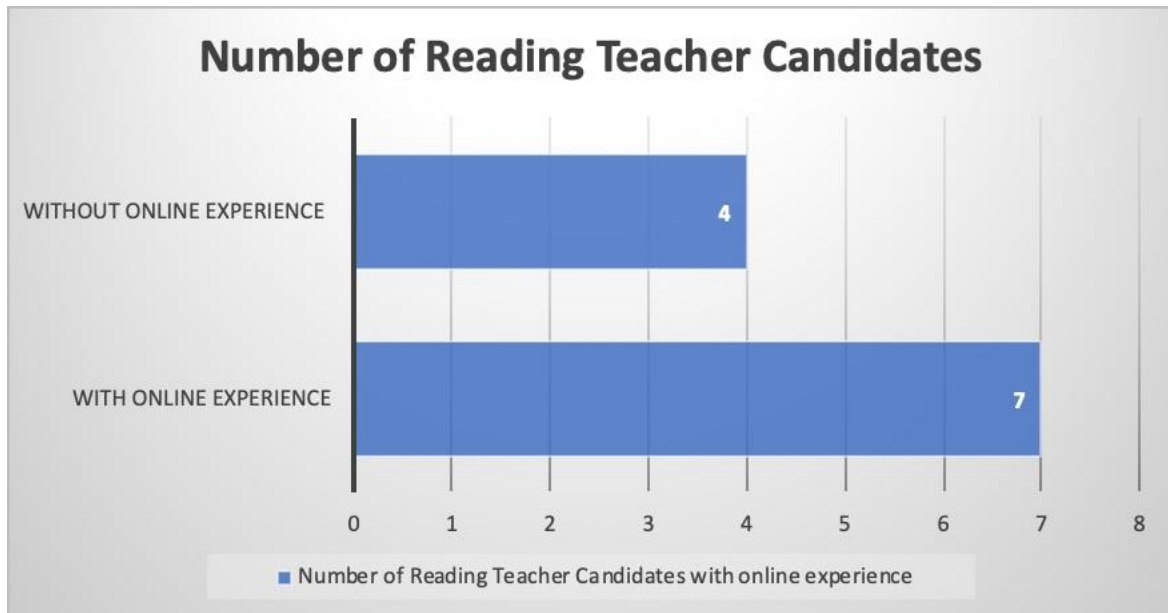
Figure 6. Reading teaching candidates who have taken an online course and those who have not.

The 11 participants were asked why and how they chose their online institution. Five respondents mentioned NLU would provide a quality education online from a reputable institution, they heard wonderful things about the institution from co-workers, flexibility, and had the classes/programs they were most interested in because they offered the Specialized Endorsement Master's Degree. Three respondents chose NLU because they went to Illinois Resource Center (IRC) for their ESL endorsement through NLU and wanted to continue on to get their master's degree. Two respondents chose NLU because the program was online, and they needed flexibility due to hectic home and/or work lives. One respondent chose NLU because of the credit and affordability. These responses helped clarify why the participants chose NLU as an institution. The majority of the reading teacher candidates chose the program because it was offered online which allowed flexibility and the Specialized Master's Program.

RQ1: How Did the Reading Teacher Candidates Perceive the Online Clinical Course Sequence?

To address research question one, how did the reading teacher candidates perceive the online clinical course sequence, I looked at the overall perceptions of the reading teacher candidates on the online clinical course sequence by analyzing the CoI survey results. The results of the survey were triangulated with one-on-one reading teacher interviews (individual case studies) that follow whole the group data.

Twelve teacher candidates from the online reading program at NLU were asked to complete an online survey (see Appendix A). Eleven responses were received, which was a 92% response rate. The survey utilized the CoI survey plus several additional open-ended items to elicit teacher perceptions of their learning. I report findings of the CoI portion of the survey first, followed by a thematic analysis of the open-ended survey items.

The CoI portion entailed a total of 34 statements comprised of three factors, which were instructor presence, social presence, and cognitive presence. Instructor presence examined instructor visibility. Social presence examined interactions among students. Cognitive presence examined curriculum delivery. Each one of the factors entailed subfactors that further distinguished them. The participants rated each one of these statements on a 5-point Likert Scale, using strongly disagree, disagree, neutral, agree, and strongly agree. At the end of the survey, there were two demographic and six open-ended questions. Overall, the responses on the reading teacher candidate survey were *disagree, neutral, agree, or strongly agree.*

Figure 7 portrays the overall CoI data collected from the 11 respondents. The data shows that the reading teacher candidate's overall perception of teacher presence (128 responses were *strongly agree*) in the online clinical course sequence was higher in comparison to the

respondent's perception of social presence (68 responses were *strongly agree*). The reading

teacher candidate's evaluation of cognitive presence (91 responses were *strongly agree*) fell in

between, but was largely positive with the majority of responses *agree* or *strongly agree*.
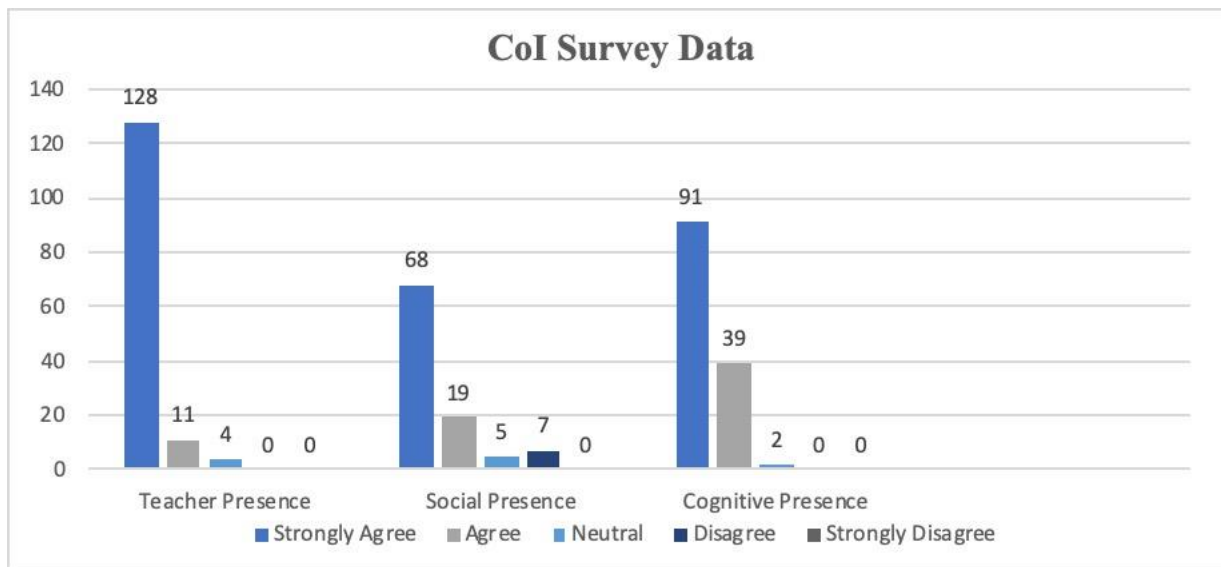
Figure 7. Reading teacher candidates' responses for each section of the CoI survey.

The items on *teaching presence* involved three subfactors: (a) to disseminate information

based on the design and organization, (b) facilitation, and (c) direct instruction of the online

courses. According to the survey authors, teacher presence is comprised of the design of the

course and how engagement is facilitated to ensure cognitive and social presence for the purpose

of meeting educational learning outcomes (Anderson, Rourke, Garrison & Archer, 2001).

Teaching presence is thought to underpin the other presences.

The first subfactor of teaching presence, *design and organization*, explored how the

course is constructed and prepared by the instructor. The survey results showed 41 out of the 44

responses from the four questions in the subfactor *agreed* or *strongly agreed* that the instructor

clearly communicated important course topics, goals, how to participate in course learning

activities and important due dates/time frames for learning activities. One participant chose

neutral in regard to the instructor communicating important due dates/time frames for learning

activities. Overall, 98% of the participants *strongly agreed* or *agreed* and that there was teaching

presence in the design and organization in the online courses. Table 2 lists the first four

statements and shows the respondents' choices.

Table 2

CoI Statements on Teaching Presence: Design and Organization

Statements on Teaching Presence Design and Organization	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The instructor clearly communicated important course topics.	0	0	0	1	10
2. The instructor clearly communicated important course goals.	0	0	0	0	11
3. The instructor provided clear instructions on how to participate in course learning activities.	0	0	0	2	9
4. The instructor clearly communicated important due dates/time frames for learning activities.	0	0	1	0	10

The second subfactor reflected teaching presence as *facilitation* of the online courses.

Facilitation examined how the instructor taught the course. Sixty four out of the 66 responses

from the six questions in the subfactor demonstrated that they *agreed* or *strongly agreed* that the

instructor was helpful in identifying areas of agreement and disagreement on course topics that

helped them learn, in guiding the class towards understanding course topics towards

understanding course topics in a way that helped them clarify their thinking, to keep participants

engaged and participating in productive dialogue, keep the course participants to explore new

concepts in the courses and the instructors actions reinforced the development of a sense of community among course participants. Two respondents chose *neutral* in regard to the instructor keeping the course participants engaged and participating in productive dialogue and the instructor's actions reinforced the development of a sense of community among course participants. Nine out of the 11 respondents *agreed* or *strongly agreed* that the instructor was helpful in the facilitation of the online course. Overall, 82% of the participants *strongly agreed* or *agreed* that there was teaching presence with respect to the facilitation of the online courses. Table 3 lists the next six statements and the respondents' choices.

Table 3

CoI Statements on Teaching Presence: Facilitation

Statements on Teaching Presence Facilitation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.	0	0	0	0	11
2. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.	0	0	0	0	11
3. The instructor helped to keep course participants engaged and participating in productive dialogue.	0	0	1	0	10
4. The instructor helped keep the course participants on task in a way that helped me to learn.	0	0	0	1	10
5. The instructor encouraged course participants to explore new concepts in this course.	0	0	0	1	10
6. Instructor actions reinforced the development of a sense of community among course participants.	0	0	1	1	9

The third subfactor of teaching presence reflected the *direct instruction* offered in the online courses. Direct instruction is how the instructor specifically helped the reading teacher candidates focus on relevant issues, feedback and how the instructor furthered their understanding of topics related to the course goals. Thirty-two out of the 33 responses from the three questions in the subfactor were either *agreed* or *strongly agreed* the instructor helped them focus on a discussion topic with relevant issues that prompted learning, provided helpful feedback that helped understand the course goals, strengths and weaknesses and provided timely feedback. One respondent responded *neutral* in regard to the instructor provided discussions on relevant issues that helped the reading teacher candidate learn. Five out of the 11 students *agreed* with the instructor provided direct instruction that helped them learn pertinent topics, applicable feedback, and timely feedback. The final 17 responses *strongly agreed* the instructor provided direct instruction throughout the clinical course sequence. Overall, 97% of the respondents *strongly agreed* or *agreed* that there was teaching presence in the direct instruction provided within the online environment. Table 4 lists the next three statements and the respondents' choices.

Table 4

CoI Statements on Teaching Presence: Direct Instruction

Statements on Teaching Presence Direct Instruction	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.	0	0	1	1	9
2. The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.	0	0	0	3	8
3. The instructor provided feedback in a timely fashion.	0	0	0	1	10

The overall survey data for teaching presence demonstrated that 97% of the responses were *agree* or *strongly agree* that the clinical course sequence provided teaching presence leaving only 3% of the responses as neutral. This data indicates that these candidates perceived that the instructor was present throughout the clinical course sequence. This teaching presence encouraged reading teacher candidate engagement with course materials, interaction with classmates, successful direct instruction, helpful facilitation and clear course design and organization. A strong teaching presence helps reading teacher candidates succeed in the course and complete their online programs.

The second factor of the CoI survey examined *social presence,* which reflected affective expression, open communication, and group cohesion. Social presence refers to how the reading teacher candidates communicated within the online environment while they established relationships to further develop their professional relationships. It is valuable to create open communication where students feel secure to communicate freely and cultivate social bonds (Garrison, 2007).

The subfactor on *affective expression* measured how the reading teacher candidates felt interacting in the online courses. Twenty-eight out of the 33 responses from the three questions in the subfactor revealed that they *agree* or *strongly agree* that the online clinical course sequence promoted getting to know other course participants that gave the reading teacher candidates a sense of belonging in the course, helped them to form distinct impressions of their classmates and provided an excellent method for communication and social interaction. One participant stated they *disagreed* that the online clinical course sequence provided affective expression. One participant was *neutral* in regard to the reading teacher candidate feeling that they were able to form distinct impressions of course classmates and the course communication

was an excellent tool for social interaction. Overall, there was more variation in the perceptions of the candidates on the affective expression factor with 85% of the respondents *agreeing* or *strongly agree*ing there was affective expression. Table 5 lists the next three statements and the respondents' choices.

Table 5

CoI Statements on Social Presence: Affective Expression

Statements on Social Presence Affective Expression	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Getting to know other course participants gave me a sense of belonging in the course.	0	1	0	3	7
2. I was able to form distinct impressions of some course participants.	0	1	1	3	6
3. Online or web-based communication is an excellent medium for social interaction.	0	1	1	3	6

The second subfactor of social presence focused on *open communication,* which looked at how the reading teacher candidates felt about communicating freely without worrying about embarrassment. Thirty out of 33 responses from all three questions in the subfactor were *agreed* or *strongly agreed* with the statements on feeling comfortable conversing in the online environment, participating in course discussions and interacting with other course participants while completing the clinical course sequence. Three participants responded neutral to feeling comfortable conversing in the online courses, participating in the course discussions and interacting with classmates. Two out of 33 responses stated they disagreed with feeling comfortable participating in the course discussions and interacting with their peers. Overall, 91% of the respondents *agreed* or *strongly agreed* there was open communication in the online clinical course sequence. Table 6 lists the next three statements and the respondents' choices.

Table 6

CoI statements on Social Presence: Open Communication

Statements on Social Presence Open Communication	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I felt comfortable conversing through the online medium.	0	0	1	1	9
2. I felt comfortable participating in the course discussions.	0	1	0	1	9
3. I felt comfortable interacting with other course participants.	0	1	0	1	9

The third subfactor of social presence reflected group *cohesion*, the feeling they got interacting with their classmates as a community. Twenty-nine out of 33 responses from the three questions in the subfactor *agreed* or *strongly agreed* with the statements on feeling comfortable disagreeing with course participants while still maintaining a sense of trust, practicing in the course discussions and felt the discussions helped the reading teacher candidates develop a sense of collaboration. Two out of 33 responses disagreed with the statements pertaining to the comfort level of participation in course discussions and that the discussions helped give them a sense of collaboration. Overall, 88% of the respondents chose they *agreed* or *strongly agreed* that they felt there was group cohesion in the online clinical course sequence. Table 7 lists the next three statements and the respondents' choices.

Table 7

CoI statement on Social Presence: Group Cohesion

Statements on Social Presence Group Cohesion	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	0	0	1	4	6
2. I felt that my point of view was acknowledged by other course participants.	0	1	0	1	9
3. Online discussions help me to develop a sense of collaboration.	0	1	1	2	7

Overall, 68% of the responses *agreed* or *strongly agree*d that the online clinical course sequence offered social presence in regard to affective expression, open communication, and group cohesion. One of the respondents *disagreed* with social presence in the online environment. These data suggested the need for an added component to increase the overall feel of social presence in an online course. Garrison (2007) stated, "As valuable as it is to establish effective communication and developing social bonds, it is essential that the group feels secure to communicate openly and coalesces around a common goal or purpose for a community to sustain itself" (p. 3). It is important for the instructor to establish a presence that encourages personal relationships among peers.

The third factor of the CoI survey examined *cognitive presence*. This online presence reflected a cognitive influence that involved a triggering event, exploration, integration, and resolution. Cognitive presence refers to how the reading teacher candidates interacted and applied the course materials. Garrison (2007) discussed the importance of designing appropriate tasks for students to complete that require a resolution that is reinforced with collaborative learning.

The first subfactor with the cognitive presence of the CoI survey measured a *triggering event*. A triggering event included activities related to an individual's understanding or curiosity related to presented materials. Thirty-two out of the 33 responses from the three questions in the subfactor revealed that they *agree* or *strongly agree* that the online clinical course sequence had a triggering event such as problems posed increased to their interest in course interest, course activities piqued their curiosity and they felt motivated to explore content-related questions. Overall, 97% of the respondents had a triggering event. Table 8 lists the next three statements and the respondents' choices.

Table 8

CoI Statements on Cognitive Presence: Triggering Event

Statements on Cognitive Presence Triggering Event	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Problems posed increased my interest in course issues.	0	0	1	3	7
2. Course activities piqued my curiosity.	0	0	0	4	7
3. I felt motivated to explore content related questions.	0	0	0	4	7

The second subfactor of cognitive presence in the CoI survey measured *exploration*. Exploration reflected how the course activities encouraged students to look outside the online course for relevant materials that may further knowledge of the curriculum presented. Thirty-two out of the 33 responses from the three questions in the subfactor displayed that they *agree* or *strongly agree* that the online clinical course sequence did utilize a variety of sources to explore problems posed in the course, brainstormed to find relevant material to supplement learning and the online discussions offered many different perspectives. Overall, 97% of the respondents felt they were encouraged to explore outside resources. Table 9 lists the next three statements and the respondents' choices.

Table 9

CoI Statements on Cognitive Presence: Exploration

Statements on Cognitive Presence Exploration	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I utilized a variety of information sources to explore problems posed in this course.	0	0	0	4	7
2. Brainstorming and finding relevant information helped me resolve content related questions.	0	0	0	3	8
3. Online discussions were valuable in helping me appreciate different perspectives.	0	0	1	3	7

The third subfactor in cognitive presence examined *integration*. These statements analyzed how well reading teacher candidates felt they were able to apply the learned skill sets to their profession. Thirty-three out of the 33 responses from the three questions in the subfactor showed that they *agree* or *strongly agree* that the online clinical course sequence helped them understand how to combine new information to perform course activities, construct explanations and solutions and reflect on the course content to understand the fundamental concepts in the courses. Overall, 100% of the respondents felt integration was successfully provided. Table 10 lists the next three statements and the respondents' choices.

Table 10

CoI Statements on Cognitive Presence: Integration

Statements on Cognitive Presence Integration	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Combining new information helped me answer questions raised in course activities.	0	0	0	3	8
2. Learning activities helped me construct explanations/ solutions.	0	0	0	3	8
3. Reflection on course content and discussions helped me understand fundamental concepts in this class.	0	0	0	3	8

The fourth subfactor of cognitive presence examined *resolution*, how well information learned could be transferred to their profession, how solutions created were applied when practicing, and applications of learned knowledge to outside activities. Thirty-three out of the 33 responses from the three questions in the subfactor revealed that they *agree* or *strongly agree* that the online clinical course sequence had resolution. Overall, 100% of the respondents feel a resolution was presented within the clinical course sequence. Table 11 lists the final three statements and the respondents' choices.

Table 11

CoI Statements on Cognitive Presence: Resolution

Statements on Cognitive Presence Resolution	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I can describe ways to test and apply the knowledge created in this course.	0	0	0	**4**	7
2. I have developed solutions to course problems that can be applied in practice.	0	0	0	**3**	8
3. I can apply the knowledge created in this course to my work or other non-class related activities.	0	0	0	**2**	9

Overall, 130 out of 132, or 97%, of the responses from the 12 statements regarding a triggering event, exploration, integration and resolution in the online clinical course sequence *agreed* or *strongly agreed* that cognitive presence was evident. These data indicated that these candidates perceived that the online clinical course sequence encouraged them to interact with course materials in a way that they can apply the skills learned to their professions. To achieve cognitive presence a strong teaching presence must also be formed. The data indicated that these candidates also perceived a strong teaching presence throughout the clinical course sequence therefore, allowing the reading teacher candidates to enact cognitive presence (Garrison, 2007).

Teacher Reflections on Online Learning Experience

To further understand the reading teacher candidate's perceptions of the online clinical course sequence, the participants were asked several additional questions at the end of the CoI portion of the survey. The overall findings showed the majority of the participants had a positive experience in the online clinical course sequence. Six out of the 11, which is 55%, of the respondents mentioned they chose the online program due to their schedule and flexibility. One respondent shared she still had the "opportunity to learn and grow as an educator while still maintaining my role as a mom and wife." Six out of the 11, 55%, of the respondents, shared a positive opinion of their online learning experience. One respondent mentioned they were hesitant to complete an online program because they enjoy "interactions with other students." They realized online learning did allow them to collaborate just as if they were in a classroom. They shared there was an adjustment period but once they were comfortable with the format, they enjoyed the pace of online learning. One respondent was concerned they would have trouble learning the material in an online environment and shared they were a visual learner and was worried it would be difficult to learn the material presented. They continued on to share they

"quickly found out this is not the case as there are plenty of visuals and videos to help us learn."
Two out of the 11, or 18% of the respondents, had a neutral or challenging experience in the
online clinical course sequence, one of the respondents shared they felt online learning was
frustrating. Two main themes emerged from the open-ended survey items.

