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Investigating the Impacts of Participating in a Virtual Literacy Clinic: A Case Study Exploring Self-Efficacy in Pre-Service Teachers

Caitlin Mahoney Spears
University of Arkansas, Fayetteville

Investigating the Impacts of Participating in a Virtual Literacy Clinic: A Case Study Exploring Self-Efficacy in Pre-Service Teachers

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by

Caitlin Mahoney Spears
Bachelor of Science in Education in Childhood Education, 2015
University of Arkansas
Master of Arts in Teaching, 2016
University of Arkansas

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University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

Heather D. Young, Ph.D.
Dissertation Director

Angela Elsass, Ed.D.
Committee Member

Christian Z. Goering, Ph.D.
Committee Member

Abstract

This study describes how participation in a university literacy clinic impacts self-efficacy in pre-service teacher candidates. This study was conducted one and a half years into the global COVID-19 pandemic, creating the need for the clinic's program, Literacy Camp, to be completed through fully virtual means. Thus, ways in which the pre-service teachers' experience was impacted by the method of instructional delivery was also detailed. Despite the body of growing research related to virtual learning and efficacy outcomes, there was a gap in the literature related to pre-service teachers' participation in a fully virtual university literacy clinic and its impacts on their self-efficacy. This study was designed with a need to fill this hole in mind.

The unique and personal experiences of 23 elementary pre-service teacher candidates completing a yearlong internship and participating in a university literacy clinic were explored in this qualitative case study, framed through a social constructivist lens (Creswell, 2013; Vygotsky, 1978) so that the voice of the individual was elevated and carefully considered. A convenience sampling scheme was utilized to collect and analyze data compiled from three main data sources provided by pre-service teacher candidate participants: an efficacy pre-survey, an efficacy post-survey, and ten daily debrief forms.

Four original themes emerged from the data: *Building a Learning Culture, Tutor as the Learner, Student First Approach to Intervention,* and *The Virtual Environment*. Findings from this study indicate that participation in the virtual literacy clinic allowed pre-service teachers to successfully plan and implement a full, individualized intervention related to literacy learning for one elementary or middle school student. Participants were able to reflect on their experience to grow as a learner and recognize the impacts they made on their Literacy Camp students. Despite

the challenges faced through a fully virtual learning setting, pre-service teachers were able to overcome obstacles and complete their practicum experience, gaining self-efficacy throughout the process.

Dedication

I dedicate this dissertation to the individuals in my life that saw me through my educational journey. First, to my parents, Larry and Sandy Mahoney: thank you for knowing what has been best for me far sooner than I knew for myself. I will never forget sitting on the floor at graduation for my master's degree and receiving a text that said, "Look to your right—there is your competition." Dad, you had spotted the doctoral graduates, and wished that for me, as you knew that "educators respect education." You both have wanted better for me than you had for yourselves, and you have worked every single day to ensure the best possible future for my brother and me. I can never thank you enough. I love you both endlessly.

Next, to my husband, Ryan: you deserve a medal for putting up with my countless hours of coursework, studying, stressing over statistics exams, and of course the writing of this dissertation. Never once did you complain when I had to skip out on family events, forget to make dinner, or neglect household responsibilities because I was busy with schoolwork. You selflessly absorbed so many additional roles within our home to guarantee that I could successfully complete my degree program, and for that, I am eternally grateful. I love you dearly.

Finally, to my three stepchildren, Garrett, Landon, and Stailey, and to my son who will be born this summer, Brady: everything I do in life is for you. I think about you four on my hardest days and remember my "why" is to provide you each with the life that I know you deserve. I love you all so much more than you'll ever understand. I pray that you grow up knowing that you are brave enough, smart enough, and strong enough to accomplish anything you want. I will ALWAYS be in your corner!

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I was fortunate enough to serve in the University of Arkansas Clinic for Literacy under Dr. Linda Eilers, someone who I have grown to cherish dearly. Dr. Eilers is one of the wisest people I know. She provided me with all the tools and materials to be a successful graduate assistant, as well as guided me as I taught my first graduate level course. Though this is her final year at the University, I know that her impact will be felt for countless years to come.

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Lastly, I want to thank every one of my students, both pre-service teachers and “littles” that participated in the Literacy Clinic. I was nervous to leave the elementary classroom to serve at the university level, but each student I taught brought me joy that I could not have anticipated. The love the pre-service teachers show for their future students is inspiring. I am so proud of have been a part of their journeys.