      Online learning provided flexibility. The common response as to why the reading
teacher candidates chose the online program was for the flexibility. One respondent stated that
they, "loved online learning because it was at their pace." One respondent shared that they chose
the online program due to their busy schedules and enjoyed not having to commute to an on-
campus location. Another respondent shared it was nice to have flexibility in regard to time to
complete assigned activities by the deadlines, supporting the above comment about working at
their own pace. One respondent shared they were happy to not have to travel to an on-campus
classroom and still be able to, "interact and complete projects with my peers as well as learn
valuable information from my instructors through videos, slide shows and readings and articles."
The flexibility allowed reading teacher candidates to enroll in a higher education program and
most shared they would not have had the opportunity to complete their degree without this
option due to work and other personal commitments.

      Online learning was enjoyable. Respondents shared that they loved their online learning
experience and through prior knowledge, the guidance of their teachers, various activities, and
student collaboration they were able to learn. Respondents shared the online environment
promoted the reading teacher candidates to be independent and organized. One respondent was
happy to use what they were learning during the courses and implement the material in their own
classroom, and they were pleased that they were, "able to learn about new updated items and
resources from their professors and peers" and thought the interaction was helpful. Another

respondent shared they "absolutely loved" online learning. They further stated that they had felt that they were in a class with a "community of learners even though they had never met." One respondent further mentioned it was another way to differentiate learning while teaching students essential skills such as "organization, productivity and online etiquette."

<center>**RQ2: Perceptions on Synchronous Communication or Virtual Presence**</center>

To examine the perceptions of virtual presence during the clinical course sequence, three short answer questions from the reading teacher candidate survey were thematically analyzed. The first question asked the reading teacher candidates to define synchronous communication; the second question asked them to describe if they felt synchronous communication was beneficial; and finally, the third question asked if they felt more synchronous communication during the practicum course was needed.

In regard to question two where they were asked to describe if they felt synchronous communication was beneficial, all of the reading teacher candidates felt the use of virtual presence was beneficial. The reasons the reading teacher candidates found synchronous communication beneficial was that they received immediate feedback in the moment, they were able to build relationships with instructors and ask questions in real-time, found comfort in being in their own home, the live video chats allowed them to discuss learning, and finally it helped to have a discussion and not just reading provided feedback. These responses depict synchronous communication as a positive inclusion to the online environment.

Overall, the reading teacher candidates defined *synchronous communication* using five major assertions:

1. Using technology to have meaningful discussions at the convenience of all parties.

2. Communicating immediately with one or more individuals via video conferencing.

3. Giving live feedback and talking as if you were face-to-face.

4. Communicating in a virtual way through email, Google Docs and discussions.

5. Being in the online environment.

These assertions were repeated throughout each reading teacher candidate's completed definition of synchronous communication. The five assertions disseminated the perceptions of the reading teacher candidates and revealed what assisted their success in the online environment.

In regard to question three, did they feel more synchronous communication in the practicum course was needed, five reading teacher candidates felt there was just enough synchronous communication and six candidates felt more would be better. All of the reading teacher candidates felt flexibility was important because of the many different schedules. This leads to the challenges the reading teacher candidates discussed, having numerous schedules to work around posed a challenge. For example, not only did reading teacher candidates have to look at their schedule, but they also had to look at their student's schedule and then their supervisor's schedule. At times this posed some challenges, especially if the reading teacher candidate wanted to conduct their tutoring sessions during the day while some of the supervisors had outside obligations to work around. Although this was challenging for all parties involved, it did not become a problem and stifle the experience.

Overall, synchronous communication was well perceived, with one specific challenge, working around numerous schedules, but helped the reading teacher candidate achieve success within the online clinical course sequence. First, I had to define synchronous communication based on the reading teachers' responses and then look at how those definitions correlate within an online course. Figure 8 represents the reading teacher candidates' definitions and the five distinct assertions that emerged from the evaluation of the short response questions based on

synchronous communication or virtual presence in the online environment. The five assertions

were (a) comfort of being in your home, (b) video communication, (c) receive feedback in the

moment, (d) build relationships with instructor and classmates, and (e) live chat to discuss

learning.
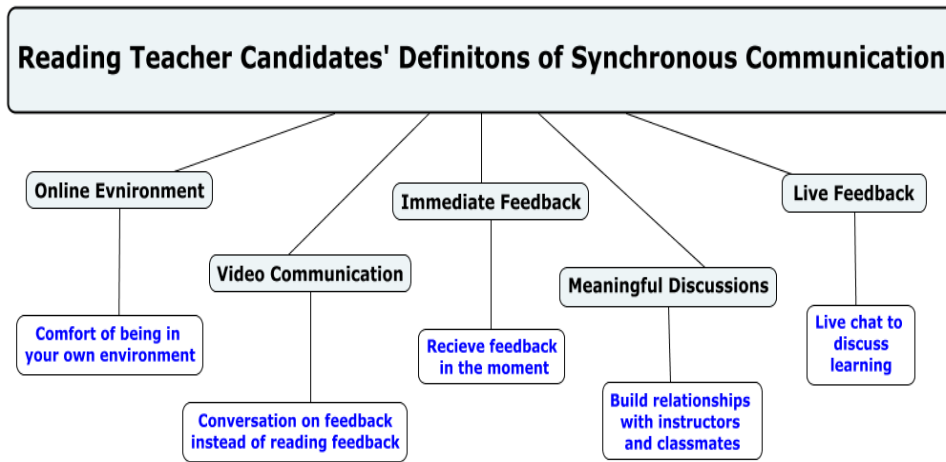
Figure 8. Reading teachers' definitions of synchronous communication

From the five distinct definition assertions found within the definitions provided by the

reading teacher candidates, three overall themes appeared to cut across each of the five assertions

students had about virtual presence in an online course. These themes were virtual presence

provided flexibility, virtual presence encouraged collaboration, and the incorporation of virtual

presence as an effective way to learn. Figure 9 portrays the overall themes of synchronous

communication (virtual presence).
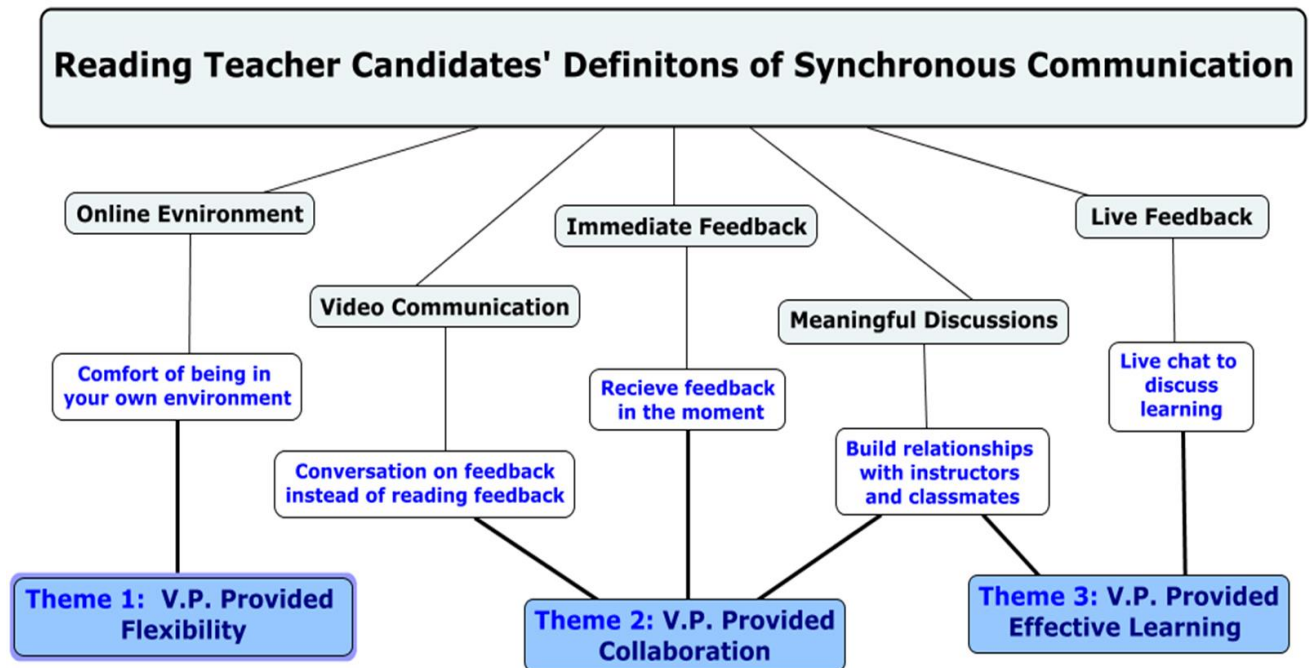
Figure 9. Overall themes of synchronous communication.

Virtual presence provided flexibility. This theme provided insight as to why the reading teacher candidates chose to complete the reading program in an online environment, learning at their own pace with given deadlines, ability to complete more schoolwork due to the lack of needing to commute to an on-campus classroom, and maintain their own schedule. One respondent shared, "There are times where you just need to speak to someone for 10 to 20 minutes but to go meet someone for that is completely out of the way and too complicated for email, so this was a perfect medium." One common reason found in the short responses was that the reading teacher candidates chose the online program due to other commitments or schedules. One respondent shared, "I think (synchronous communication) it is a wonderful way to communicate and helps those who work a lot." Many of the respondents shared the desire to have "conversations" with their peers and asked how virtual presence could help promote

collaboration in the online environment, one respondent shared, "There are times that it would be helpful to discuss our challenges or successes with other classmates and get advice from them."

Virtual presence provided collaboration. This theme provided insight into the learning environment and how the reading teacher candidates utilized teacher, social and cognitive presence throughout the online clinical course sequence. A respondent shared, "The online communication and collaboration supported my learning." Further discussions within this theme include the specific experiences of reading teacher candidates and instructors on their evaluation of the clinical courses and the use of synchronous communication (virtual presence). One respondent shared, "Helpful face-to-face time." Many of the reading teacher candidates mentioned that they would rather meet face-to-face, but do not have that option due to time constraints. When asked about adding virtual presence as an alternate choice, one respondent shared, "At first it was slightly difficult for me because I would rather meet in person, however, once you get used to it, it worked out very well." Encouraging collaboration among classmates increases student engagement promoting a more effective learning environment.

Virtual presence provided effective learning. This theme provided insight into the effectiveness of the reading teacher candidate's overall education in the reading program. One respondent shared, "I probably would have failed without it." Evaluation of the data from student assessments provided information on the challenges and successes that accompany online learning. The addition of virtual presence during the practicum course had positive reviews. One respondent shared, "I think discussing our observations in this manner provided great conversation between the instructor and student that helped build a strong relationship." The overall perceptions of the reading teacher candidates demonstrate the importance of adding virtual presence in the online clinical course sequence, especially practicum.

Now that we have a sense of how the reading teacher candidates have perceived their online learning experience and the role of virtual presence, we can determine how they actually performed according to the key assessment data. This data is important because it demonstrates the overall performance of each reading teacher candidate.

SRQ 2: How Well Did the Reading Teacher Candidates Enact and Learn Core Practices?

I analyzed data pulled from D2L (course platform) to address research question sub-question two, which was How did the virtual presence experiences support candidates to enact and learn reading core practices?

Key assessment data. The key assessments are an overall measure of the reading teacher candidate's success based on their four required student observations throughout their practicum course. Two of these observations are recorded 30-minute sessions of the reading teacher candidate tutoring their student, one observation is completed when the supervisor watches a previously taped tutoring session and evaluates the reading teacher candidate's teaching with a required live follow-up meeting within 24 hours of the submission, the final observation is a live 30-minute tutoring session with a follow-up meeting directly after tutoring. The eight areas of criteria on the observation rubrics and key assessment examine: (a) the content of the lesson plans, (b) materials used, (c) language used, (d) the tutor listens, (e) scaffolds, (f) metacognition, (g) pacing and rapport, and (h) are all Illinois state standards.

The observation rubrics (see Appendix D) scored the reading teacher candidates on a scale of 3–Proficient, 2–Basic, 1–Unsatisfactory, and *–not observed. The key assessment is a culminating overall assessment of the reading teacher candidate's four observations and has the same scale, but proficient means that all routines are appropriate to support student's literacy.

The reading teacher candidate's overall competency scores were collected from D2L in the courses RLR 592 A and RLR 592 B and placed on the key assessment rubric (see Appendix E). The data from the key assessments from the practicum course with the younger student showed, seven out of the 11 reading teacher candidates received 100%, one reading teacher candidate received 95.83%, one reading teacher candidate received 91.67%, and two reading teacher candidates received 87.5%. These data demonstrated 100% of the reading teacher candidates were successful in meeting the core practices and reading program goals. Figure 10 depicts the key assessment grades after practicum for the reading teacher candidate's younger student and Figure 11 displays the older student.
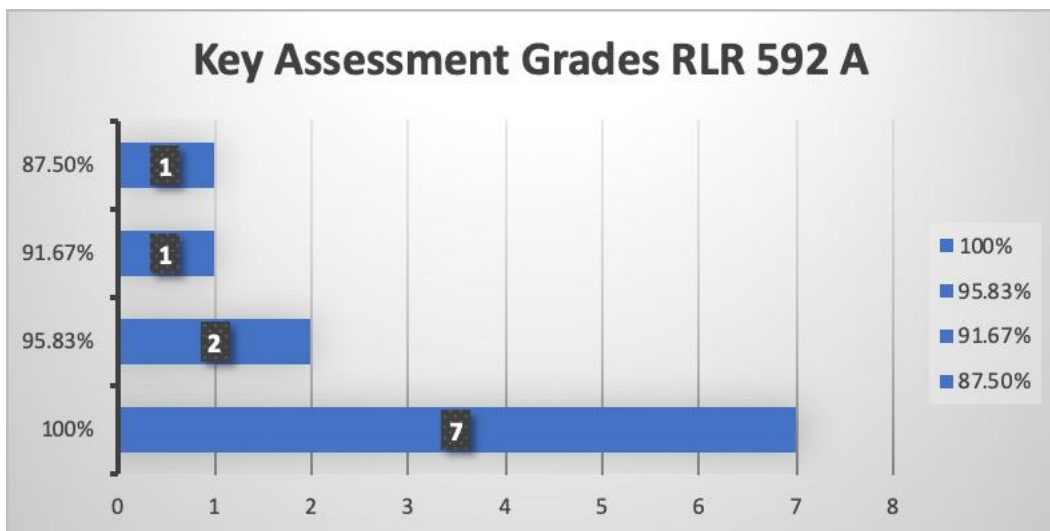
Figure 10. Key assessment grades for younger practicum student.
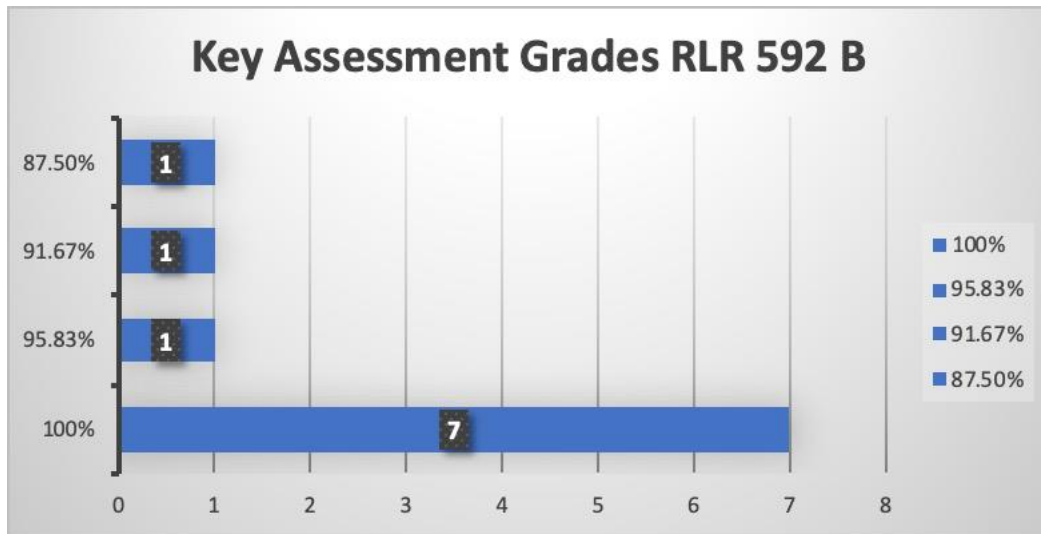
Figure 11. Key assessment grades for older practicum student.

The data from the key assessments the practicum course with the older student revealed seven out of the 11 reading teacher candidates received 100%, two reading teacher candidates received 95.83%, one reading teacher candidate received 91.67%, and one reading teacher candidate received 87.5%. These data demonstrate 100% of the reading teacher candidates were successful in meeting the reading program goals.

The final piece of data collected from D2L was the grades for the 11 reading teacher candidates grade on their final reports, which assessed five areas of criterion. First, the initial diagnosis, which included complete testing information and accurate diagnosis based on the assessments administered. Second, description of instruction, which included a full comprehensible description of the instruction for each component of literacy that was addressed. Third, description of progress, which describes the student's progress in all areas of literacy assessed supported with appropriate formal and informal data. Fourth, makes good recommendations with specific strategies learned based on the instruction given and assessment for further instruction. Finally, the fifth criterion was style and format, which looks the accuracy

and appropriateness of the report in regard to grammar, APA format and punctuation. The rubric is evaluated as proficient, basic, and unsatisfactory.

These data, shown in Figures 12 and 13, gave insight as to what reading teacher candidates had learned about completing a formal write-up. Reading teacher candidates composed a final report on their student which represented the process of completed throughout the clinical course sequence. First, the reading teacher candidates had to select a student to assess and diagnosis. Next, they had to create an implementation plan based on their findings utilizing materials and strategies represented and decomposed. Then they completed their tutoring sessions while continually assessing their instruction and the student's performance. Finally, the reading teacher candidates had to develop final recommendations on how to further the student's learning in literacy. This report is significant because it portrays the reading teacher candidate's overall knowledge of how-to diagnosis a student's reading difficulty, how to plan and implement strategies to help this student advance in their literacy skills and complete a formal write-up.
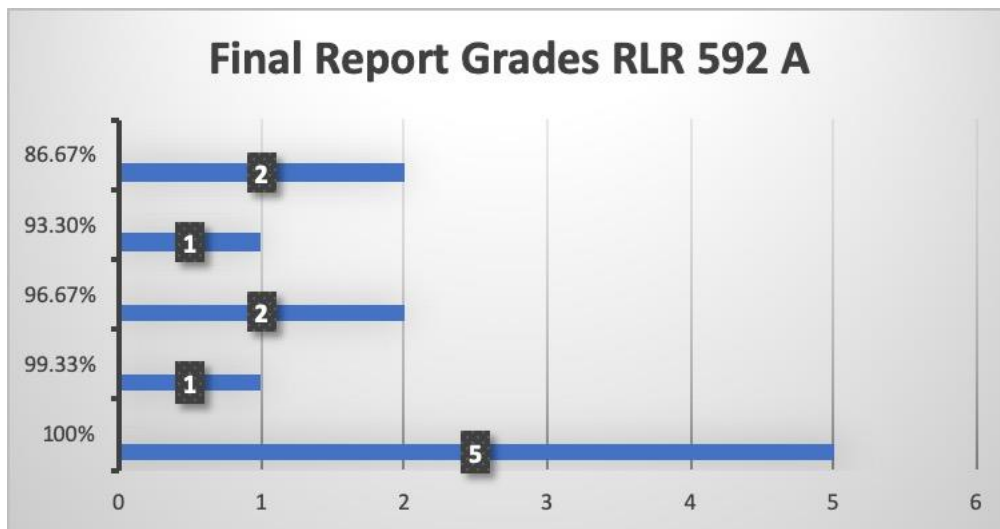
Figure 12. Final Reports for the practicum course with the younger student.

The data from the Final Report for practicum with a younger student shows nine out of the 11 (82%) students scored proficient. Two out of the 11 (18%) scored basic. Further analysis of the reading teacher candidates' scores showed they needed more support with initial diagnosis, description of instruction and style and format. As a supervisor in the course, I feel the data supports the need for further cognitive presence in the online courses with the possible addition of more samples, further description of how-to write-up a formal report and synchronous meetings for those who need extra assistance.
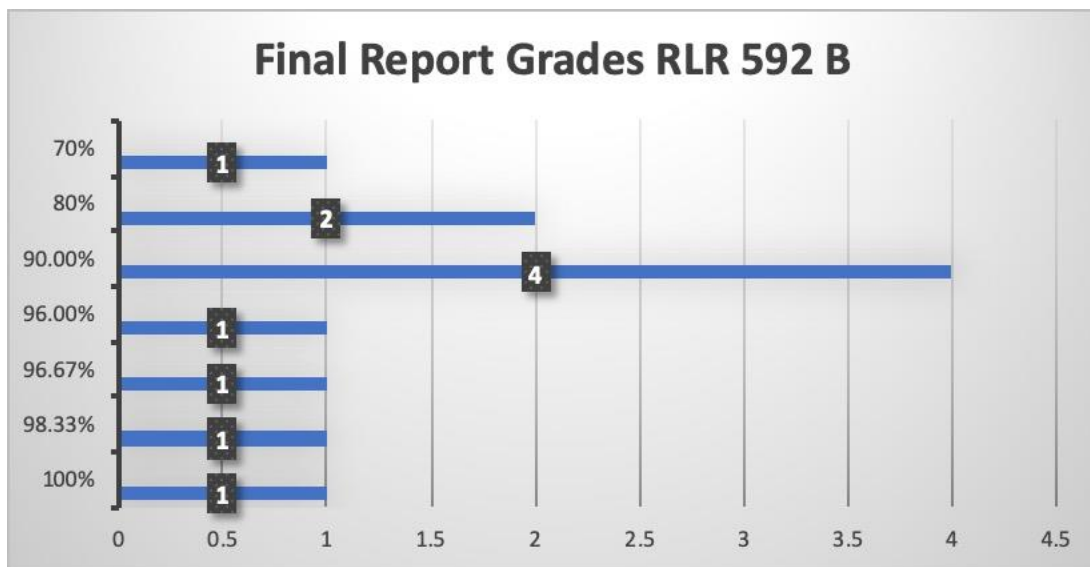
Figure 13. Final reports for the practicum course with the older student.

The data from the final report for the practicum with an older student shows eight out of the 11 (73%) students scored proficient. Two out of the 11 (18%) scored basic with the remaining one (9%) student falling in the unsatisfactory category. This data shows a few students needed more support with completing the final report. Further analysis of the basic scores shows the reading teacher candidates struggled on the initial diagnosis, description of instruction, description of progress, recommendations, and the style and format with scores falling in the basic category. Further analysis of the reading teacher candidate who achieved unsatisfactory as

their final score achieved a basic level on the rubric but unsatisfactory on the description of progress. As a supervisor in the course, it seems the samples provided for the older student report were more beneficial and reading teacher candidates had further success writing this final report.

Instructor Case Studies

To address research question two, how did the reading teacher candidates and instructors utilize and perceive virtual presence during the clinical course sequence, I conducted six case studies, three with reading teacher candidates and three with instructors. I examined the reading teacher candidates' and instructors' interviews to examine if they corresponded with the five assertions pulled from the thematic analysis, which were (a) being in your home, (b) video communication, (c) receive feedback in the moment, (d) build relationships with instructor and classmates, and (e) live chat to discuss learning. From these five assertions, the thematic analysis emerged three overlapping themes on the incorporation of virtual presence in an online course, which were (a) virtual presence provided flexibility, (b) virtual presence encouraged collaboration, and (c) incorporation of virtual presence was an effective way to learn. Each case was written up in a narrative framework to reveal similar and different responses based on each individual's perceptions and experiences involving virtual presence in an online clinical course sequence. According to Creswell and Poth (2018), "Chase (2005) suggests analytic strategies based in parsing constrains on narratives-narratives that are composed interactively between researchers and participants and the interpretations develop by various narrators" (p. 70). The researcher pulled quotes from each interview to support the development of the case study.

Mary

The first instructor participant was Dr. Mary Hoch, an Assistant Professor and Reading Director for the past eight years at NLU. Mary has her doctorate degree in reading and language,

which she earned from NLU. A strength Mary shared with the online clinical courses is that those reading teacher candidates are still held to the same standards as the on-campus.

During my one-on-one interview with Mary, she disclosed that she was happy with the outcomes of the online clinical course sequence because when she designed the courses, she followed the face-to-face model and translated the same outcomes. Mary indicated that she has supervised the on-campus practicum for the past eight years, which gave her an advantage when she designed the online practicum. Mary shared, "That it is necessary to use synchronous communication." She felt that only using asynchronous communication, she was not getting the results the reading department expected.

Mary stated that in the Diagnosis and Assessment of Literacy course, she added data meetings to help increase student success because it is the hardest to teach as they are learning advanced skills on how to be a reading specialist. These meetings were added after the first round of clinical courses online in 2018 and she shared that 100% participation was crucial because the students need practice since they have never administered diagnostic tests. The informational meeting was vital and allowed the reading teacher candidates to ask questions about the diagnostic process. Mary further shared that she felt, "Virtual presence does not necessarily mean it is synonymous with synchronous, it involves when a student sees an instructor's comment on an assignment or seeing when an instructor is in a course, especially in the lesson plans." Supervisors are required to check each lesson plan before a reading teacher candidate teaches; this is time-intensive and requires specific timeframes for both the reading teacher candidate and supervisor.

As a co-teacher within the practicum course, we felt it was necessary to have weekly meetings at the beginning of the session to discuss any important matters that arose while

checking our student's lesson plans. Mary discussed the process of the lesson plans; once a lesson plan is uploaded, the supervisor checks it over to ensure the lesson is properly paced, materials are appropriate, the student reading levels are accurate, and the strategies are going to enrich student learning. This part of the online practicum is time-consuming but effective. It was critical to check the reading teacher candidates' lesson plans before they teach to make sure their lessons are appropriate and promote literacy growth.

Just as it is important to pre-check lessons, it is as equally important to check the reading teacher candidate's reflection after the lesson. This is when a reading teacher candidate may ask questions or share thoughts that need a supervisor's response. Mary shared that she checks their logs (lesson plans) every morning and she stated that she, "Feels this is where virtual and teaching presence comes in and is extremely important." She further shared that, "The first five weeks we are giving explicit feedback and I would answer questions by adding links to videos or strategies." Mary feels that two out of the four observations have synchronous meetings and that is enough because the reading teacher candidates are "virtually" seeing the supervisor in various ways. She continued to say, "It is important to have some leeway because I feel that the teacher candidates see teaching presence in regard to feedback on a daily basis through their logs." During practicum, the reading teacher candidates had a lot going on; they had to gather material, conduct lesson pre- and post- checks, and ensure their student was in attendance for their sessions and their four observations.

Mary stated that "the success of a practicum course online is highly dependent on the supervisors or director's background." She further shared that her experience on-campus started with an "internship for two years before doing it on her own and has completed 4 or 5 times on her own face-to-face." Mary shared that, "the practicum experience is an eye-opening event

because they are utilizing practice-based application and RLR 511 is extremely important to prepare them before tutoring their students." She felt the immersion of synchronous communication within the practicum courses was the best thing they could do to demonstrate for reading teacher candidates what they were expected to do for this profession.

Mary shared her biggest challenge was, "Scheduling and managing my teacher candidate caseload." The point of the reading teacher candidates being online is the flexibility and with large numbers, it has been helpful to have three supervisors for practicum and the collaboration helps. Mary stated, "The logistics can be challenging because all of the supervisors have different schedules." One major difference from the on-campus practicum is that they have two weekly seminars that allow reading teacher candidates to collaborate and share what they are doing during this time. The online practicum used the discussion board as their seminar and allowed reading teacher candidates to collaborate. Mary felt that the discussions are more of an assignment. She mentioned her, "On-campus teacher candidates shared they could not imagine completing practicum during the school year." She also stated that she feels the online discussions are a form of "virtual" presence.

Mary shared that, "In the online practicum we still have to model and share what the teacher candidates are supposed to do during each tutoring session and eventually gradually release responsibility." She mentioned that she knows when the online students reached this point, she did not have to write as much feedback on the lesson plans. Supervisors have to give explicit feedback for the first few weeks to ensure the reading teacher candidates are receiving the support needed to be successful. Once a reading teacher candidate has mastered writing lesson plans that demonstrate literacy growth, we do not have to pre-check them. Mary mentioned that she, "Does not know if all of the online teacher candidates can dig deeper into the

reason a student may be struggling with comprehension or another area of literacy as well as my on-campus teacher candidates."

Mary shared she does not think it is possible to add more synchronous communication during practicum because she could already see the effectiveness and the power of it. She discussed that she added a mandatory virtual meeting in teaching beginning literacy, the first course in the reading program. She added that it helped because the reading teacher candidates do not know who the instructors were, and it helped them form a relationship with their instructors. This meeting allowed the instructor to "meet" the reading teacher candidates during week two of the course and begin to build a connection with these individuals. This foundation was important when the reading teacher candidates began to take their clinical courses in the winter of 2020.

Mary also stated she wants to add a virtual meeting to teaching comprehension and content area reading because "Adding this virtual presence really does make a difference and it allows you to see the teacher candidates it allows you to build a relationship and get to know who the teacher candidate is as an individual." Mary noted that the synchronous opportunities she created are a testament that at least some virtual presence does have to be handled synchronous and you cannot just be asynchronous all the time. Synchronous meetings with the reading teacher candidates allowed coaching to be more effective because it is not just read, because reading feedback is a different cognitive process than hearing it orally and the opportunity to meet "face-to-face" is immeasurable.

Jana

My second one-on-one instructor interview was with Dr. Jana McNally. Jana has been in higher education since 2009 at Elmhurst College and earned her Ed.D. in Reading from NLU.

She started as an adjunct at NLU in the fall of 2014 and has been assisting Mary with practicum for 4 years.

During my one-on-one interview with Jana, she stated that she has a unique perspective because she has been a student in an online program and now teaches online. She stated that she, "preferred face-to-face because it was much more collaborative." She does feel online learning is improving and shifting to add more collaboration and is convenient. Jana took online courses in 2002 and there was no collaboration because online learning was just starting off and she lacked having conversations with teachers.

From her viewpoint as a supervisor, she loved the online practicum. Jana indicated that she has been in numerous classrooms to observe hundreds of students as a supervisor and feels that observing a teacher candidate behind a computer screen provides more of an authentic situation and alleviates the distraction a supervisor might have while sitting in the classroom. Jana shared, "From a scheduling perspective it has been great because reading teacher candidates do not have to wait for her schedule, they can record their lessons and upload them for her to watch." Jana is busy at home with her own children and the online practicum allowed her to still work and be a mother. She acknowledged that she felt there was more collaboration within an online environment because of the way the practicum is set-up, reading teacher candidates are required to meet with the supervisor one-on-one.

Jana defined synchronous communication as live communication, face-to-face behind a screen. Jana shared, "A huge advantage is to incorporate synchronous communication and helps to make the online course feel like a face-to-face course." She continued to discuss how it feels real and authentic because you are not just typing in a chat room. Jana feels that the reading

teacher candidates benefited from scheduling because they had flexibility and did not have to include drive or commute time and they could complete work on their schedule.

Jana discussed how offering online programs allow more individuals the opportunity to earn a degree. She shared,

> It eliminates discriminating against people who are working to support their families and before used to feel like it was education privileged to the wealthy who did not have to take off work because taking courses during the day or setting up a meeting during business hours can be difficult.

Offering online courses helps those potential students the ability to choose what institution they would like to attend even if it is not geographically close to home.

Jana felt there was a good amount of synchronous communication during the practicum courses. Jana shared, "The teacher candidates I supervised had a great pace and progress from the first video to the fourth video." She mentioned that she enjoyed the opportunity to see how the teacher candidates implemented strategies they discussed and how they took ownership of what they have learned. Throughout the sessions, reading teacher candidates had to reflect on each lesson, what went well and what did not, with this they had to differentiate their lessons to make sure the materials were at the student's instructional reading level. With that, reading teacher candidates were consistently informally assessing students as well as adding in a formal assessment every so often. Jana discussed the part of synchronous communication she enjoyed was seeing a reading teacher candidate know when to move their student's reading level up.

The challenges Jana faced during practicum include when one student did not show up to a meeting and had no communication for five days. Jana shared, "In a face-to-face course a student cannot hide from talking to an instructor." She also mentioned it helped to have a

"written" history because the student was trying to get out of completing more videos, but the email correspondences held the reading teacher candidate responsible for the misconception. Another challenge was a reading teacher candidate was constantly late when handing in assignments since the online environment allows flexibility. The hard part is when the reading teacher candidates did not complete their discussion post on time. They would miss valuable opportunities to collaborate with their peers.

Jana shared she "was happy with how the practicum was run and online learning in conjunction with the addition of virtual presence is the way of the future." Being committed to having a live set-up will make online courses much more successful. This statement supports the idea of incorporating virtual presence in online courses because it will help students, in general, be more successful by providing the students with a "face-to-face" feel in the online environment.

Michelle (Researcher)

To further address research question two, which was how did the reading teacher candidates and instructors utilize and perceive virtual presence during the clinical course sequence, and how did the virtual presence experiences support candidates to enact and learn reading core practices, I was able to examine my experiences in the online clinical course sequence from an instructor and supervisor's point of view. One advantage of using synchronous communication, or virtual presence, is the flexibility it permits the reading teacher candidate and supervisor. Since I am a part-time employee at NLU and teach part-time at my local middle school, my available time to drive and observe a reading teacher candidate would be significantly limited. Using virtual presence to immediately view a live lesson without factoring in the drive time was extremely beneficial.

For example, I was able to see the reading teacher candidate and the student in an authentic setting and work around my schedule. This session I had four live video observations and all reading teacher candidates logged on promptly at the start of their lessons and we had the opportunity to meet virtually for an immediate follow-up meeting. These meetings allow me and the reading teacher candidate to discuss the lesson, progress, and go over any questions all from the convenience of a location of our choice. I also had the opportunity to view two more videos for each reading teacher candidate on my time and provide feedback without having to drive to the reading teacher candidate's location.

Another advantage of virtual presence is the ability to host a meeting and have those students join who are available. This gave the reading teacher candidates an opportunity to virtually meet their instructors and other classmates. This also provided reading teacher candidates the opportunity to ask questions in real-time. While working with my reading teacher candidates, I felt that the most important part of my supervision was during our synchronous meetings. These meetings allowed me to have a face-to-face conversation with my reading teacher candidates and provide them with the support needed. I also felt like I was building a relationship with these individuals.

The first addition of virtual presence was after the reading teacher candidates had the opportunity to administer an IRI assessment with a student of their choice during RLR 510. After they conducted the recorded assessment, they were to upload the recording to a predetermined peer discussion forum where the reading teacher candidates peer coached. Once feedback was received the reading teacher candidates had the opportunity to sign up for 15-minute data meetings with an instructor. Each instructor shared various dates and time on a Google Share drive allowing the reading teacher candidates to choose a date and time that fit into their

schedule. Once a reading teacher candidate signed up for a time slot the instructor sent out a

Zoom invite. These synchronous meetings are conducted one-on-one and require the instructor to

preview reading teacher candidate's uploaded recording, cover sheet, and the actual assessment

results. Majority of the reading teacher candidates make their meetings, but I did have one no

show. One challenge with this is that it took the spot from another potential reading teacher

candidate and the time of the instructor. The reason for the absence was that the reading teacher

candidate forgot, and something come up at school. After this experience, I made an adjustment

in the invitation of data meetings; I now include that I only wait 5 minutes before logging off and

send out Zoom reminders a few days before the synchronous meeting. The same opportunity was

offered during RLR 511 and we had 100% student attendance.

When a reading teacher candidate was struggling with a component of the course work or

administration of an assessment a synchronous meeting was set up to clarify any questions or

concerns. During the clinical course sequence I only had to meet with one reading teacher

candidate to clarify the protocol of the final report assignment at the end of practicum. This was

an important option because it allowed the reading teacher candidate to ask questions in the

moment and receive immediate feedback without the wait of a return phone call or email

response. This type of communication decreases potential feedback being misconstrued.

During practicum, reading teacher candidates were asked to record three 30-minute

sessions and upload them to the online course. The three recordings were watched by the

assigned supervisor, (myself), and given feedback. For two of the recordings, feedback was

given was through rubrics. For the third recording, feedback was given via Zoom video

conference the day after the instruction. One challenge with giving the feedback the day after the

recording was that the reading teacher candidate had already moved on from the lesson and was

thinking of what they would be doing next. Even though the feedback was synchronous, it was not "in the moment," which shows some of the limitations of virtual presence when it is not happening concurrently with the lesson being taught. Another type of feedback that was given to the candidates was a live tutoring session, which I observed as it was being held. This allowed me to provide the reading teacher candidate feedback immediately after the tutoring session. The data showed that the reading teacher candidates enjoyed the instantaneous feedback and the opportunity to further their learning through live discourse.

Adding virtual presence to a practicum course sequence is beneficial, but also has its challenges. During RLR 510 we had a mandatory synchronous meeting with 100% reading teacher candidate attendance. The importance of this meeting was to explicitly go over the sections of the individual reading inventory (IRI) assessment by Jerry Johns. For many of our reading teacher candidates, this was their first experience with the assessment, therefore it was necessary to go over how to administer, score, and interpret the results. Before hosting this meeting, the reading teacher candidates were required to watch a teacher administer the assessment and score the results giving them a chance to see what the assessment looked like in action. During the synchronous meeting reading teacher candidates could ask specific questions to further their understanding.

Another disadvantage of virtual presence I had was during a planned follow-up meeting with a reading teacher candidate who forgot about the meeting and did not show up. I have a rule to wait about five minutes and then I email the student to see what happened. In this case, the student forgot about the meeting, but received my email and was able to log on and complete the meeting.

These data supports adding virtual presence to an online course, especially a practicum one is beneficial and enhances the reading teacher candidates learning. It also showed the instructors felt virtual presence is the way of the future and will help students be successful in the online environment. The reading teacher candidate and instructor interviews gave me insight as to how to define virtual presence, it encompasses synchronous and asynchronous communication with the use of digital technology to enhance the overall reading teacher candidate experience with "virtual" face-to-face meetings. Although these "virtual" interactions were not conducted live, they were, in fact, able to get a "virtual presence" of one another.

Virtual Presence as Support

Virtual presence was evident in diagnosis and assessment of literacy through a synchronous meeting offered by Mary and myself on October 17. We did not make this a mandatory meeting and had eight out of the 16 reading teacher candidates in attendance. The meeting was recorded and uploaded to the course for reference. This meeting addressed how to administer the diagnostic assessment, the informal reading inventory, that reading teacher candidates were preparing to administer. This meeting allowed individuals to ask specific questions and receive live feedback. This was the only form of virtual presence in this course. The meeting was informative and allowed us to virtually meet our reading teacher candidates making learning more authentic. The idea of being able to put a live face to a name in an online course is phenomenal and prompted us to implement mandatory synchronous meetings in the first reading course in the program.

During week seven of the instructional strategies for literacy interventions course, Mary encouraged reading teacher candidates to sign up for individual data meetings, which would be conducted virtually, to go over their student's scores on the assessments administered to their

selected students for practicum. The meetings were allotted 15-minutes and 12 out of 13 reading teacher candidates signed up in a shared Google Doc to allow real-time visualization of what spots had been taken and what was available. This was the only form of virtual presence in this course.

Finally, in the practicum courses, virtual presence was required. Two virtual meetings were arranged by the reading teacher candidates and were accomplished when reading teacher candidates had their follow-up meetings or live observations. These meetings allowed me to share specific areas that needed improvement, highlight what went well, elaborate on strategies that might be useful to further learning, and give the reading teacher candidates an opportunity to ask questions on their teaching. Most of the meetings lasted 15-30 minutes and created a deeper instructor-reading teacher candidate relationship.

Reading Teacher Candidate Case Studies

To further examine reading teacher candidate's perceptions on how they perceive the online clinical course sequence, I created the PB-CoI tool (see Appendix B) to help design questions around the components *teacher*, *social* and *cognitive* presence while incorporating Grossman et al.'s (2012) essential teaching practices, representations, decompositions, enactments, and coaching. This foundation was used to analyze specific components of the online courses that correlated with the practice based teaching framework. While creating this tool, I devised a section on virtual presence to question the reading teacher candidate's thoughts on synchronous communication and virtual presence in place of synchronous communication because it was more compatible with the CoI components.