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Chapter One: Introduction

The beliefs of a teacher about his or her own self-efficacy often specify how the professional gauges his or her personal abilities to create or facilitate worthwhile change within a student (Gibson & Dembo, 1984). Teachers' sense of effectiveness provides a base for their instructional decisions (Woodcock, 2011); thus, self-efficacy plays a direct role in the learning experiences of students. Research has shown that while efficacy levels may fluctuate during the years of in-service teaching, they are rarely as high as they are during a teacher preparation program (Soodak & Podell, 1997). Teacher educators have the unique opportunity to capitalize on these elevated levels of personal and teaching efficacy in their students to not only improve their overall teaching abilities, but also target specific areas of need within their students. Teacher education programs are one of the first lines of defense for pre-service teachers and thus, the promotion and building of efficacy within teacher candidates is critical to the pre-service teacher candidates' future success.

This study took place in the context of a university literacy clinic. The university literacy clinic provides supplemental instruction by pre-service teachers to children in a one-on-one or small group setting that may not otherwise be possible. The exposure to additional instruction, as well as the targeted, specific lessons written and taught for the individual child, presents an opportunity for the child to continue growing and flourishing, thus potentially resulting in higher levels of self-efficacy for the university pre-service teacher.

The dual nature of services provided by the university literacy clinic presents an opportunity for teacher educators and university faculty to meet the needs of pre-service teachers. The onset of the COVID-19 pandemic in Spring 2020 presented a new set of challenges for the university literacy clinic while also supplying it with the opportunity to shift from an in-

person to virtual setting. The experiences of university faculty, pre-service teachers, and K-6 students included an array of benefits and drawbacks; most notably, the immediate and unexpected requirement for all parties to begin teaching and learning through distance means. This research study explored the effects of participation in the virtual university literacy clinic program, titled Literacy Camp, on pre-service teacher efficacy.

Statement of Problem

The problem investigated through this research study was related to the notion that participation in a university literacy clinic may impact pre-service teachers' self-efficacy as related to literacy instruction. The virtual mode of learning may have been a mitigating factor; thus, it was necessary to explore this problem as it related to method of instructional delivery.

Definition of Terms

Several terms will be used throughout this study that may have different meaning depending on the context. For the purposes of this study, *pre-service teachers, teacher candidates, teacher interns, novice teachers,* or *tutors* were the individuals serving as tutors in the literacy clinic who were pursuing a Master of Arts in Teaching degree. The degree-seeking program led to state teacher licensure for grades kindergarten through sixth. These individuals had not yet earned accredited teaching licensure and were pursuing the path to securing the necessary credentials to serve as a licensed educator through completing university coursework and other state requirements, as well as participation in a year-long internship.

The distinction between the university literacy clinic and Literacy Camp will be marked throughout; thus, the *university literacy clinic* can be defined as a university-based organization designed to remediate struggling learners or to provide enrichment services to learners achieving

at higher levels (Laster, 2013; Ortlieb & McDowell, 2016). Many *university literacy clinics* utilize pre-service teacher candidates as tutors, others enlist graduate students, licensed teachers, or university professors to carry out clinic responsibilities (Bates, 1984; Bader & Wiesendanger, 1986). *University literacy clinics* may also be known by several names, including literacy centers, reading clinics, reading centers, or other variations. This paper will use the term *literacy clinic* unless describing specific clinics that identify under another name.

Literacy Camp is the virtual, once-weekly event lasting for one hour that provides tutoring services to K-6 students by pre-service teachers. The *university literacy clinic* is the parent organization that encompasses *Literacy Camp*.

Efficacy will be described throughout this study, in terms of general teaching efficacy and personal teaching efficacy. For the purposes of this study, *self-efficacy in the field of teaching* can be defined as "teachers' judgments about their abilities to promote students' learning" (Hoy & Spero, 2005, p. 343). Further, *personal teacher efficacy* will be defined as the belief that one can or cannot influence his/her students' learning through his/her instructional abilities, and *general teaching efficacy* will be defined as the belief that outside factors in a student's life can or cannot be overcome in the classroom (Woodcock, 2011).

Purpose of Study

The purpose of this qualitative case study was to explore how participation in the university literacy clinic impacted pre-service teachers' overall efficacy and confidence as it related to literacy instruction. Additionally, this study aimed to assess how the method of instructional delivery impacted pre-service teachers' teaching experience in the clinic setting.