Therefore, it was necessary for me to include virtual presence in the PB-CoI tool while creating the instructor and reading teacher candidate interview questions. The PB-CoI tool

helped me examine the perceptions and specific experiences of virtual presence and its impact on the reading teacher candidates' learning of the core practices. From the interviews, I was able to pull quotes from the participants that correlated with the thematic analysis and helped me develop a within-case analysis of the in-depth interviews of their perceptions and experiences of virtual presence and online learning.

To examine how virtual presence supported teacher candidates to learn and enact the core practices, diagnosing, and differentiating learning, the four observation rubrics, key assessments, final report grades, three one-on-one reading teacher candidate interviews, and my field notes were analyzed. The first set of data examined was each of the three-reading teacher candidate's observation rubrics from each of the four observations, each reading teacher candidate chose their third observation to be live or synchronous (virtual presence).

Bella

Bella's student, Emily, was a first-grade student with a mid-kindergarten instructional level. Emily was administered the Illinois Snapshots of Early Literacy (ISEL). Emily's areas of need were with punctuation and letter sounds. Emily relied on pictures to assist her in reading a text. Bella's goal for Emily was to help her develop strategies that supported her to encode and decode unfamiliar words. Bella's instructional focus was on comprehension. Bella conducted her tutoring sessions at a local library. The beginning sessions were at a table located in a relatively quiet area. However, this still posed some distraction for Emily, therefore Bella changed the location to a private room. Bella noted that Emily would easily get off task when she was distracted.

Emily's initial diagnostic assessment showed she was reading at a level C according to Fountas and Pinnell's reading levels, which equates to a middle of kindergarten reading level.

Emily showed strength in vocabulary, one-to-one matching, and sentence structure. Building upon her strengths at the end of tutoring, she was able to independently read a level C book with 96% accuracy and an oral reading rate of 40 words per minute. Emily scored 100% on her comprehension questions.

Social presence. The first reading teacher candidate, Bella, was interviewed on June 3, 2019. At the start of the interview, I communicated that the questions were based on the CoI framework and were geared toward the clinical course sequence, RLR 510 (Diagnosis and Assessment of Literacy), RLR 511 (Instructional Strategies for Literacy Interventions) and RLR 592 (Practicum: Literary Interventions for Elementary and Secondary Students). During the interview, I defined social, cognitive, and teacher presence. The first set of questions were geared toward social presence in the online environment. Bella shared that she, "Enjoyed connecting with peers outside of class via social media outlet," which she did not think would happen in an online environment. Bella shared that she experienced the social and emotional climate in the clinical course sequence through, "The course discussions which were beneficial but would have liked more encouragement to interact with students." This data correlates with the survey responses in regard to affective expression. Bella suggested adding more Zoom meetings because of synchronous communication (virtual presence). Bella felt that there were clear goals set by the instructor which clearly stated what the features of the learning environment were which helped her understand the expectations clearly. When asked to describe ways she had the opportunity to work with classmates in the online environment that was the most helpful to her learning, she stated it was, "The peer coaching assignments completed in RLR 510 and RLR 511 because at least 8 different classmates got to see her teach." Bella also revealed that she liked having her lesson plans checked frequently because it helped her grow as a learner.

Cognitive presence. Bella shared that she was able to interact with the materials presenting in the online clinical course sequence and the materials were beneficial, especially the "PowerPoints and the organization of the course" so she clearly knew what her job was and the objective she had to meet. She declared that she did not have to look for outside resources for the course assignments. Bella shared that she utilized the materials presented in the course by transferring them to her daily teaching, for example, she created a word wall. Bella felt that the materials presented gave her enough insight into the topic or skill begin taught, she stated, "I feel like there was an overwhelming amount, which is really great." Bella felt there were enough samples and models provided to learn and understand how to administer a diagnostic assessment. She also stated that she did feel that she understood how to differentiate her tutoring sessions based on the diagnosis of her students. These two components, diagnosing and differentiating are core practices for the clinical course sequence and based on Bella's responses she feels she has accomplished learning these core practices. Bella also felt that the course offered digital tools to enhance her learning.

Teacher presence. Bella shared that she felt her instructor interacted with her throughout the course through the face-to-face, email, PowerPoint, Zoom, Panapto and through YouTube. She felt that the instructors were equally active in all of her courses and stated, "We are adults and we need to find our own way." Bella shared that she did not think the instructor could have been in the course more and gave an example of the time she had to contact an instructor via phone during Diagnosis and Assessment of Literacy really quickly, which was great. When asked if she felt the instructor presented feedback in a timely manner she said, "Yes" and agreed it enhanced her overall learning experience. Bella indicated that the feedback was great because it was clear and concise. Bella shared that she did feel the instructor provided enough examples

or models of how to administer assessments. When asked if she felt the instructor provided enough strategies sand skills to differentiate lesson plans for her tutoring sessions, she said she had an abundance of items that included digital tools and apps.

While in the practicum course, Bella contacted her supervisor via Zoom about her older student scores and felt that she was able to view her work with the supervisor to find a resolution. She felt that she could call or email any of her instructors at NLU with questions or concerns. Bella said that she felt the instructor provided clear examples of expectations on assignments, "In detail." When asked if she had the opportunity to practice or rehearse diagnostic skills, she was able to do this and explain the importance of rehearsing specific skills and strategies with classmates. Bella stated,

> Yes, we had to take a running record and then share it with a classmate and see what they
> thought and that was a great learning experience and I like that. I feel like that came
> before the peer coaching so it kind of prepped you for what you need to do what kind of
> feedback you need to leave and of course, there were the rubrics to follow.

Bella did feel the instructor provided clear examples of expectations on diagnostic skills. She also shared that the instructor provided enough opportunities to enact and practice a diagnostic skill. Finally, Bella shared that she thought she was always overprepared and the instructor provide time to enact specific skills, strategies and assessments with classmates before working with students. She acknowledged that she felt she was paired up with different classmates each time there was a group or partner assignment.

Part of tutoring requires the reading teacher candidate to create lesson plans for each tutoring session. These lessons must be submitted within 24 hours to allow the supervisor to check the lesson plan to ensure they are meeting all of their instructional goals for their students.

Bella continuously shared her lesson plan on-time and when suggestions were given, she applied them and continued to grow as a professional. Bella was consistent in the development of her lesson plans which helped scaffold her student's learning through the use of differentiation and informal assessments. After the first few weeks of practicum, I did not have to pre-check Bella's lesson plans due to her mastery of creating appropriate skills and strategies to facilitate her student's continued progress.

Virtual presence. During my one-on-one interview with Bella, she shared that she was afraid to take an online program because she thought there would be a lack of connection in the online environment, which was not the case. She stated that the use of synchronous video conferencing with her supervisor during the practicum courses was beneficial. Bella mentioned that it was nice being with the same group of reading teacher candidates in each of the online clinical courses and that it allowed her to get to know them on a personal basis. Bella mentioned she was able to connect with her peers on numerous social media outlets which helps her feel connected to them after the courses ended. Bella further shared that she felt the Zoom meetings were helpful and she thought she would like to utilize these types of meetings in the future with parents or teachers. She admitted she did not know how she felt about the synchronous meetings but ended up liking them. She liked the Zoom meetings on the lessons in the course. Bella shared the assignments she enjoyed were when she was asked to peer coach. These lessons allowed at least 8 different peers to watch her teach and provide feedback.

Table 12 represents Bella's four required observations during the practicum course and her scores. The rubric has four choices of evaluation, which are 3- Proficient, 2-Basic, 1-Unsatisfactory, and * not observed. The goal is for each reading teacher candidate to receive all proficient scores by the end of their fourth observation. A basic score means the reading teacher

candidate exhibits an understanding of what is being evaluated but may not have mastered the skill. Bella's rubric showed that she struggled with the metacognition piece and scaffolding during her first two tutoring sessions.

Table 12

Bella's Observation Rubrics

Observations Criteria	Observation 1 4/12/19	Observation 2 4/30/19	Observation 3 5/16/19 *Live*	Observation 4 5/30/19
Literacy processes	Proficient	Proficient	Proficient	Proficient
Materials used	Proficient	Proficient	Proficient	Proficient
Language used	Proficient	Proficient	Proficient	Proficient
Active listening	Proficient	Proficient	Proficient	Proficient
Scaffolding	*Basic*	*Basic*	Proficient	Proficient
Metacognition	*Basic*	*Basic*	Proficient	Proficient
Pacing	Proficient	Proficient	Proficient	Proficient
Rapport	Proficient	Proficient	Proficient	Proficient

When evaluating this section, supervisors are focusing on how the reading teacher candidate promotes higher order thinking by verifying the student knows what and why they are learning and how they can incorporate it into their everyday learning. One area of focus is to make sure the reading teacher candidate asks the student why they are working on a specific strategy or skill. This type of questioning promotes students to take ownership of what they are learning and helps encourage engagement right from the start of the lesson. The first observation Bella received was written feedback, which included, "Remember to explain why you are having her complete tasks. This is important to activate metacognition." During her second observation Bella had a Zoom follow-up meeting with her supervisor, which was conducted a day after her lesson.

During the first synchronous meeting with Bella, we were able to connect on time and she was able to ask me specific questions about her tutoring sessions. Bella shared her student was a bit challenging and part of her tutoring session was used to talk over some positive

strategies to use when difficult situations arise. I was also able to explain to Bella the importance of continuing to ask her student why she was teaching the skill or strategy to promote metacognition and suggested to her to create a notecard to use as a reminder. The importance of scaffolding learning was also discussed, and I gave her some ideas on how she can accomplish this during her tutoring sessions. During Bella's live video I noticed her looking at something while she was tutoring in our follow-up meeting that day, she mentioned she created a notecard and had it next to her to help her remember to ask "*Why*". Both meetings provided me insight into Bella's personality and let me get a "feel" for her teaching style. The synchronous meetings allowed us to build an authentic virtual relationship.

Gabrielle

Gabrielle's student, Jenny, was a new student in the United States and a freshman in high school. Jenny was classified as a newcomer and at the end of the school year she was going to be leaving the Newcomer Center, within the high school, to attend her home school. Jenny was administered the IRI, which assessed her instructional level to be the middle of first grade with areas of need in vocabulary, comprehension, fluency, and writing. Gabrielle started her tutoring sessions working to strengthen Jenny's print/spelling skills and her long vowel patterns. All of Jenny's tutoring sessions were done at the Newcomer Center in a classroom setting. During the initial diagnostic assessment Jenny read a first-grade passage with 95% accuracy and an oral reading rate of 142 words per minute. Jenny's comprehension score was 80%. By the end of the tutoring sessions, Jenny read the same passage with 96% accuracy and had an oral reading rate of 145 words per minute. Jenny's comprehension score increased to 100%.

Social presence. Gabrielle shared that she experienced the social and emotional climate of the online clinical course sequence by "Being with the same students, once you see a familiar

name, you make a connection once you start reading discussions and posts." Gabrielle shared she took some classes face-to-face and was able to make some connection with a few reading teacher candidates from those classes. Gabrielle shared "The instructor had the discussions as a requirement that helped me engage with classmates and the peer coaching element in RLR 510 and 511." She continued to say that the peer coaching assignment promoted her to "see other people and work with partners." When asked what particular features of the learning environment helped her know what to do, she shared the syllabus and weekly content helped her know what was expected and if she was unclear, she felt comfortable asking questions. She shared that she wished there was a question discussion board in the practicum courses.

Gabrielle shared that the way she was able to work with others to learn the online clinical course sequence by group work, which provided collaboration, peer coaching, the instructor's weekly postings, and the discussions. Gabrielle discussed some significant opportunities to interact with peers in the online clinical course sequence were during "group work, peer coaching, Basic Reading Inventory (BRI), repeated readings to see how others have done it." Gabrielle shared that they helped her learning the core teaching practices needed for literacy tutoring, "It prepared me for RLR 592, like the Spelling Inventory and know the instructional strategies would meet the needs of all the students. I wished we had more guidelines on how to ask why." Gabrielle shared that she felt she did rehearse important teaching practices. The way she did this was by watching Mary's videos, which explained the important skills needed. These rehearsals helped put into practice the multiple BRIs. She further indicated, watching other classmates' BRIs was helpful. When asked what tools or supports she used she shared that she felt there were not enough materials during the practicum, but she referred back to the BRI book.

Cognitive presence. Gabrielle shared that she interacted with the materials presented in the online courses in that she would read what was presented and if needed seek out more material to clarify the concept because she felt she lacked guidance. She further explained, "This mirrored what the students felt in tutoring, uncertainty." Gabrielle was asked if she felt the materials were beneficial, she expressed that they were especially the concept and structure sorts, making words articles and her classmates' presentations. A follow-up question was asked about needing to find materials outside of the online course she added that she may have had to add her own graphic organizer.

Gabrielle shared that she used the materials presented in the course during her tutoring sessions. She shared that she used word study, sentence frames, anchor charts. She stated she, "Always used sentence frames and tried structure sort with her ESL 1 students at school." For her younger student, she used reading comprehension strategies and multi-syllabic skills, and had to find decoding and phonics activities. Gabrielle shared that she did feel the materials presented gave her insight into the topic or skill she was being taught and that she felt there were enough samples or models provided to learn and understand how to administer a diagnostic assessment. Regarding her learning, she said, "definitely" and she further said it helped improve her teaching. When asked if she felt that she understood how to differentiate her tutoring sessions based on her diagnosis of her student she stated, "definitely" and she felt the course offered digital tools to enhance her learning.

Teacher presence. Gabrielle shared hat the instructor interacted with her throughout the course through assignment feedback, weekly posts, and emails. She felt the discussion forum that allowed questions was helpful. Gabrielle mentioned that she enjoyed the Zoom meetings and "they were the most beneficial." Gabrielle said she did feel that she received coaching feedback

from her classmates through the peer coaching assignment and it was beneficial. The most beneficial way the instructor provided materials for her to learn was through, "Videos, slides, and sample videos." When Gabrielle was asked if she felt the instructor prompted you to reflect on her learning she said, "definitely" and she further said it helped improve her teaching. Gabrielle stated an area the instructor could have been more present in the course was by "Providing more EL sample lesson plans, there was not much variety and the samples were similar." Gabrielle was asked if she felt the instructor provided timely feedback and she said, "Yes, especially the Google feedback." She did state that she felt the instructor provided enough examples or models of how to administer assessments, strategies, and skills to differentiate lesson plans for her tutoring sessions.

When asked if she contacted her instructor throughout any of the clinical courses she said, "yes," and that the instructor, "emailed her back" and she was satisfied with the instructor's response. Gabrielle shared that she felt the materials, videos, and models provided in the course were explicitly explained and that the instructor provides clear weekly goals of what critical features were taught during each module. She also thought the instructor did explain the importance of rehearsing specific skills and strategies with classmates as well as provide clear examples of expectations on assignments. Gabrielle shared that the instructor provided her with opportunities to practice diagnostic skills through, "samples, assignments, recording ourselves." She further shared that she definitely felt the instructor provided time to enact specific skills, strategies and assessments with classmates before working with students.

As Gabrielle's supervisor, I pre-checked all of her lesson plans 24 hours prior to her teaching. Gabrielle was tutoring an EL student and needed suggestions on materials that would assist in her literacy advancement. Since we used Google Docs it was a great digital tool to

interact with Gabrielle because once she made an adjustment on her lesson plan, I received a notification of her change or even if she had a question. At the bottom of each lesson plan, reading teacher candidates were asked to reflect on their teaching which was checked after the tutoring session. This section allowed Gabrielle to share with me what she felt worked well during her tutoring session. One challenge was when Gabrielle would only reflect on how she felt her student was progressing and not her student in the Google Doc shared lesson plan. I would make comments after she reflected on her tutoring session to make sure she was reflecting on her teaching and she may not have seen my comments. Therefore, during our first synchronous meeting, I discussed this part of the lesson plan with her which was extremely beneficial.

Virtual presence. During my one-on-one interview with Gabrielle, she shared her overall thoughts of online learning were pretty good, she did state that she learned a lot, but it was more challenging because there was more responsibility on herself. She furthered explained that she had to do more learning and it was hard to find the course or module objectives but nothing too much to complain about, just the lack of social comradery. She stated that the synchronous video conferencing with her supervisor during practicum was definitely helpful as well as the group meetings. I can concur with Gabrielle on our meetings being beneficial, as stated above it allowed me to go over parts of her lesson plans that she was doing well and parts that she needed to improve upon.

During Diagnosis and Assessment of Literacy and Instructional Strategies for Literacy Interventions (RLR 510) we had synchronous meetings to discuss diagnostic testing and final report expectations. During these meetings, reading teacher candidates would have the opportunity to ask questions and receive immediate feedback. She shared the group meeting in

RLR 501 (Teaching Beginning Literacy) was helpful, but they never utilized the chat online. When we have our Zoom meetings there is a group chat option. Suggesting reading teacher candidates to use this chat would allow them to have a "side" conversation on what the instructor is presenting or if a question arises during the presentation the instructor can stop and address the whole group.

The groups she was in during her courses only communicated through D2L. She felt that utilizing the chat with zoom would be beneficial. Gabrielle felt the synchronous live video conferencing was helpful and shared that she never used synchronous communication with classmates and thought it would be beneficial, but it may be hard to find the time. I like this idea of using synchronous communication with classmates and think that it would be valuable to use it in a peer coaching assignment. She suggested to use it as an option, not a requirement. One challenge that occurred during practicum was Gabrielle and I had a follow-up meeting scheduled on April 23 at 5:00 p.m. I logged on and waited for her for about 5 minutes before emailing her to see what had happened. Fortunately, she was able to respond to my email and admitted she forgot, but we were able to meet at that time. Gabrielle was able to log into Zoom via her phone. This is not always the case, earlier in the day Gabrielle had missed a meeting with her other supervisor entirely. The one advantage of this situation was I able to conduct this meeting directly following another meeting I had at the on-campus location of NLU in Lisle. One extremely beneficial part of this meeting was that I did not have to worry about travel time, which worked out advantageously because my on-campus meeting ran longer than anticipated. Another challenge I had with Gabrielle was that she was tutoring during her plan time since her student was an EL student and did not have the ability to stay after school. Gabrielle was working with her student from 10:45-11:15 and I worked part-time and started teaching at 11:24

and we needed to conduct a live observation, therefore, I was able to Zoom in and observe her

and we had to complete our follow-up meeting after school. This was a bit cumbersome to plan,

but it worked out well for both of our schedules. Table 13 represents Gabrielle's four required

observations during the practicum course and her scores.

Table 13

Gabrielle's Observation Rubrics

Observations Criteria	Observation 1 14/15/19	Observation 2 24/23/19	Observation 3 35/8/19 *Live*	Observation 4 45/22/19
Literacy Processes	Proficient	Proficient	Proficient	Proficient
Materials Used	Proficient	Proficient	Proficient	Proficient
Language Used	Basic	Proficient	Proficient	Proficient
Active Listening	Proficient	Proficient	Proficient	Proficient
Scaffolding	Proficient	Basic	Proficient	Proficient
Metacognition	Basic	Basic	Basic	Proficient
Pacing	Proficient	Proficient	Proficient	Proficient
Rapport	Proficient	Proficient	Proficient	Proficient

The rubric has four choices of evaluation, 3-Proficient, 2-Basic, 1-Unsatisfactory, and * -

not observed. The goal is for each reading teacher candidate to receive all proficient scores by

the end of their fourth observation. A basic score means the reading teacher candidate exhibits an

understanding of what is being evaluated but may not have mastered the skill.

On Gabrielle's first observation she struggled with metacognition. Her first observation

feedback was received via written on a rubric and I shared with her to "Remember to ask Jenny

why she is doing the word sort and writing the words. This will help her understand how these

activities help her learn English." This feedback was not enough for Gabrielle since she still

struggled with promoting higher order thinking during her next two observations as well. Her

second observation was a synchronous meeting a day after she taught, I went over the rubric and

discussed my comment, "Make sure you ask Jenny why she is doing the word sort, and how does

this help?" During her live observation Gabrielle was still not promoting higher order thinking

and I mentioned to her, "Do not forget to ask her why you are having her complete the tasks. This will help her become more engaged in her learning. When you asked Jenny if we should be worried about the water rising, scaffold her answer and ask her why." This live synchronous meeting helped Gabrielle and me discuss exactly what I noticed, and she was able to reflect immediately on her tutoring session. By the fourth observation Gabrielle successfully enacted metacognition into her lesson.

During the first observation Gabrielle struggled with incorporating academic vocabulary into her lesson and she received written feedback, "Remember to use as much academic language as possible." From this written feedback Gabrielle was able to address this area and receive a proficient score on the rest of her three observations. On Gabrielle's second observation she received a basic score for metacognition and her written and synchronous meeting feedback was focused on scaffolding her learning; specifically, to put her words she was working on in sentence strips or creating sentences in a notebook. It was also suggested to have her student check her own work which would encourage gradual release of responsibility. From this live meeting Gabrielle was able to apply the suggestions to her final two observations.

Colin

Colin's student, Cameron, was a fourth grader working on developing many areas of need to due to his lack of formal schooling. Cameron was considered an older student for practicum purposes. Cameron entered the United States as he was entering second grade. Cameron was administered the IRI, which assessed his instructional level was middle first grade and that he needed instruction in phonemic awareness. He exhibited difficulties with diagraphs, blends, and common long vowels, which challenged his spelling and writing skills. Cameron's strengths were in vocabulary and comprehension, but fact-based and topic questions were

difficult for him. Colin worked on providing Cameron strategies to decode and self-monitor to improve his reading fluency.

Colin worked with Cameron mainly after school in his classroom, though a few sessions were conducted during lunch. Cameron's initial reading assessment depicted his accuracy of a middle first grade passage at 86%, his comprehension score was 90% and his oral reading rate was 63 words per minute. By the end of the tutoring sessions, Cameron's oral accuracy with the same passage increased to 91%, his comprehension score increased to 91% and his oral reading rate increased to 98 words per minute. Adam moved from the first-grade level to the second-grade level in terms of word recognition.

Social presence. When Colin was asked about his impression of the social and emotional climate of the online clinical course sequence he responded that he enjoyed all of the classes and shared his hesitation to work in an online environment because he felt there may be a lack of communication, but was pleased to find there were great discussions based on the presentations and videos. Colin shared, "A lot of the times able to collaborate with each other and share our projects and different experiences with each and I thought that was a great use of time as well." When asked what the instructor did to help him engage him into the class, he mentioned that she was organized and each module was thoroughly explained. He shared he is a visual learner and that is why he was hesitant to take an online course and he loves to interact with people but "the discussion board and good discussion questions allowed them to interact with each other."

Colin revealed having very, "detailed modules, instructions and clear expectations helped him know the particular features of the learning environment and there was never a doubt of what was expected." He further stated he had taken other courses that were not laid out as well and he could never figure out what was expected. He shared the way he worked with others

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during the online clinical course sequence was though group activities that provided peer feedback. When asked what was the most helpful to his learning, he shared the final two courses were valuable and the explicit teaching of how to administer and analyze the BRI assessment was beneficial. Colin said, "I thought you guys in 592 walked us through everything perfectly step by step on the tutoring process to get the full effect of the tutoring process." Colin shared some of the significant opportunities he had to interact with peers in the online clinical course sequence were through the peer coaching assignments, discussion boards, videotaping and sharing lessons, and the feedback that walked him through the final report. The way they helped him learn the core teaching practices needed for literacy tutoring were during peer interactions and interacting with the same people. When asked if he felt that he rehearsed the important teaching practices he shared he transferred the strategies learned to his classroom and if it did not work in class, he would modify them before his tutoring sessions. The tools and supports he used were, "the BRI, videos, *Choice Words and the Reading Strategies* book by Jennifer Serravallo."

Cognitive presence. Colin shared that the he interacted with the materials presented in the online clinical courses by, "Well, so, a lot of the materials we would use in the course I would then take them back to my classroom, I use the DRTA, GIST and Question the Author in my classroom and shared those strategies with my colleagues as well." He further stated he definitely found the materials beneficial and has them on a shelf to use daily while teaching. He stated that he did not have to find any outside materials. Colin shared that the materials presented gave him enough insight into the topic or skill he as being taught. He stated, "Definitely, I liked it when we had readings but then there was either a Zoom video talking about the strategies and a PowerPoint I feel like if you didn't grasp the material there was enough ways you could learn." When asked if he felt there were enough samples or models provided to learn and understand

how to administer a diagnostic assessment, he shared there were always four or five examples that he could refer back to if he needed. Colin shared that he did understand how to differentiate his tutoring session based on his diagnosis of his student and was able to reach out to an instructor if needed. He gained his insight from the strategies he learned from his classes and felt the course offered digital tools to enhance his learning.

Teacher presence. Colin shared the instructor interacted with him during each course; "feedback was always timely you could always get feedback within 24 hours also communicating any changes or updates needed to be made and keeping us on track on what we needed to do next." Colin stated that the instructor was consistent for all three courses. He did not feel there was a time where the teacher was not in the course enough. Colin mentioned the feedback was great and was constructive criticism which provide him assistance when he needed to make necessary changes. He shared that the video conferencing was a "huge way to get feedback for me." When asked if the instructor provided enough examples or models of how to administer assessments he said, "Yes, all of the modules had examples that you could go to and look for." He further shared that the instructor definitely provided enough strategies and skills to differentiate lesson plans for his tutoring sessions especially because there were "Plenty strategies that were learned from previous courses and form the literature."

Colin shared that he did have to contact his instructors for questions, rescheduling and it took less than 24 hours to respond. When asked if he felt the materials, videos, and models provided in the course were explicitly explained by the instructor he said, "Definitely." He also felt the instructor provided clear weekly goals of critical features that were taught during each model, he said, "We had our goals for the week and our learning targets for the week." Colin stated that the instructor explained the importance of rehearsing specific skills and strategies with

classmates. Colin shared that he most definitely felt the instructor provided clear examples of expectations on assignments and he felt the instructor provided him with opportunities to practice a diagnostic skill, he felt that was conducted by practicing the ISEL and BRI assessments before administrating them. Colin said, "I thought one of the main, really good tasks was to teach one of those to a teacher and record them, the session and that just really helped me get a better feel of it and walk through the steps with someone else."

Colin thought all interaction was beneficial—students to students and students to teachers. Colin shared that he did receive feedback from his classmates that was beneficial in the form of a "document they had to fill out with all of the key parts of the lesson and was sent back to us to review." He further stated that he felt the professor's videos were the most beneficial because of the way the instructor explained the materials needed to learn. He also shared that the instructor prompted him to reflect on his learning all the time, especially during tutoring, which helped him improve in his teaching.

Colin uploaded his lesson plans to our shared Google Doc folder on-time and was succinct in his lesson. The strategies he found to use with his students were appropriate and Colin was able to adjust his lessons while teaching. Colin also shared sample higher-order thinking questions, for example, "During the read-think-aloud today, I modeled the DRTA strategy as well as asking myself questions, such as, *I wonder how the boy is feeling now? Why did the boy decide to give the shoes away?* and *What does the author want me to learn from this story?"* Colin also provided his student with choice in regard to what part of the lesson the student wanted to start with, allowing the student to take ownership of his learning. Colin shared that he struggled with time-management and shared, "Reflecting on this lesson, there were some last-minute adjustments that I needed to make just like we do in the classroom on a daily basis."

My response to Colin was, *"It is good that you are able to reflect and think about what you can do differently."* When we had our first synchronous meeting on May 3, we brainstormed ways he could stay on track; for example, setting a timer on his phone or computer as a visual for himself and his student. Even though he felt this was a struggle, he was able to complete his tasks listed on the lesson plans.

   Virtual presence. During my one-on-one interview with Colin, he mentioned that he was hesitant to complete an online program because it was new to him, but he ended up loving online learning because of his interaction with his peers and professors. Colin shared that he thought the synchronous video conferencing during RLR 592 was extremely beneficial and it most definitely enhanced his practicum experience. Since I was Colin's supervisor, I had the opportunity to see how this communication benefited his learning. After our first follow-up session, Colin went back to his lesson plan and applied the suggestion of reflecting on his teaching instead of his student's actions. Colin continued to complete his reflection this way and I was able to see how he grew as a reading teacher candidate. Colin stated that he did not use synchronous video conferencing with his classmates but adding this as a component would be very beneficial.

   While supervising Colin, we ran into some scheduling challenges toward the end of his practicum due to his student being ill, leaving school early, and field trips. For example, Colin was scheduled to complete his live observation on May 20, but due to his student's absence, we had to reschedule. Colin did not find out until later in the school day and emailed me late in the afternoon and given his geographical location I would have already been on my way to watch his tutoring session if this was completed face-to-face. Luckily, I saw his email and we were able to reschedule for the following week. In this situation the benefit of using synchronous communication was immeasurable.

Toward the end of his practicum, Colin ran into more scheduling difficulties due to the student leaving school during the day of his final video recording. Colin had to once again reach out to me and let me know he was not able to complete the session. Fortunately, Colin was able to work with his student during his plan time at school and complete his mandatory minutes with his student. If this were in a face-to-face setting, he would not be able to bring the student back to the reading center to complete that time and would miss out on valuable teaching moments.

Even though we had some struggles, Colin persevered through and continued to grow as an educator. Table 14 represents Colin's four required observations during the practicum course and his scores.

Table 14

Colin's Observation Rubrics

Observations Criteria	Observation 1 4/15/19	Observation 2 5/3/19	Observation 3 5/21/19 *Live*	Observation 4 6/3/19
Literacy processes	Proficient	Proficient	Proficient	Proficient
Materials used	Proficient	Proficient	Proficient	Proficient
Language used	Proficient	Proficient	Proficient	Proficient
Active listening	Proficient	Proficient	Proficient	Proficient
Scaffolding	Proficient	Proficient	Proficient	Proficient
Metacognition	*Basic*	*Basic*	*Basic*	Proficient
Pacing	Proficient	Proficient	Proficient	Proficient
Rapport	Proficient	Proficient	Proficient	Proficient

The rubric had four choices of evaluation, which were 3-Proficient, 2-Basic, 1-Unsatisfactory, and *-not observed. The goal is for each reading teacher candidate to receive all proficient scores by the end of their fourth observation. A basic score means the reading teacher candidate exhibits an understanding of what is being evaluated but may not have mastered the skill. Colin was given written feedback for his first observation and one of his areas to think about was, "Instead of telling James what you read last time ask him what he remembers reading. Ask him why you are reading it again to promote metacognition. Also, discuss why rereading is

an important reading strategy." On his next observation he had written feedback and we had a synchronous meeting to discuss his lesson and I reviewed his written feedback with him sharing, "Don't forget to ask James why you are having him read. When you ask why you promote metacognition." Since this synchronous meeting was conducted a day after his lesson, Colin may have already moved on to thinking about his next lesson and did not apply the feedback given since during his live observation he still neglected to promote metacognition. During his live observation and immediate coaching meeting, Colin was once again advised to use metacognition while tutoring. During Colin's final observation I was able to see him apply his feedback and utilize metacognition strategies throughout the 30-minute tutoring session.

Cross-Case Analysis

In this cross-case analysis I wanted to consider what areas the six cases were similar and where they may differ. I first reviewed the data from the whole group short answer responses, the overall themes that emerged from the thematic analysis were virtual presence provided flexibility, virtual presence encouraged collaboration, and the incorporation of virtual presence was an effective way to learn. When looking at the data from three instructor and reading teacher candidate interviews, all had similar responses.

The first theme, virtual presence provided flexibility, was reiterated when looking at the instructor and reading teaching candidate responses a key word that appeared in all six cases was flexibility. While conducting the within-case analysis a reoccurring word was flexibility. During the online clinical course sequence both the reading teacher candidates and instructors reported the reason behind teaching and taking online courses was to eliminate commute time, work at their own pace, and works within their schedule. For example, one of the instructors works part-time as a middle school teacher and her schedule was limited but teaching in the online

environment allowed her the flexibility to teach. Bella and Gabrielle both shared they would not have been able to complete their master's degree on campus, therefore the flexibility of online allowed them to further their education.

The second theme, virtual presence encouraged collaboration, was repeated in five of the six case studies. Through the within-case analysis, the three reading teacher candidates continually shared the word *collaboration*. The reading teacher candidates mentioned that collaboration occurred during the beneficial assignments or activities when they had the opportunity to work with a classmate when practicing a particular core practice, specifically the peer coaching assignment. Colin mentioned that he thought a great use of time was when they were able to collaborate and share different experiences with classmates. Two of the three instructors felt that one important aspect of virtual presence was when they had the ability to collaborate with the reading teacher candidates. Bella mentioned she would like to see more virtual presence included in the online environment. Jana shared she enjoyed the face-to-face environment but with the incorporation of virtual presence adds the opportunity for more collaboration.

The third theme, virtual presence was an effective way to learn, aligned with four out of the six cases. The reoccurring word from the CoI survey short answer responses and the case studies were effective and learning. Gabrielle shared that she felt there were not enough materials for her to use during her tutoring because her older student was an EL student. Bella and Colin had the opposite experience and felt there was an overwhelming amount of material to use and bring back to their classrooms. Michelle shared that one reading teacher candidate needed further support in understanding a core practice and with the brief Zoom meeting the reading teacher candidate was able to successfully understand the concept. Bella shared the

materials in the course were useful and she transferred the strategy of creating a word wall to her teaching. Colin practiced the strategies he planned on using during his tutoring session within his classroom, which allowed him to adjust his lesson if it did not work the way he was anticipating. Overall, the case studies delineated virtual presence was an effective way to learn.

One case study showed that their definition of virtual presence differed than the other five case studies. Mary defined virtual presence as more than just live communication and involves teacher presence, for example written feedback. The other five case studies define virtual presence as live communication. From the data, the researcher's final definition of virtual presence involved any type of live communication.

From the CoI survey the results of social presence in the online clinical course sequence were positively viewed, 88% percent of the respondents were *strongly agree* or *agree*, .05% were *neutral* and .07% were *disagree*. For example, Colin's overall experience with social presence was positive, which corroborates what Bella and Gabrielle shared, but Gabrielle added there could be more virtual presence added. Three out of the three applicable case studies had an overall positive experience and perception of social presence. As stated above, Bella felt more virtual presence would be valuable in the online setting because it would encourage more collaboration.

From the CoI survey, the results of teacher presence were positive, 97% of the responses were *strongly agree* or *agree* and .03% were *neutral.* The within-case analysis showed Gabrielle, Bella, and Colin—three out of the three applicable case studies—felt the instructor was visible in online clinical courses. All three reading teacher candidates shared that they felt they could ask questions for clarity and the feedback was given in a timely manner. Colin said the communication helped him stay on track and understand what he needed to next. All three

reading teacher candidates shared the emails, presentations, discussion posts, and weekly announcements provided teacher presence.

From the CoI survey, the results of cognitive presence were extremely positive, 98% of the responses were *strongly agree* or *agree* and .02% were *neutral*. The overall thoughts on cognitive presence were constructive and correlates with the three individual case studies. During the within-case analysis, it was clear the overall thoughts of cognitive presence were positive, but Gabrielle did mention she did not feel as though she had enough support for her older EL student. As her supervisor I sent her specific learning strategies and materials to utilize. The lack of materials in the online course that support EL students made it difficult for Gabrielle to find applicable teaching materials. Bella and Colin felt the online courses had enough representations and were able to understand the process of administrating a diagnostic assessment.

After looking at each observation rubric, the data shows that each reading teacher candidate was able to apply instructor feedback from the lesson plans, two graded observations, and two synchronous communication meetings to become proficient in enacting the core practices. The three reading teacher candidates I supervised, Bella (practicum: younger student), and Colin and Gabrielle (practicum: older students) all received 100% on their key assessment. I then examined the final report grades of three reading teacher candidates, and two out of the three reading teacher candidates received 100% and one reading teacher candidate received 96%. This data demonstrates proficiency in the enactment of learned professional skills while tutoring and the ability to complete a formal write-up depicting their student's literacy abilities and skills over the 20 tutoring sessions.

To complete this cross-case analysis, the one-on-one in-depth reading teacher candidate interviews, four observation rubrics, key assessments and final reports demonstrate the reading teacher candidates had a positive experience with the online courses and they shared that the online clinical course sequence did help them enact and learn core practices. The key assessment data and final reports are evidence of the reading teacher candidate success in RLR 510, 511, and 592.

CHAPTER FIVE: DISCUSSION

The purpose of this case study was to examine student and instructor perceptions of online learning and synchronous communication (virtual presence) in a clinical course sequence for reading teachers. Data sources included an online survey, student and instructor interviews, and course generated assessment data. This chapter summarizes the major findings and extends the analysis through connections to the literature. The chapter also discusses recommendations for virtual presence in the online clinically oriented courses as well as its potential benefits for higher education in general. The chapter concludes with suggestions for further research.

Summary of Findings

The overall findings of the research established an understanding and recommendation for the implementation of virtual presence in online courses. After careful analysis of instructor and reading teacher candidate's perceptions and survey data, the addition of virtual presence in online courses adds to the validity of the education provided. Specifically, the engagement of representations, a collaboration that simulates face-to-face in-class discussion and feedback, and the flexibility to work at an individual pace. Ninety-five percent of the reading teacher candidates reported 'strongly agreed' or 'agreed' that the online clinical course sequence provided three important components of online learning; cognitive presence (curriculum delivery), teaching presence (instructor visibility) and social presence (student interaction).

During the one-on-one reading teacher candidate interviews one respondent shared they were hesitant to lose valuable in-course interactions with classmates. This hesitation quickly dissipated after the initial adjustment of understanding the nuances of the online format and the incorporation of virtual presence to encourage "face-to-face" communication. Seventy-three percent of the reading teacher candidates felt there was enough virtual presence throughout the

clinical course sequence. One hundred percent of the instructors felt the online course sequence applied and provided sufficient opportunities of virtual presence to ensure the reading teacher candidates learned and enacted core practices of teaching.

After careful analysis it was concluded that adding virtual presence is beneficial in an online clinical environment, enhances overall learning experiences, and provides effective learning. Virtual presence provides support to struggling students by allowing them to ask questions in real time with immediate feedback. Through the addition of virtual presence reading teacher candidates had a higher rate of collaboration. Reading teacher candidates increased their engagement within the course, with their classmates, and with instructors, which increased their ability to enact the core practices of literacy. Implementing virtual presence increases student productivity through the opportunity to have flexibility because they are enrolled in an online course. Flexibility can be viewed as decreased drive time if any, eliminating missing family or work commitments, completing assignments at an individual pace and most importantly still able to have face-to-face meetings without the hassle.

Two fundamental research questions framed this research:

1. How did the reading teacher candidates perceive the online clinical course sequence?

2. How did the reading teacher candidates and instructors utilize and perceive virtual presence during the clinical course sequence? How did the VP experiences support the reading teacher candidates to enact and learn core practices?

RQ1: How Did Reading Teacher Candidates Perceive the Online Clinical Course Sequence?

Examining reading teacher candidates' perceptions of an online clinical course sequence helped identify the significant attributes of a successful online environment. The CoI framework is designed specifically for the online environment and has three essential components that

should be implemented in an online course, those components are: (a) teacher presence, (b) cognitive presence, and (c) social presence. As suggested by Armellini and De Stefani (2016), social presence is a core component for both constructs, teaching and cognitive, which was evident after analyzing the reading teacher candidate's surveys and short responses.

Overall, 97% of the reading teacher candidates thought the online clinical course sequence utilized teacher presence. The data from the CoI survey showed the reading teacher candidates were encouraged to collaborate with classmates, instructors, and co-workers.

As an instructor in the online clinical course sequence, I was able to see how teacher presence encouraged the reading teacher candidates to continually collaborate with classmates, instructors, and co-workers. During the practicum course, reading teacher candidates were able to develop skilled practices to prepare them for classroom experiences. The role of the instructor in the clinical course sequence was that of a facilitator as well as a coach. These two distinct roles lead to scaffolded learning that provided gradual release of responsibility so teacher candidates could demonstrate mastery of the reading core practices. As one of the clinical supervisors, we had to ensure we were encouraging gradual release of responsibility to model our expectations as to what our reading teacher candidates were to achieve with their own students.

Reading teacher candidate's extensive comments on their experience of social presence in the online clinical course sequence were mixed. These statements referred to the reading teacher candidates getting to know their classmates and feeling a sense of belonging in the course, forming distinct impressions of their classmates, and noting that online communication was an excellent medium for social interaction. The statements on social presence and open communication continued to show that one reading teacher candidate was not comfortable

participating in the course discussions or interaction with other course participants. One respondent in particular repeatedly disagreed with the statements regarding opportunities for affective expression, sharing thoughts freely, in the online clinical course sequence. This data suggested that additional attention is needed with regard to the social presence aspect of the online design in this clinical course sequence.