Pre-service teachers submitted 10 weekly daily debriefs reflecting on each Camp experience with their specific K-6 students. Additionally, pre-service teachers completed an open-ended pre-survey and post-survey related to teaching efficacy. Each K-6 Camp student completed a verbal questionnaire that was later transcribed. These answers were used only as support for the pre-service teachers' data. Through analyzing the data collected, the reported experiences from the pre-service teachers' perspectives provided a comprehensive look at how involvement in the university literacy clinic impacted self-efficacy related to literacy teaching.

Research Questions

This qualitative research study addressed the following question and sub-question:

Central Question: How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?

Sub-question 1. How does the method of instructional delivery impact the teaching experience of the pre-service teacher?

Conceptual Framework

This study was grounded in a social constructivist conceptual framework. Because the social constructivist point of view centers the learner's unique experience and considers the cultural surroundings and prior experiences of the learner (Vygotsky, 1978), it was necessary to utilize this framework. Literature suggests that teachers construct teaching efficacy based on the belief that they have the ability "to influence their students' learning and achievements," as well as the teacher's personal confidence that he or she "can overcome external influences on the student" (Woodcock, 2011, p. 24) through his or her own teaching. Each individual experience for study participants was unique and personal. The voice of the individual was elevated in this

study; thus, Vygotsky's social constructivist theory informed the analysis and the design of the study.

Significance of Study

The study was significant and appropriate to conduct. The importance of this study was highlighted by the lack of existing research in the university literacy clinic as it relates to pre-service teacher learners completing a Literacy Camp program through virtual only means. While pre-service teacher efficacy is largely reviewed in literature, it is less researched when considered in the university literacy clinic setting and is non-existent when the clinic method of instruction is virtual due to a global pandemic. Findings from this study provided insight to university faculty serving K-6 pre-service teachers on how to provide better instruction and on how to promote teaching efficacy.

It was appropriate and necessary to include university pre-service teachers and K-6 students participating in Literacy Camp to better understand how the camp and the virtual setting impacted learning and teaching. Through allowing each participant to recount their experiences through an open-ended survey, their voices were centered and elevated, which ensured that the findings of this study were truly rooted in participant experience. The accounts collected from pre-service teachers made this study significant and appropriate.

Overview of Method

This qualitative study used a case study research approach to explore how the university literacy clinic impacted pre-service teachers' overall efficacy and confidence as it related to literacy instruction. Additionally, this study aimed to assess how instructional delivery impacted pre-service teachers' teaching experience in the clinic setting. Participants included a

convenience sampling (Creswell, 2013) of 26 pre-service teacher candidates enrolled in CIED 5173: Literacy Assessments and Instruction. Twenty-three university elementary pre-service teacher candidates consented to participation in this study; thus, only their data was accessed. Though not seen as participants, questionnaire data from 14 first through seventh grade Literacy Camp students were collected. Parents consented to their students' answers being included in this study as auxiliary and supportive data.

A pre- and post- researcher constructed, open-ended efficacy survey was given to pre-service teachers. Each question corresponded with the three themes present in Hoy & Tschanen-Moran's 2001 *Teacher's Sense of Efficacy Scale (TSES)*. Elementary and middle school students enrolled in Literacy Camp were given a researcher-constructed reflection questionnaire at the end of the Camp. These questions were read aloud by Camp tutors and recorded for me to transcribe. Each question corresponded with the three themes present in Muris' 2001 *Self-Efficacy Scale for Children (SEQ-C).* The data from these questionnaires was used only to support the data collected from the pre-service teachers. Documents were collected from pre-service teachers that described the interventions completed with the elementary and middle school students. The documents collected from pre-service teachers were analyzed inductively for themes.

Assumptions

I assumed that all participant survey data, interviews, and documentation collected were truthful and accurate.

Delimitations

All participants in this study were enrolled in one of two sections of the Literacy Assessments and Intervention course at the university during the Fall 2021 semester. Participants were chosen based on this fact alone; it was not possible to select respondents outside of this collection of individuals.

I was the lecturer assigned to one of the two sections of Literacy Assessments and Intervention and was responsible for the instruction of 14 of the 23 pre-service teachers that consented to participate in this study. Additionally, I served as the graduate assistant in the university clinic. I facilitated one of the two sections of literacy camp in which I oversaw the instruction of 8 of the 14 first through seventh grade students that submitted questionnaire data to this study. Thus, my reflexivity in this study required a conscious examination of "the biases, values, and experiences that [I brought] to a…research study" (Creswell, p. 216, 2013). This will be explored further below in the Situation of Self section.