Finally, one reading teacher candidate believed that their point of view was not acknowledged by other course participants and the online course discussion helped form a sense of collaboration. To acquire a sense of belonging while in an online course, participants must first feel comfortable sharing their points of view and opinions. From the one-on-one interviews with the reading teacher candidates, a sense of comfort may be difficult to establish in an online environment because the participants are not seeing each other face-to-face and given the ability to read facial cues. To eradicate these fears, a reading teacher candidate suggested implementing more virtual presence in online courses. It was further communicated that solely reading feedback from peers or instructors, there is a chance to misconstrue the overall meaning. The short answer responses showed that the integration of synchronous meetings in RLR 592 allowed the reading teacher candidates to have feedback given in a discussion form, face-to-face (virtually) instead of solely reading it. This gives both parties the opportunity to read facial cues and hear voice inflection.

The reading teacher candidates' survey results showed 98% of them felt the online clinical course sequence exhibited cognitive presence. The cognitive presence data indicated that candidates perceived the online clinical course sequence to display materials, presentations, tasks, and assignments the reading teacher candidates could comprehend and apply successfully.

Overall, the reading teacher candidate's comprehensive perceptions of the online clinical course sequence were encouraging, although one respondent had mentioned, "Online learning is frustrating." This same respondent was the one who disagreed with some of the social presence statements which may mean online learning is not an option for everyone. Adding more scaffolding through the use of virtual presence when needed may increase student success in the online environment.

RQ2: How Did Reading Teacher Candidates and Instructors Utilize and Perceive Virtual Presence During the Clinical Course Sequence?

Reading teacher candidates were introduced to a new way of communicating with their instructor during the first course of the clinical course sequence, RLR 510, although this was not the first course of the reading program. *Virtual presence* was any type of synchronous interaction conducted via Zoom or another communication tool where the teacher candidates have a live, visual conversation with their instructor. For example, during the RLR 510 course, reading teacher candidates were asked to join the instructors in a synchronous meeting via Zoom. During this meeting, the instructor presented important information on one of the core practices of reading, diagnostic testing. This testing was explicitly explained, and examples were presented. The reading teacher candidates found these synchronous meetings beneficial. Virtual presence interactions also included one-on-one, reading teacher candidate and instructor, or teacher candidate and group meetings. Virtual presence interactions permitted teacher candidates to ask real-time questions and make meaning through a real-time, visual connection. During one-on-one meetings, reading teacher candidates were able to receive verbal feedback to enhance the overall learning experience in the online environment and eliminated the chance of misinterpretation, all of which were expressed as beneficial.

Virtual presence was viewed as a positive implementation during the clinical course sequence by all of the reading teacher candidates. Reading teacher candidates indicated the application of virtual presence enabled them to have meaningful discussions at the convenience of all parties. Employing virtual presence to conduct meetings helped establish meaningful relationships between the instructor and reading teacher candidate and illuminated the importance of teacher presence in conjunction with cognitive and social presence. After careful analysis of the reading teacher candidates' and instructors' perceptions of synchronous communication, I refined a working definition of virtual presence as an online quality that encompasses synchronous communication with the use of digital technology for face-to-face interactions. This can translate to all online courses that require a clinical experience supporting the development of complex professional skills.

One of the three overall theme that emerged from the data was, incorporation of virtual presence is an effective way to learn supports the positive perception of implementing synchronous communication within an online course. Reading teacher candidates and instructors agreed that adding virtual presence increased conversations and built strong relationships. Not only can relationships be constructed, but, through these relationships, the ability to scaffold learning with specific feedback and recommendations increases differentiation and individualized education at the higher education level. Having the option to have a synchronous meeting, which provides live and immediate conversation and feedback, strengthens the instructor-student bond but also allows the student to have a face-to-face connection. When a student is taking a face-to-face course both the instructor and student are able to read facial cues which enhances the overall success of the course. Within an online course the lack of facial cues can deter students from reaching their full educational potential, especially those who may need

extra support. Often times electronic communication can be misinterpreted, with the option of a synchronous meeting decreases misconceptions.

How virtual presence experiences support the teacher candidates to enact and learn core practices. As a supervisor, I enjoyed working with reading teacher candidates from multiple school districts because the number of new ideas, strategies, and programs shared are extremely valuable. I feel that online learning is an effective way for all students, no matter what their geographical location, to obtain a degree. I feel the reading teacher candidates I supervised successfully progressed throughout practicum and from the analysis of the key assessment data, final reports and tutoring rubrics they were successful in enacting the core practices.

After reviewing my in-depth one-on-one interviews, both Mary and Jana shared that they had the unique ability to have worked in both the on-campus and online practicums. This opportunity led them to realize the utmost importance of utilizing virtual presence in the online environment as well. Reviewing all of the reading teacher candidate's key assessments and final reports, it is clear they were successful in implementing the core practices of reading. To further investigate the reading teacher candidate's success, I examined each component based on the practice-based teaching and CoI frameworks.

By examining the data utilizing the practice-based teaching and CoI frameworks, it allowed me to see how Grossman et al.'s (2009) three essential components (representations, decompositions, and enactments), and Garrison's (2000) three essential components (teacher, social, and cognitive presence) can be transferred to the online environment. Data that was analyzed to determine success was taken from the key assessments and final reports. Knowing cognitive presence may be difficult to identify in online discourse due to "the difficulty of assessing critical thinking as a product is that it is a complex and (only indirectly) accessible

cognitive process" (Armellini & De Stefani, 2016, p. 10). The evaluation of the surveys, short answer questions, and one-on-one interviews demonstrated evidence of cognitive presence through the key assessments, final reports, and tutoring rubrics.

The key assessment data collected determined the reading teacher candidates were able to learn from the representations, decompose the representations and enact the core practices of a reading teacher. During one-on-one interviews with the three reading teacher candidates I supervised, I was able to deduct the use of teacher, cognitive, social, and virtual presence all had positive impacts on their scores. After careful examination of the key assessment data, it was clear the reading teacher candidates were able to complete the clinical course sequence with success, in RLR 592 A and B, 7 out of 11 participants received 100%. The lowest grade was 87.5%, which attests to overall mastery of the core practices of reading.

Individual tutoring sessions required reading teacher candidates to enact all facets of the diagnostic assessment and differentiated instruction. After examining the three reading teacher candidate's rubrics I supervised, it was evident they were able to use feedback to become proficient in the eight facets of these practices including (a) literacy processes, (b) materials used, (c) the language used, (d) active listening, (e) scaffolding, (f) metacognition, (g) pacing, and (h) rapport. The rubrics confirmed the ability of the reading teacher candidates to apply representations, decompositions of the representations and enact the core practices. Feedback was given in written form as well as synchronous meetings. During the one-on-one interview, the reading teacher candidates expressed their appreciation for the use of synchronous communication during RLR 592 and shared it enhanced their overall learning.

The final reports allowed the reading teacher candidates to represent their enactments of all of the reading core practices in one document. This assignment requires the reading teacher

candidates to complete formal write-ups on the students they tutored. In RLR 592 A, 82% of the reading teacher candidates scored proficient, the highest available, on their final report. The remaining 18% scored basic, the second highest available. In RLR 592 B, 73% of the reading teacher candidates score proficient, 18% scored basic, and 9% (1 reading teacher candidate) scored unsatisfactorily. This data demonstrated the majority of the reading teacher candidates had the ability to use representations, decompose the representations, and enact core practices. The final grades demonstrate overall mastery of these final reports. As an instructor in the course, I know the one reading teacher candidate struggled as on online learner. All of the reading teacher candidates had the opportunity to employ virtual presence during an optional scheduled (using Goggle Docs) one-on-one meetings. Two respondents felt frustrated and with the online format and by adding more scaffolding and support during the practicum course they were able to overcome their challenges and successfully enact the core practices of literacy.

Community of Inquiry and Practice-Based Teaching in the Online Environment

The CoI model describes how learning transpires for students. The CoI model encourages teacher candidates to collaborate and engage in authentic learning experiences and high-leverage teaching practices by intertwining these four components, teacher, cognitive, social, and virtual presence. The practice-based teaching framework has three main components that research suggested would promote teacher candidate preparedness, representations, decomposition, and enactments. Each framework is comprised of unique characteristics and when intertwined in an online course, enhanced the overall advancement of instruction of the core practices of literacy to reading teacher candidates.

Teacher Presence Using Representations, Decompositions, and Enactments

Teacher presence is how the course is facilitated through the guidance of the instructor and includes the course design. Instructor feedback and monitoring are key features of instructor presence. Analyzing teaching presence in an online classroom is important because of an important component of the online environment that binds the learning community together (Garrison, 2007). The instructor's role is to facilitate the online course in a way that promotes discourse among the students and the instructor. Teaching presence begins prior to interaction with the enrolled students through the organization of the course materials and design (Lynch, n.d.). Part of teaching presence includes (a) establishing clear and concise course goals, (b) setting reasonable timetables, (c) providing curricular materials that cognitively stimulate, and (d) addressing relevant topics to advance student learning (Anderson et al., 2001). Instructors continue to play a critical role in providing teaching presence throughout the duration of the course through the facilitation of discussions, providing feedback on assignments/activities and answering course questions. Garrison (2007) stated, "Teaching presence must consider the dual role of both moderating and shaping the direction of the discourse" (p. 9).

Instructors provided representations in the clinical course sequence that encouraged engagement and application to learn the core practices of literacy. For example, one assignment required the reading teacher candidates to practice a diagnostic assessment with a student and then upload their video for a classmate to watch provide coaching feedback. The instructor provided clear and concise directions on the assignment and in a previous course had sample videos to display explicit expectations. Reading teacher candidates saw teacher presence in their assignment directions.

Reading teacher candidates had to decompose the representations provided, which demonstrated gradual release of responsibility because now the reading teacher candidates were given the opportunity to practice their understanding of this core practice on their own. Reading teacher candidates had to administer the assessment, provide coaching feedback, and reflect on their own teaching. This required practice provided the instructor confirmation that the reading teacher candidate could successfully enact this core practice in a real-life setting. Teacher presence was seen in the assignment grade and feedback.

Enactment occurred throughout the entire process of the above example. Reading teacher candidates were enacting the core practice of assessing their classmates while watching their own video as well as their classmates and during the feedback process. Reading teacher candidates were able to integrate multiple representations to scaffold learning. Teacher presence was visible on the grading rubric and instructor comments.

Virtual presence enhanced this experience because the reading teacher candidates were able to attend a synchronous meeting depicting specific details on the diagnostic test. Reading teacher candidates were able to ask important questions in real-time and get immediate responses. Teacher presence while integrated with virtual presence improves student-teacher relationships.

Social Presence Using Representations, Decompositions, and Enactments

Social presence advocates reading teacher candidates communicate with classmates in the course to enhance relationships. For example, reading teacher candidates viewed a sample video (representation) of how to administer a diagnostic assessment. After watching the video, they posted to a discussion forum their own diagnostic results and share feedback with classmates.

The discussion required each reading teacher candidate to respond to at least two classmates and the instructor graded this discussion forum, providing social presence in the classroom.

Decomposition occurred with the above example during the peer coaching and feedback section on the assignment. The reading teacher candidates demonstrated their aptitude of the core practices by applying what they have learned about diagnostic testing through authentic and meaningful feedback. The ability to appropriately give feedback to peers validates the mastery of the core practice being taught. The interaction among peers and the instructor's feedback furnished social presence.

Reading teacher candidates enacted their understanding of the representation and how they decomposed it by successfully replying to their classmates' discussions. The instructor monitored the discussion forum and provided necessary feedback and graded each individual response. Social presence was evident throughout this particular task and enhanced overall meaning.

Virtual presence occurred when the instructor held a synchronous meeting with the entire class to walk them through the diagnostic process of that particular test. This virtual meeting allowed reading teacher candidates to ask questions in real-time and have immediate feedback. This permitted the reading teacher candidates to attend the meeting from an area of their choice and encouraged building a relationship with the instructor and their peers.

Cognitive Presence Using Representations, Decompositions, and Enactments

Cognitive presence is defined as how the reading teacher candidates were able to construct meaning of the artifacts found within the course and from continued reflection as to how they interpret discourse (Garrison et al., 2000). In-course materials could be presented as PowerPoints, Google Docs, PDFs, or presentations. Utilizing multiple modalities will increase

the overall comprehension of the lessons being presented. Cognitive presence ties in with the practice-based teaching framework through the application of representations in the online course. Representations included all artifacts uploaded to the course such as PowerPoints, journal articles, videos, diagnostic tools, student samples, and chapter readings.

Decomposition encompassed how the teacher candidates identify the practice being represented and applied those skills and strategies into their assignments. For example, reading teacher candidates were required to administer diagnostic assessments to their students before creating an individualized tutoring plan. This plan validates the reading teacher candidate's capability to apply the core practice of literacy of differentiation. Each student has their own unique goals to work on during the 20 tutoring sessions. Once the assessment was complete, the reading teacher candidates had to utilize the core practices learned to write-up formal reports on their findings. This example provided evidence of cognitive presence.

Enactments in the online environment were evident when the reading teacher candidates demonstrated their understanding of the core practices during their tutoring sessions, key assessments, and final reports. For example, reading teacher candidates practiced administering a diagnostic assessment with a classmate and were required to record the session. After the assessment was complete, they were to coach and provide feedback to their classmates and then watch their own video and reflect. This enhanced overall cognitive presence.

Adding virtual presence to course presentations can improve the overall understanding of pertinent information, especially important concepts such as diagnostic assessments. One example of using virtual presence to enact the core practices of literacy was during each tutoring session. Reading teacher candidates were required to integrate representations to demonstrate how they successfully decomposed the representations through enacting the core practices while

tutoring their students, and the instructors were able to virtually coach these enactments and provide constructive feedback to enhance cognitive presence.

Virtual Presence Using Representations, Decompositions, and Enactments

Virtual presence is live communication offering real-time coaching, feedback, or discussion. According to one instructor, virtual presence can be found in areas of teacher presence, for example, the use of Google Docs allows the reading teacher candidates to view comments in real-time, chat room live discussions or instructor recorded presentations. The addition of virtual presence to the CoI framework is important because after careful review of the data the one concern reading teacher candidates had when choosing between an on-campus or online program was the lack of face-to-face communication. Incorporating virtual presence diminishes this concern. One participant was concerned that there would be a lack of connection in the online environment but was pleasantly surprised at the effect synchronous communication had while in the online clinical sequence. When interviewed, the three reading teacher candidates discussed their concerns of online learning, but further shared that those concerns were unremarkable by the end of the clinical course sequence.

With the incorporation of virtual presence, feedback is enhanced and received in real-time. Social presence can be seen in teacher and cognitive presence as well and should be encouraged as much as possible to ensure the participants in the online environment feel comfortable sharing their point of view, interact with classmates and instructors to build meaningful relationships and have the flexibility to complete assignments within a given timeline. According to Garrison et al. (2000), social presence integrates the encouragement of communication among the individuals within the online environment to help advance interpersonal relationships, which is a necessary component of the CoI framework. Building

relationships, especially in an online course is beneficial and can be accomplished with the use of virtual presence. Critical discourse encourages participants to construct meaning of the material presented in the course.

By examining both the CoI and practice based teaching frameworks, we can see how the practice-based teaching model was designed to improve the teacher candidate's understanding of the core practices within a specific profession. In this case, the profession is a reading teacher and the core practices are the specific skills necessary to perform as a reading teacher in a school setting. The core practices identified are essential to the accurate diagnosis of a specific reading deficiency and to discern which of the teaching strategies will properly address the correction of the deficiency.

The practice-based teaching concepts of representations, decompositions, and enactments have the potential to powerfully inform and expand the CoI presences in online clinically oriented courses. through multiple facets of learning in the online environment. Teacher candidates socially interacted throughout the online courses, especially during weekly discussions. These discussions required the teacher candidates to use representations that they have decomposed from the artifacts located in each module. Teacher candidates used social presence when they uploaded a video recording to a discussion forum of themselves working with students for peer coaching, which demonstrates enactment by way of teacher/student interaction followed by instructor and peer feedback.

Cognitive presence can be seen when teacher candidates utilize the elements in the course and decompose those skills to complete discussions and assignments. Teacher presence was seen throughout the course, the evidence of this presence was denoted with the representations

provided each week, the instructor feedback on teacher candidate enactment and through the

interactive design of the online course framework.

With this research, I was able to connect the lack of a physical instructor presence in an

online forum with the creation of virtual presence, which eliminates the concern of face-to-face

interactions. Research has stated that students enjoy authentic communication when in a face-to-

face setting because of the real-time interactions to encourage student engagement with

classroom materials (Holzweiss, Joyner, Fuller, Henderson, & Young, 2014). The addition of

virtual presence to the CoI framework allows the instructor to engage with students in an online

setting as if they were communicating face-to-face. Virtual presence adds a unique component to

the online environment by encouraging instructors and students to make real-life connections

with the class. Providing opportunities to meet with instructors in a synchronous meeting

provides a unique situation for students to communicate in real-time and encourages the

formation of authentic relationships. Lynch (n.d.) stated, "Notably, research has also indicated

that teaching presence is more predictive of student success in online learning than interactions

with peers" (p. 4).

I propose the implementation of the P-B CoI framework, which intertwines the practice

based components with the CoI components and situates virtual presence in the intersection (see

Figure 14) to enhance online learning, and particularly courses focusing on learning clinical

training in complex skills. Virtual presence can be used for multiple types of professional

training, for example, social workers, health professionals, certified public accountants, lawyers

and financial advisors. These occupations require interaction with individuals and with

professional training can improve their overall performance. This framework can guide the

design of online preparation in other professional skills by providing a comprehensive

foundation of the necessary components that will enhance collaboration, through the

encouragement of participant engagement by providing effective instruction in conjunction with
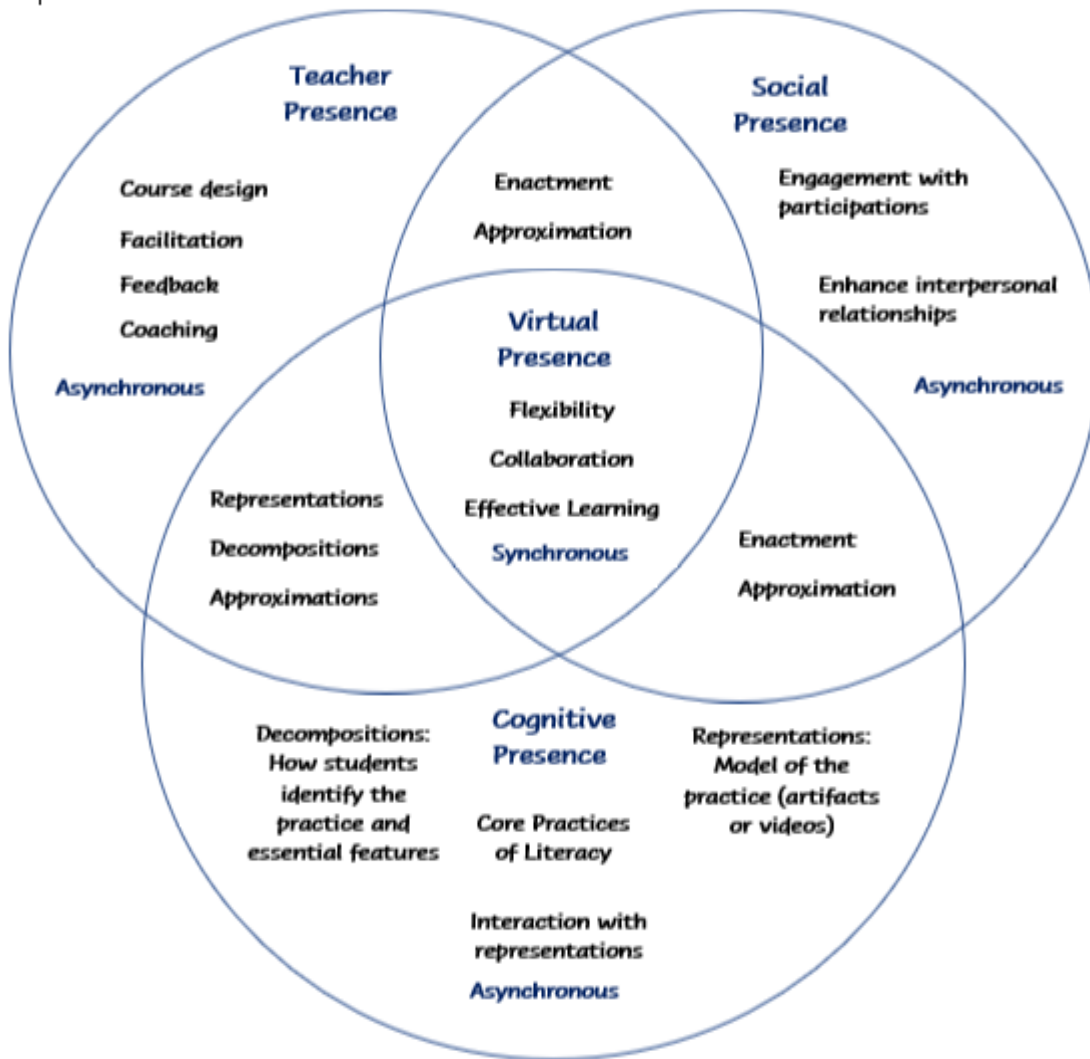
flexibility.

Figure 14. PB-CoI framework.

The framework incorporates asynchronous and synchronous communication (virtual

presence) at the intersection of the three CoI presences. The framework includes the important

elements of the practice based teaching method (i.e., representation, decomposition, enactment)

as they align with the three CoI presences. These components of practice based teaching have

been shown to be effective in face-to-face courses and should now be transferred into the online classroom. My research suggests that incorporating virtual presence in online courses can enhance overall engagement, collaboration, and effectiveness by providing the face-to-face feeling many students find lacking in current online courses. This research suggested that virtual presence can enhance the practice-based teaching elements of representation, decomposition, and enactments, and the CoI components of teacher, social and cognitive presence in an online professional course sequence for teachers. With continuous technological advances, it is likely that virtual presence can augment all online learning.

The framework can serve as a guide for higher education institutions as well as faculty development. It is important that faculty members understand the need for a dynamic online learning environment. Online teaching may sound like an unfavorable option for seasoned faculty members, but the overall implications of offering online courses offers significant benefits. Students from any geographical location may choose to attend a higher education institution based on their reputation. The implications of this research suggest the addition of virtual presence for online learning of specific skills can fill the gap in preparing professionals in remote geographic locations. Improving the quality of educating professionals online increases accessibility of professional knowledge and skills to those who live far from a campus as well as enhancing student engagement and success in online learning wherever they may live.

Recommendations

It is recommended that higher education institutions start to examine their current online courses through the use of the PB-CoI tool checklist (see Table 15) I created and used as an intricate guide for my one-on-one reading teacher candidate and instructor interviews. This tool can be useful for new online instructors to assure they are incorporating features from both

frameworks to create an effective online course that encourages collaboration, communication,

stimulating artifacts, and virtual presence. The P-B CoI tool can utilized in conjunction with the

P-B CoI framework. The tool has been designed as a checklist for instructors explicitly depicts

the vital areas from the P-B CoI framework that enhance the development of student learning.

Table 15

The PB-CoI Tool Checklist

	Pre-Course	During	After
SOCIAL PRESENCE			
• Instructor posts a welcome video • Instructor sends a welcome email to all students • Instructor provides checklist, course map or schedule highlighting important assignments and due dates • Instructor provides a clear explanation of the course and program goals • Instructor was visible throughout the course • Peer observation of approximations or enactments • Rehearsals of core practices with peers • Partner or group work • Encouragement of collaboration among peers			
COGNITIVE PRESENCE			
• Course and program goals are clearly attainable • Materials were engaging and encouraged collaboration • Representations to engage all learners. Examples: Power Point presentations, videos, supplemental articles • Models provided of the practice to be learned • Examples: Sample IRI, ISEL or reports • Differentiation strategies were provided • Learning environment utilizes innovative technology • All links in the course are active and easily accessible • Visual representations provide closed captioning			
INSTRUCTOR PRESENCE			
• Instructor was present throughout the course • Feedback was presented in a timely manner • Facilitates online discussions • Instructor posts in discussion forum at least *two* times • Provides timely feedback on discussions and assignments • Feedback is informative • Judiciously models provided and discussed throughout the course. Example: video on how to conduct and score a running record • Contact information is clearly stated and easily found • Course is activated on-time			

• Representations engage all learners and include closed captioned power points, videos and presentations • Judiciously models provided and discussed throughout the course. Example: *video on how to conduct and score a running record* • Decompositions clearly identify the critical features of the practice to be learned weekly • Allow students to rehearse the skills with classmates • Practice reading and interpreting important diagnostic assessments Example: students watch a video of a teacher administering a running record and practice scoring the assessment to share their results with classmates • Enactments provide students with opportunities to implement the practice learned with learners in the field • Example: Students video record working with students in the field and upload for classmates and instructor feedback • Coaching instructor and classmates provide constructive criticism to promote reflection and enhance learning			
VIRTUAL PRESENCE			
• Implement synchronous communication with instructor (i.e. Introduction meeting or explicit lesson) • Implement synchronous coaching for professional skills (i.e. practicum) • Implement synchronous communication among classmates (i.e. Group or paired assignments)			

The P-B CoI tool has been designed to examine social, cognitive, instructor, and virtual presence before, during and after an online course. The checklist serves as a guide for new and seasoned faculty members to increase engagement and effectiveness of an online course. Having a checklist improves the overall course readiness for the online environment and keep instructors focused on important instructional moves during the course duration. Some of the areas within the tool may only be seen prior to the start of the course or during the course; therefore, this tool should be used as guide and can be transferred to a professional development session on how to prepare faculty to teach in the online environment.

The overall findings of the teacher candidate's perceptions of the online clinical course sequence were positive but did include some negative connotations in regard to lack of social presence. Online graduate reading programs should be a goal for every higher education

institution not only with the implementation of online learning but how it will be organized, coordinated, and executed. The overall impact of how far NLU can reach in regard to a geographical location is vast but it is also important to highlight how this increase can impact pre-K-12 reading teacher candidate learning. The more reading candidate teachers who improve their practices can, in essence, improve reading instruction in their own classrooms.

It is also recommended online courses implement virtual presence to enhance the overall course. After analyzing the data on teacher presence in the online clinical course sequence it is suggested to encourage more courses to incorporate virtual presence to enhance the fluidity of the enactment of core practices of the specific profession. One suggestion is to have potential online students take a survey to establish if that type of learning is an option for their educational path. One challenge of virtual presence was discussed, working around numerous schedules but was not seen as a major quandary. This single challenge can be eradicated with the use of Google Docs, which can be seen in real-time and all participants can immediately add their schedules for viewing. In future for the online practicum courses, reading teacher candidates can review potential supervisor schedules and vice versa to successfully match reading teacher candidates and supervisors. This can be conducted with any potential profession where online clinical experiences are required.

It is suggested to incorporate virtual presence early on in a course program to begin building meaningful relationships. The short answer responses based on the addition of virtual presence in the final course, RLR 592, were positive and demonstrated virtual presence is beneficial to creating relationships with classmates and instructors. One suggestion from a reading teacher candidate was to promote the use of virtual presence among classmates. The respondent stated, "There are times that it would be helpful to discuss our challenges or

successes with other classmates and get advice from them." Although it was recognized finding

time among busy schedules may be difficult, the ability to discuss feedback virtually would

outweigh this potential challenge. Adding this suggestion would increase social presence among

classmates and increase participants' comfort level while participating in discussions, group

assignments and posting questions.

It is suggested to conduct a meet and greet, a synchronous meeting, in the first online

course of the program to eliminate the uneasiness of interacting with classmates in the online

environment. Creating social presence in an online course is not just having discussions between

classmates, it also includes the overall environment in which students learn. To increase social

presence, instructors must also increase teacher presence and encourage course participants to

build relationships with one another which can be done through virtual presence.

Suggestions for Further Research

This research study attempted to understand teacher candidate and instructor perceptions

of online learning and virtual presence throughout a clinical course sequence. Previously, the

lack of research on online practicum design and teacher candidate perceptions of online learning

in regard to social, cognitive, teacher presence and synchronous communication helped direct

this research. The qualitative case study methodology utilized in this study offered insight and a

detailed examination of the experiences of 11 teacher candidates' and three instructors'

perceptions of the online clinical course sequence and the use of virtual presence to enhance

overall learning.

Although this study represents a beginning of research on the incorporation of adding

virtual presence to online courses to improve teacher candidate and instructor perceptions of

online learning and its effectiveness, further research is needed. First, a future study should focus

on a larger group of teacher candidates to further validate the overall positive impression of online learning and virtual presence. The CoI survey can be utilized to gain perceptions of students in various online courses to see if there is a correlation.

Another area to investigate is faculty development needs. Not all faculty members teach in the online forum; therefore, understanding what it would take for faculty to effectively engage in online teaching that includes virtual presence is important. Virtual presence cannot be a welcome video posted in a discussion forum. Virtual presence must be implemented in a way that encourages real-time discussion and builds relationships among faculty and students, demonstrating teacher, social and cognitive presence. To address that area, it is suggested that professional development be created and required for those faculty members teaching in the online environment. Offering a webinar will permit numerous faculty members to join and is ideal to demonstrate the significance virtual presence would have in an online course. It is imperative the professional development webinar is created and implemented live to amplify the relevance of virtual presence. At the end of the webinar, there would be time for questions and answers to really strengthen the importance of having a live chat to discuss learning and receiving immediate feedback. Offering a webinar is extremely manageable and allows faculty to complete training in the comfort of their own environment.

Another area to investigate is the online platform and design. How can the platform be improved to include a program that imbeds a synchronous communication program? Creating a platform that is more interactive and allows participants to use innovative technology to enhance student learning as an alternate to face-to-face courses. The reading teacher candidates shared they missed the comradery of a face-to-face environment (social presence) and to compensate for this missing link, an online platform that has the opportunity to utilize virtual presence within the

course would improve online learning. This incorporation may increase the student's opportunities to use virtual presence with their classmates, let the learners drive their educational needs and goals.

Finally, during practicum, reading teacher candidates were required to use their own materials. Further research is needed as to how difficult this process was and if they felt confident in creating and implementing reading strategies when working with their students. This research can depict whether or not reading teacher candidates were stuck finding their own materials or if they were able to successfully apply the materials presented in class and enact those strategies during practicum.

Conclusion

There is little amount of recent research on graduate online reading practicums and how they are run in an online environment this research hopefully paved the way for higher education institutions to examine their online reading practicums to include virtual presence as a component to increase the overall teacher candidate experience. Frey (2008) suggested "Online delivery of teacher education programs may hold the potential to reach a greater number of in-service teachers than on-campus programs, providing professional growth opportunities to teachers that are geographically isolated" (p. 2).

After carefully analyzing the data, I found that adding virtual presence (synchronous communication) in the online clinical course sequence was perceived as beneficial by both reading teacher candidates and instructors. The candidates indicated that virtual presence enhanced their overall learning experiences and provided for effective learning. Virtual presence provided support to the reading teacher candidates who needed further assistance by allowing them to ask questions in real time with immediate feedback. Through the addition of virtual

presence reading teacher candidates found it easier to collaborate online. Reading teacher candidates felt the virtual presence increased their engagement within the course, with their classmates and instructors which increased their ability to enact the core practices of literacy. As an instructor, I saw how implementing virtual presence increased student productivity through the opportunity to have flexibility. The flexibility afforded by virtual presence allowed for decreasing drive time if any, eliminating missing family or work commitments, completing assignments at an individual pace and most importantly, creating the opportunity to have face-to-face meetings without the hassle.

Therefore, it is essential to design online courses with innovative digital technology and utilize virtual presence to enhance the students' overall experience, preparedness, and achievement. Creating a high-quality and engaging program will help attract, retain and confer students once they have committed to an educational program. The vision of adding virtual presence to the majority of online courses is to increase student enrollment, retainment, conferment, engagement and success at the higher education level. My desired change is primarily to integrate a digital tool for students to utilize that will allow the incorporation of virtual presence with their classmates as well as instructors to enhance the overall online learning experience.

Virtual presence increases productivity because it allowed the reading teacher candidate to be in the comfort of their own environment. Online programs decrease the amount of time spent traveling to and from class, time away from outside activities and flexibility. Reading teacher candidates expressed the pleasure of not having to travel to a campus for class. The majority of the reading teacher candidates held full-time jobs and would have to add to their day traveling if they took the clinical course sequence on-campus. The amount of time spent

traveling would vary, but for most was not an option due to the fact the majority of the reading

teacher candidates had families and other obligations. Finally, the flexibility of completing

assignments at their leisure was an important factor as to why the reading teacher candidates

chose an online program.

I envision NLU creating a reading specialist program where it can be nationally

accessible to teacher candidates based on their substantial history and reputation with preparing

teachers. With NLU's rich history in teacher preparation, potential students would be able to

evaluate their highly successful education programs and consider NLU their higher education

institution, even if they are not Illinois residents. One challenge will be creating a solid

foundation to implement a nationally recognized Reading Specialist Program since each state has

its own program requirements. With the daily advancement of technology, it will be crucial for

online programs to adhere to each state's teaching standards to increase the opportunity for

teacher candidates to select the higher education program of their choice no matter their

geographical location. Illinois has a lot of requirements for the reading teacher endorsement,

those requirements are 24 semester hours in the areas of foundations of reading, content area

reading, assessment and diagnosis of reading problems, development, and remedial reading

instruction and support, development and remedial materials, resources and literature appropriate

to students across all grade rangers and reading practicum (Illinois State Board of Education

Teachers, n.d.).

The reading specialist program should consider shifting the program focus on research-

based core teaching practices that will advance the reading teacher candidate's understanding of

literacy and less focus on specific state standards. With the advancement of online learning, it is

pertinent for states to come up with higher education curriculum that can be transferred state to

state since we do live in a highly peripatetic world.

REFERENCES

Alpi, K. & Evans, J. (2019). Distinguishing case study as a research method from case reports as a publication type. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6300237

Amemado, D. & Manca, S. (2017). Learning from decades of online distance education: MOOCs and the Community of Inquiry framework. Retrieved December 28, 2019, from ResearchGate website: https://www.researchgate.net/publication/317223722_Learning_from_decades_of_online_distance_education_MOOCs_and_the_Community_of_Inquiry_framework

Anderson, T. (2018). How Communities of inquiry drive teaching and learning in the digital age. Techonline.ca. Retrieved from: https://teachonline.ca/tools-trends/insights-online-learning/2018-02-27/how-communities-inquiry-drive-teaching-and-learning-digital-age

Anderson, T., Rourke, L., Garrison, D. R., Archer, W. (2001). Assessing teaching presence in a computer conference environment. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.

Armellini, A., & De Stefani, M. (2016). Social presence in the 21st century: An adjustment to the Community of Inquiry framework. *British Journal Of Educational Technology, 47*(6), 1202-1216. doi:https://doi.org/10.1111/bjet.12302

Armstrong, D. A. (2011). Students' perceptions of online learning and instructional tools: A qualitative study of undergraduate students use of online tools. *TOJET: The Turkish Online Journal of Educational Technology, 10*(3), 222-226. Retrieved from http://www.tojet.net/articles/v10i3/10325.pdf

Ball Loewenberg, D., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. Journal of Teacher Education, 60(5). doi:https://doi.org/10.1177/0022487109348479

Cabello, V., & Topping, K. (2018). Making scientific concepts explicit through explanations: Simulations of a high-leverage practice in teacher education. *International Journal of Cognitive Research in Science, Engineering & Education, 6*(3). doi:https://doi.org/10.5937/ijcrsee1803035C

Chen, N.-S., Ko, H.-C., Kinshuk & Lin, T. (2005). A model for synchronous learning using the Internet. *Innovations in Education and Teaching International, 42*(2), 181-194. doi:https://doi.org/10.1080/14703290500062599

Chen, R. (2016). Learner perspectives of online problem-based learning and applications from cognitive load theory. *Psychology Learning & Teaching,15*(2), 195-203. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/1475725716645961

CoI Survey | CoI. (2018). Retrieved December 28, 2019, from Athabascau.ca website:
        https://coi.athabascau.ca/coi-model/coi-survey/

Core Practice Consortium. (n.d.). Retrieved from https://www.corepracticeconsortium.com/

Corcoran, P., Walker, K., & Wals, A. (2004). Case studies, make-your-case studies, and case
        stories: A critique of case-study methodology in sustainability in higher education.
        Environmental Educational Research, 10(1), 7-11. doi:10.1080/1350462032000173670

Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five
        approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications

Creswell, J. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five
        Approaches*. Retrieved from:
        https://bookshelf.vitalsource.com/#/books/9781506336176/cfi/6/32!/4/2/4/2@0:0

Culatta, R. (2019). Constructivist theory (Jerome Bruner). *Instructionaldesign.org*. Retrieved
        from https://www.instructionaldesign.org/theories/constructivist/

Dictonary.com (n.d.). Retrieved from https://www.dictionary.com/browse/diploma-mill?s=t

Dutton, Y. M., Ryznar, M., & Long, K. (2019). Assessing online learning in law schools:
        Students say online classes deliver. *Denver Law Review, 96*(3), 493-534. Retrieved from
        http://hdl.handle.net/1805/19627

Ferrer, D. (2019). History of online education. *The Quad*. Retrieved from
        https://thebestschools.org/magazine/online-education-history/

Forzani, F. (2014). Understanding "core practices" and "practice-based" teacher education:
        Learning from the past. *Journal of Teacher Education, 65*(4).
        doi:https://doi.org/10.1177/0022487114533800

Frey, T. (2008). Determining the impact of online practicum facilitation for inservice teachers.
        Journal of Technology and Teacher Education, 16(2), 181-210. Retrieved from
        https://core.ac.uk/download/pdf/5165368.pdf

Garrison, D. (2007). Online community of inquiry review: Social, cognitive, and teaching
        presence issues. *The Journal of Asynchronous Learning*. Retrieved from
        https://files.eric.ed.gov/fulltext/EJ842688.pdf

Garrison, D., & Akyol, Z. (2013). The community of inquiry theoretical framework: In the
        context of online and blended learning. Retrieved from
        https://www.researchgate.net/publication/284306348_The_Community_of_Inquiry_Theo
        retical_Framework

Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st century: A framework for*

research and practice. Retrieved from:
https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?
ReferenceID=631566

Garrison, D., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment:
Computer conferencing in higher education model. *The Internet and Higher Education.*
Retrieved from: https://coi.athabascau.ca/coi-model/

Garrison, D., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning:
Interaction is not enough. *The American Journal of Distance Education.* Retrieved from
http://www.anitacrawley.net/Resources/Articles/GarrisonClevelandInnes2005.pdf

Gibbons, L. & Cobb, P. (2017). Focusing on teacher learning opportunities to identify potentially
productive coaching activities. *Journal of Teacher Education, 68*(4), 411-425. Retrieved
from https://journals.sagepub.com/doi/pdf/10.1177/0022487117702579

Going the Distance: Online Education in the United States - OLC. (2011). Retrieved December
28, 2019, from OLC website: https://onlinelearningconsortium.org/survey_report/2011-
survey-online-learning-report/

Goldman, Z., Goodboy, A., & Weber, K. (2016). College students' psychological needs and
intrinsic motivation to learn: An examination of self-determination theory.
Communication Quarterly, *65*(2), 167-191. doi:10.1080/01463373.2016.1215338

Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E. & Williamson, P. (2009).
Teaching practice: A cross-professional perspective. *Teachers College Record, 111*(9),
2055-2100. Retrieved from
https://pdfs.semanticscholar.org/6018/abe8f22ac30ec7937edf6dea8989f3e9b105.pdf?_ga
=2.55760750.413542877.1577402245-1022683546.1575632797

Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imaging
teacher education. *Teachers and Teachers: Theory and Practice, 15*(2), 273-289.
doi:http://dx.doi.org/10.1080/13540600902875340

Hiebert, J., Morris, A. K., Berk, D., & Jansen, A. (2007). Preparing teachers to learn from
teaching. *Journal of Teacher Education, 58*(1), 47-61.
doi:10.1177/0022487106295726

Holzweiss, P. C., Joyner, S. A., Fuller, M. B., Henderson, S., & Young, R. (2014). Online
graduate students' perceptions of best learning experiences. *Distance Education, 35*(3),
311-323. Retrived from https://doi-org.nl.idm.oclc.org/10.1080/01587919.2015.955262

Hwang, W.-Y., Shadiev, R., Kuo, T. C. T., & Chen, N.-S. (2012). Effects of speech-to-text recognition application on learning performance in synchronous cyber classrooms. *Journal of Educational Technology & Society, 15*(1), 367-380. Retrieved from https://pdfs.semanticscholar.org/f89c/62812cca180454ab5f0f37a3dd31066341f4.pdf?_ga=2.23141119.413542877.1577402245-1022683546.1575632797

IES: National Center for Education Statistics. (n.d.) *Enrollment and Employees in Postsecondary Institutions, Fall 2017; and Financial Statistics and Academic Libraries, Fiscal Year 2017*. Retrieved from https://nces.ed.gov/pubs2019/2019021REV.pdf

Illinois State Board of Education. (n.d.). Retrieved from https://www.isbe.net/Pages/SpecificDistributionAreasforSelectedContent-AreaEndorsements.aspx

Illinois State Board of Education. (n.d.). Retrieved from: https://www.isbe.net/Documents/prog-report-format-reading-end.pdf#search=reading%20specialist

Kucan, L., Palincsar, A., Busse, T., Heisey, N., Klingelhofer, R., Rimbey, M., & Schutz, K. (2011). Applying the Grossman et al. theoretical framework: The case of reading. *Teachers College Record, 113*(12), 2897-2921. Retrieved from https://www.researchgate.net/publication/288083635_Applying_the_Grossman_et_al_Theoretical_Framework_The_Case_of_Reading

Lederman, D. (2018). Online education ascends. *Inside Higher Education.* Retrieved from https://www.insidehighered.com/digital-learning/article/2018/11/07/new-data-online-enrollments-grow-and-share-overall-enrollment

Lilienthal, L. K., Potthoff, D. D. P., & Anderson, K. E. (2017). The development of an online, graduate practicum course. *Delta Kappa Gamma Bulletin, 84*(1), 42-52.