Limitations

The collection of data occurred in one university literacy clinic setting with a specific group of 23 university elementary pre-service teacher candidates completing a yearlong internship. This small sample size presented a limitation as related to the generalizability of the study; however, because another study has not been conducted related to the efficacy pre-service teachers participating in a Literacy Camp program through virtual means, the consequence could not be determined. It is fitting to project that findings from this study can be generalized to pre-service teacher efficacy in the virtual setting.

All participants being surveyed reported their feelings about efficacy as it related to literacy on a specific day; therefore, it stood to reason that their responses may have been impacted by their life situation and any events that occurred unrelated to the literacy clinic. They may have brought personal biases, conscious or not, to their responses. Outside factors may have guided their answers on a survey or when responding to a daily debrief.

Situation of Self

I, as stated above, served as both an instructor for one section of CIED 5173 and as the university literacy clinic's graduate assistant. Further, I completed the same degree program and enrolled in the same course as each of the study participants. I graduated in 2015 from the University of Arkansas with the same B.S.E. degree as the pre-service teachers. I subsequently earned, in 2016, the same M.A.T. degree as participants. However, the university literacy clinic had not yet been established as an integral part of this course; thus, I had no participation in the Camp during my degree programs.

Several biases had to be bracketed because of my previous involvement, as well as my role as a lecturer and facilitator in the Camp. I had to remove all names from Camp documents so that I did not give preferential treatment to any one participant response. I separated my own experience as a student from that of the Literacy Camp tutors, as my previous field experience looked different to theirs. Lastly, I removed student names from Camp student questionnaire data as to not try to interpret what they meant based on my knowledge of any given student.

Chapter Two: Review of Literature

University literacy clinics are an integrated and well-established part of many institutions in the United States (Pletcher et.al., 2019). There is a large variance in how university literacy clinics are conducted; however, this study focused on a clinic model that utilized pre-service teachers as literacy tutors for kindergarten through sixth grade students. This study aimed to determine how participation in a university literacy clinic affected teaching efficacy for pre-service teacher candidates.

This chapter will review the literature related to the history of and roles fulfilled by the university literacy clinic, followed by the research surrounding the self-efficacy of teachers as it relates to literacy teaching practices. The literature reviewed contributed to the design of the study, as findings bolstered the need for the research questions to be answered.

Dozens of search terms were used to conduct this review of literature, including but not limited to: university literacy clinic, literacy clinic, reading clinic, literacy camp, literacy centers, reading centers, history of university literacy clinic, goals of literacy clinic, literacy clinic participants, literacy clinic stakeholders, mission of literacy clinics, virtual literacy clinics, online tutoring, self-efficacy, efficacy, teacher efficacy, elementary student efficacy, learner efficacy, teacher preparation program, elementary learning gap, elementary learner supports, preservice teacher supports, and virtual learning strategies. Research terms were searched through Google Scholar and ProQuest. Any term searched through Google Scholar was also searched through ProQuest and vice versa. A limitation to this search is that the use of Google Scholar and ProQuest did not always allow for the review and reading of every article found. Use of the university's Interlibrary Loan (ILL) system was also utilized, but not every article requested was available.

University Literacy Clinics: History, Role, and Adaptations

University-run literacy clinics have been in existence for just over 100 years, with the earliest clinic originating in 1921 at the University of California at Los Angeles (UCLA). The scope of each university-based literacy clinic varies widely across the country; however, the mission for each clinic surrounds the dedication to student success in the literacy sector (Pletcher et.al., 2019). This section will first review the history of the university-based literacy clinic, as well as examine the scrutinous lens through which these clinics are assessed. Next, the role a university-facilitated literacy clinic plays in the development of novice and literacy teachers, in addition to the role it plays in the literacy growth of its clients, will be explored. Lastly, focus will be placed upon the modifications and adaptations university-run literacy clinics have made to better serve the diverse needs of twenty-first century learners and stakeholders.

History of the University Literacy Clinic

University literacy clinics have a broad history, dating back to 1921 and continuing through present (Pletcher et.al., 2019). First designed by Dr. Grace Fernald at UCLA, the intent of reading clinics was to remediate struggling learners, a model that served students for over 90 years (Laster, 2013). Literacy clinics may also be known by several names, including literacy centers, reading clinics, reading centers, or other variations. This paper will use the term “literacy clinic” unless describing specific clinics that identify under another name.