Lim, D., & Kim, H. (2003). Motivation and learner characteristics affecting online learning and learning application. *Journal of Educational Technology Systems,31*(4), 423-439. doi:10.2190/0LW0-KE8X-MDYH-X27F

Lynch, J. (n.d.) Teaching presence. *Pearson*. Retrieved from https://www.pearsoned.com/wp-content/uploads/INSTR6230_TeachingPresence_WP_f.pdf

Maidment, J. (2006). Using on-line delivery to support students during practicum placements. *Australian Social Work*, *56*(1), 47-55. doi:https://doi.org/10.1080/03124070500449770

Moreillon, J. (2015). Increasing interactivity in the online learning environment: Using digital tools to support students in socially constructed meaning-making. *TechTrends: Linking Research & Practice to Improve Learning*. Retrieved from https://doi-org.nl.idm.oclc.org/10.1007/s11528-015-0851-0

Moss, P. (2011). Analyzing the teaching of professional practice. *Teachers College Record*, *113*(12), 2878-2896.

National College of Education. (n.d.). Retrieved from PDF File. Retrieved from: https://www.researchgate.net/publication/284564249_Using_Teaching_Videos_in_the_Adaptive_Cycles_of_Teaching

National Louis University. (n.d.) Retrieved from https://www.nl.edu/colleges/nationalcollegeofeducation/aboutnce/

Nguyen, T. (2015). The effectiveness of online learning: Beyond no significant difference and future horizons. *MERLOT Journal of Online Learning and Teaching, 11*(2). Retrieved from http://jolt.merlot.org/Vol11no2/Nguyen_0615.pdf

Nye, A. (2015). Building an online academic learning community among undergraduate students. *Distance Education, 36*(1), 115-128. doi:10.1080/01587919.2015.1019969

Ogange, B, Agak, J. j., Okelo, K, & Kiprotich, P. (2018). Student perceptions of the effectiveness of formative assessment in an online learning environment. *Open Praxis, 10*(1), 29-39. doi:10.5944/openpraxis.10.1.705

Online Learning Consortium. (2017). EDTech and online learning are making education more accessible. Retrieved from https://onlinelearningconsortium.org/news_item/edtech-online-learning-making-higher-education-accessible/?gclid=Cj0KCQjw3JXtBRC8ARIsAEBHg4mJG9OAzX2QOh8-ZlBOjqgW0D-ADJYNS34bR7XGQ1FxKw9pvbfdEMUaAuEwEALw_wcB

Patton, M. (1987). How to use qualitative methods in evaluation. Retrieved from https://evaluation.msf.org/sites/evaluation/files/a_guide_to_using_qualitative_research_methodology.pdf

Pargett, K. (2011). The effects of academic advising on college student development in higher education. *Educational Administration: Theses, Dissertations, and Student Research*. Paper 81. Retrieved from https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1083&context=cehsedaddiss

Perry, H., & Pilati, L. (2011). Online learning. *New Directions for Teaching & Learning, 2011*(128), 95-104. doi:10.1002/tl.472

Redstone, A. E., Stefaniak, J. E., & Tian Luo. (2018). Measuring presence: A review of research using the community of inquiry instrument. *Quarterly Review of Distance Education, 19*(2), 27-36. Retrieved from https://www.researchgate.net/publication/336638490_Measuring_Presence_A_Review_of_Research_Using_the_Community_of_Inquiry_Instrument

Rodgers, R. F. (1990c). Student development. In U. Delworth, G. R. Hanson, & Associates, *Student services: A handbook for the profession* (2nd ed.) (pp. 117- 164). San Francisco: Jossey-Bass.

Rose, M. (1999). Our hands will know: The development of tactile diagnostic skill—teaching, learning, and situated cognition in a physical therapy program. *Anthropology and Education Quarterly, 30*, 133–160.

Salmon, D., Freedman, R., Degener, S., Rossman, A., Ko, E., Phillips, M., & Hilsabeck, A. (2015, April). *Adaptive Cycles of Teaching (ACT): An Innovation in Teacher Education.* Round Table presented at the annual meeting of the American Educational Research Association, Chicago.

Sayeski, K. L. (2018). Putting high-leverage practices into practice. *Teaching Exceptional Children*, *50*(4), 169-171.doi:https://doi-org.nl.idm.oclc.org/10.1177/0040059918755021

Shea, P., Gozza-Cohen, M., Uzuner, S., Mehta, R., Valtcheva, A., Hayes, S., & Vickers., J. (2011). The community of inquiry framework meets the SOLO taxonomy: A process-product model of online learning. *Educational Media International*, *48*(2), doi:https://doi.org/10.1080/09523987.2011.576514

Sheffield, S. L., McSweeney, J. M., & Panych, A. (2015). Exploring future teachers' awareness, competence, confidence, and attitudes regarding teaching online: Incorporating blended/online experience into the "teaching and learning in higher education" course for graduate students. *Canadian Journal of Higher Education, 45*(3), 1-14. Retrieved from http://files.eric.ed.gov/fulltext/EJ1085353.pdf

Simpson, M. (2006). Field experience in distance delivered initial teacher education programmes. Journal of Technology and Teacher Education, 14(2), 241-254.

Smith, M. (2019). Characterizing adjunct faculty members' call to teach in higher education. *Curriculum & Teaching Dialogue, 21*(1-2), 65-80, 164.. Retrieved from https://search.proquest.com/openview/ca532e5a7be0539797f41c558a72ef35/1?pq-origsite=gscholar&cbl=29703

Squires, D. R. (2014). M-Learning: Implications in learning domain specificities, adaptive learning, feedback, augmented reality, and the future of online learning. *Journal of Educational Technology, 11*(3), 1-8.

Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Teaching Works. (n.d.). Retrieved from http://www.teachingworks.org/work-of-teaching/high-leverage-practices

Tsai, C. (2013). An effective online teaching method: the combination of collaborative learning with initiation and self-regulation learning with feedback. *Behavior & Information Technology, 32*(7), 712-723. doi:10.1080/0144929X.2012.667441

Yin, R. (2006). Case study methods. In J. L. Green, G. Camilli, & P. B. Elmore, (Eds.), *Handbook of complementary methods in education research* (pp. 111-122). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Yin, R. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Yin, R. (2018). *Case study research design and applications.* Retrieved from https://bookshelf.vitalsource.com/#/books/9781506336176/cfi/6/2!/4/2/2@0:58.5

APPENDIX A

Community of Inquiry Survey Instrument

Please use the following Likert Scale to answer the survey questions below:
<u>5- point Likert-type scale</u>
1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Teaching Presence *Design & Organization*	
The instructor clearly communicated important course topics.	1 2 3 4 5
The instructor clearly communicated important course goals.	1 2 3 4 5
The instructor provided clear instructions on how to participate in course learning activities.	1 2 3 4 5
The instructor clearly communicated important due dates/time frames for learning activities.	1 2 3 4 5
Facilitation	
The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.	1 2 3 4 5
The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.	1 2 3 4 5
The instructor helped to keep course participants engaged and participating in productive dialogue.	1 2 3 4 5
The instructor helped keep the course participants on task in a way that helped me to learn.	1 2 3 4 5
The instructor encouraged course participants to explore new concepts in this course.	1 2 3 4 5
Instructor actions reinforced the development of a sense of community among course participants.	1 2 3 4 5
Direct Instruction	
The instructor helped to focus discussion on relevant issues in a way that helped me to learn.	1 2 3 4 5
The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.	1 2 3 4 5
The instructor provided feedback in a timely fashion.	1 2 3 4 5
Social Presence *Affective Expression*	
Getting to know other course participants gave me a sense of belonging in the course.	1 2 3 4 5
I was able to form distinct impressions of some course participants.	1 2 3 4 5
Online or web-based communication is an excellent medium for social interaction.	1 2 3 4 5
Open Communication	
I felt comfortable conversing through the online medium.	1 2 3 4 5
I felt comfortable participating in the course discussions.	1 2 3 4 5

I felt comfortable interacting with other course participants.	1 2 3 4 5
Group Cohesion	
I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	1 2 3 4 5
I felt that my point of view was acknowledged by other course participants.	1 2 3 4 5
Online discussions help me to develop a sense of collaboration.	1 2 3 4 5
Cognitive Presence	
Triggering Event	
Problems posed increased my interest in course issues.	1 2 3 4 5
Course activities piqued my curiosity.	1 2 3 4 5
I felt motivated to explore content related questions.	1 2 3 4 5
Exploration	
I utilized a variety of information sources to explore problems posed in this course.	1 2 3 4 5
Brainstorming and finding relevant information helped me resolve content related questions.	1 2 3 4 5
Online discussions were valuable in helping me appreciate different perspectives.	1 2 3 4 5
Integration	
Combining new information helped me answer questions raised in course activities.	1 2 3 4 5
Learning activities helped me construct explanations/solutions.	1 2 3 4 5
Reflection on course content and discussions helped me understand fundamental concepts in this class.	1 2 3 4 5
Resolution	
I can describe ways to test and apply the knowledge created in this course.	1 2 3 4 5
I have developed solutions to course problems that can be applied in practice.	1 2 3 4 5
I can apply the knowledge created in this course to my work or other non-class related activities.	1 2 3 4 5

Demographics

1. Please share what grade level and/or content area you teach?
2. Please circle your age range:
   20-25 26-30 31-35 36-40 41-45 46-50 51-55 56-60 61-65
3. What are your thoughts on online learning?
4. How and why did you choose your online institution?
5. Was this your first experience with an online program?
6. How would you define synchronous communication (virtual presence)?
7. Did you feel synchronous communication (live video conferences) beneficial? Why or why not?
8. Do you feel there should be more synchronous communication embedded in RLR 592 or do you feel there was just enough?

Practice-Based Community of Inquiry Tool (PB CoI)

Social Presence	
	Interview Prompts
-Instructor posts a welcome video	How did you experience the social and emotional climate of the online clinical course sequence? What did your instructor do that helped you to engage?
-Instructor sends a welcome email to all students	
-Instructor provides checklist, course map or schedule highlighting important assignments and due dates	What particular features of the learning environment helped you know what to do? Describe the ways you worked with others to learn during the online clinical course sequence? What was most helpful to your learning?
-Instructor provides a clear explanation of the course and program goals	What were some of the significant opportunities to interact with peers in the online learning clinical sequence? How did they help you learn the core teaching practices needed for literacy tutoring?
-Instructor was visible throughout the course	
Peer observation of approximations or enactments	Did you rehearse important teaching practices? If so, how? What tools or supports did you use?
Rehearsals of core practices with peers	
-Partner or group work	
-Encouragement of collaboration among peers	
Cognitive Presence	
	Interview Prompts
-Course and program goals are clearly attainable	How did you interact with the materials presented in the online clinical courses? Did you find the materials beneficial? Did you have to find materials on your own outside of the online course?
Materials were engaging and encouraged collaboration	
-**Representations** to engage all learners Examples: *Power Point presentations, videos, supplemental articles*	How did you utilize the materials presented in the course? Were you able to transfer any of the skills and strategies learned to your own classroom? Did you feel the materials presented gave you enough insight into the topic or skill you were being taught?
-Models provided of the practice to be learned Examples: Sample IRI, ISEL or reports	Did you feel there were enough samples or models provided to learn and understand how to administer a diagnostic assessment?
-Differentiation strategies were provided	Did you feel you understood how to differentiate your tutoring sessions based on your diagnosis of your student?
-Learning environment utilizes innovative technology	Did you feel the course offered digital tools to enhance your learning?

-All links in the course are active and easily accessible	
-Visual representations provide closed captioning	
Instructor Presence	
Interview Prompts	
-Instructor was present throughout the course	How did the instructor interact with you throughout each course? Was there one course where the instructor was more active or present?
-Feedback was presented in a timely manner	
-Facilitates online discussions	Did you feel there is an area the instructor could have been more present in the course?
-Instructor posts in discussion forum at least *two* times	Did you feel instructor feedback was presented in a timely manner and enhanced your overall learning experience? Specifically, did you feel the feedback was informative to your learning?
-Provides timely feedback on discussions and assignments	
-Feedback is informative	Did you feel the instructor provided enough examples or models of how to administer assessments?
Judiciously models provided and discussed throughout the course Example: *video on how to conduct and score a running record*	Did you feel the instructor provided enough strategies and skills to differentiation lesson plans for your tutoring sessions?
-Contact information is clearly stated and easily found	Did you have to contact your instructor throughout any of the clinical courses? If so, how quick was the instructor to respond? Were you satisfied with the instructor's response?
-Course is activated on-time	Was the course activated on time?
Representations engage all learners and include closed captioned power points, videos and presentations	Did you feel the materials, videos and models provided in the course were explicitly explained by the instructor? If not, why? Did the instructor provide clear weekly goals of what critical features were taught during each module? If not, what suggestions do you have for improvement?
-Judiciously models provided and discussed throughout the course Example: *video on how to conduct and score a running record*	Did the instructor explain the importance of rehearsing specific skills and strategies with classmates?
Decompositions clearly identify the critical features of the practice to be learned weekly	Did the instructor provide clear examples of expectations on assignments? Did the instructor provide you with opportunities to practice a diagnostic skill? If so, how was this conducted?
-Allow students to rehearse the skills with classmates	Did the instructor provide time to enact specific skills, strategies and assessments with classmates before working with students? If so, what are your thoughts on these interactions? Were they beneficial?
-Practice reading and interpreting important diagnostic assessments	Did you receive coaching feedback from your classmates? If so how did you receive this feedback, and did you feel it was beneficial?

Example: students watch a video of a teacher administering a running record and practice scoring the assessment to share their results with classmates	What was the most beneficial way the instructor provided materials for you to learn? Did you feel the instructor prompted you to reflect on your learning? If So, did it help you improve your teaching? What are your overall thoughts of online learning?
Enactments provide students with opportunities to implement the practice learned with learners in the field Example: Students video record working with students in the field and upload for classmates and instructor feedback	
Coaching instructor and classmates provide constructive criticism to promote reflection and enhance learning	
Virtual Presence	
Interview Prompts	
Synchronous video conferencing with instructor	How do you feel about synchronous video conferencing with your Supervisor during RLR 592?
Synchronous video coaching	Did you feel synchronous video coaching was beneficial to your Online learning practicum experience?
Synchronous video conferencing with classmates	Did you use synchronous video conferencing with your classmates? If so how? If not, do you feel this would be beneficial?

Instructor Interview Questions

Demographics

1. How long have been teaching?
2. What is your job position at NLU?
3. How long have you been teaching at NLU?
4. What is your highest level of education? What is your degree in?

Clinical Sequence Questions

5. How many times have you taught the clinical course sequence?
6. Did you develop the courses?
7. How many times have you supervised the practicum courses?
8. What are your thoughts on online learning?
9. How many online courses have you taught?
10. How many face-to-face courses have you taught?
11. What do you think about using virtual presence (synchronous meetings) in the online environment?
12. How do you think virtual presence (synchronous meetings) will benefit student learning?
13. What are your thoughts on virtual presence (synchronous meetings) for RLR 510?
14. What are your thoughts on virtual presence (synchronous) meetings for RLR 511?
15. What are your thoughts on virtual presence (synchronous) meetings for RLR 592?
16. How do you feel students progressed throughout the clinical course sequence?
17. What were challenges you perceived throughout the clinical course sequence?
18. What are the strengths you see using a clinical course sequence in the online environment?
19. What suggestions do you have to add virtual presence to the online course sequence?
20. Any other thoughts you would like to add?

RLR 592 Observation Rubric

Tutor Name _____Student_____Date_____

Criteria	3	2	1	*
1. The content of the lesson demonstrates understanding of literacy processes.				
2. Materials used are appropriate.				
3. Tutor uses appropriate language.				
4. Tutor listens to the student and responds appropriately				
5. Tutor provides appropriate scaffolding.				
6. Student understands what s/he is doing and why.				
7. The lesson is paced well.				
8. Tutor has good rapport with the student.				

3-Proficient; 2-Basic; 1-Unsatisfactory; *-not observed

Strengths

Things to Think About

APPENDIX E

Key Assessment Rubric

	Unsatisfactory (1)	Basic (2)	Proficient (3)	N/A
1.ContentThe content of the lessons demonstrate understanding of literacy processes. (1.000, 12%) ILA-2010.5.3	Few routines are appropriate to support student's literacy	Most routines are appropriate to support student's literacy	All routines are appropriate to support student's literacy	
2. Materials – Materials used are appropriate. (1.000, 12%)	Uses limited range of materials (including online resources)	Uses a range of materials (including online resources)	Uses a wide range of materials (including online resources)	
3. Language – Tutor uses appropriate language. (1.000, 12%) ILA-2010.5.2	Language used does not motivate and scaffold student's learning	Uses some language to motivate and scaffold student's learning	Uses appropriate language to motivate and scaffold student's learning	
4. Listens – Tutor listens to the student and responds appropriately. (1.000, 12%) ILA-2010.3.3	Responds poorly to support and modify instruction	Usually responds to support and modify instruction	Responds appropriately to support and modify instruction	
5. Scaffolds – Tutor provides appropriate scaffolding. (1.000, 12%) ILA-2010.2.2	Approaches are not appropriate to develop student's literacy	Uses some appropriate instructional approaches to develop student's literacy	Uses varied and appropriate instructional approaches to develop student's literacy	
6. Metacognition – Student understands what s/he is doing and why. (1.000, 12%) ILA-2010.5.2	Does not develop students' metacognitive processes to develop literacy and motivate student	Partially develops students' metacognitive processes to develop literacy and motivate student	Develops students' metacognitive processes to develop literacy and motivate student	
7. Pacing – The lesson is paced well. (1.000, 12%) ILA-2010.2.2 ILA-2010.5.3	Routines and approaches are poorly paced	Routines and approaches are usually well-paced	Routines and approaches are varied and well-paced.	
8. Rapport – Tutor has good rapport with the student. (1.000, 12%) ILA-2010.5.2	The tutor has poor rapport with the student	The tutor has good rapport with the student	The tutor has excellent rapport with the student	

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Final Report Rubric

Criteria	Proficient	Basic	Unsatisfactory	Points
Initial Diagnosis	3 points Included with complete testing information and accurate diagnosis based on the assessments.	2.7 points Included with partial testing information and a diagnosis based on the assessments.	2.4 points Included with testing information and a diagnosis poorly related to the assessments.	/3
Description of Instruction	5 points Included a full, understandable description of the instruction for each component of literacy that was addressed.	4.5 points Included an understandable description of the instruction for most components of literacy that was addressed.	4 points Included a description of the instruction for most components of literacy that was addressed that is difficult to understand.	/5
Description of Progress	4 points Describes the student's progress in all areas of literacy addressed, with appropriate formal and informal data.	3.6 points Describes the student's progress in all areas of literacy addressed, with some data.	3.2 points Describes the student's progress in most areas of literacy addressed.	/4
Recommendations	2 points Makes good recommendations based on the instruction given and assessment.	1.8 points Makes good recommendations based on instruction or assessment.	1.6 points Makes recommendations which are not specifically related to the instruction given or assessments.	/2
Style and Format	1 point Accurate and appropriate.	0.9 points A few errors in style or format.	0.8 points Several errors in style or format.	/1