Several notable scholars in the literacy field contributed to the early growth and promotion of literacy clinics across the country, including W.S. Gray and H.M. Robinson at the University of Chicago, S. Orton at Iowa State University, and M. Dougherty at Johns Hopkins University. There was a surge in the 1960s-1970s of university literacy clinics across the country

(Laster, 2013) following the founding of the prestigious clinics listed above. However, due to limited financial resources and administrative support, the number of clinics drastically decreased during the late 1980s and 1990s (Michel & Dougherty, 1999).

University-run literacy clinics have received growing interest again in the 21st century (Ortlieb, 2012) as the missions and visions of clinics have evolved to serve not just struggling students, but students who need enrichment services (Laster, 2013; Ortlieb & McDowell, 2016). Other stakeholders of the clinic are being involved in the formation process, including teachers or tutors, guardians and/or family, literacy specialists, university professors, and pre-service teacher candidates (Bates, 1984; Laster, 2013). Research and new practices have been established through the implementation and delivery of services in the literacy clinic, thus allowing the clinic to serve as a vessel for "leadership in theory and policy, assessment and instruction, and other components and contexts of literacy instruction" (Laster, 2013, p. 7).

Literacy Clinic Tutors

While some clinics utilize their pre-service teacher candidates as tutors, others enlist graduate students, licensed teachers, or university professors to carry out clinic responsibilities (Bates, 1984; Bader & Wiesendanger, 1986). Bates' 1984 study showed that of the 242 participating schools, 87 percent allowed pre-service teachers to participate in the clinic setting. Irvin and Lynch-Brown's 1988 survey of university-run literacy clinics found that of the 183 responding clinics, 163 of these (89 percent) were focused primarily on training their graduate students in the education departments. Reading clinics typically correlate with one or two courses that are usually completed at the graduate-level (Cassidy & Hanes, 1992).

Location of Service

The variation between clinic structures and facilities can be seen in Bates' study as well; of the 242 responding schools, 67 percent of responding universities had a clinic on their campus, and 50 percent used college classrooms to perform clinic work. Only 23 percent of university students completed clinical experience in the K-12 schools, and just three percent of the reporting colleges facilitated a clinic facility within the schools they served (Bates, 1984). A 1997 study showed that these percentages remained consistent over time, with 71 percent of clinics residing on campus, 24 percent of clinics operating both at the university and at a school site, and only 5 percent housed at an off-campus school (Teale & Hester, 1997).

Goals and Missions of the Literacy Clinic

Goals and missions for university clinics have evolved over time. The earliest reason for the invention of university-based literacy clinic was to "diagnose and treat the reading retarded" (Smith, 1965). However, as diagnosis of specific reading problems is often counter-productive to holistic approaches to reading, clinics have moved away from treatment of specific deficits and gravitated towards serving children through creation of a language-rich environment that contains activities and instruction across several literacy domains, including writing, speaking, reading, and listening (Cassidy & Hanes, 1992). Even further, clinics also may offer enrichment services for children who are proficient or advanced in their literacy learning, as the one-on-one or small group setting of the literacy clinic allows tutors to plan for the individual student (Ortlieb & McDowell, 2016). Literacy clinics in recent years, including the University of Central Florida's Enrichment Program in Literacy (Kelley & Wenzel, 2013), have sought to refine and develop children's strengths in literacy rather than focusing solely on deficits and remediation of these perceived weaknesses (Coffey et.al., 2013).

Historical Challenges for University-run Literacy Clinics

Many of the same challenges faced by the earliest literacy clinics are still present today. The cost to operate a university-run literacy clinic is high, as funding must be provided for physical space, technological resources, snacks, and other materials. Clinic support staff and/or graduate assistants are typically paid for the time spent working in a clinic, adding additional costs. There are only a small, finite number of university courses associated with the work of the literacy clinic, which results in a limited amount of revenue for the university (Bader & Wiesendanger, 1986; Cassidy & Hanes, 1992). Some universities may charge an enrollment fee to the clients to offset the cost, though it was reported in a previous study that only 57 percent of responding universities implemented a fee (Bates, 1984). The cost of running a literacy clinic may result in a clinic director being hired only part-time or not at all, as funding is first required to serve the needs of the university students and clients attending (Cassidy & Hanes, 1992).

Advocacy for the creation and maintenance of a university-run literacy clinic has proven challenging, as typically the professors associated with courses served by the clinic are the ones who promote funding to go to the clinic. This can cause tension between clinic staff and non-clinic staff, as those who are not stakeholders in the clinic may feel that they are not receiving adequate resources for their own programs. The allocation of graduate assistants to the clinic, as well as the budget required to keep a clinic healthy and operating, may not be tolerated by other staff (Cassidy & Hanes, 1992). University stakeholders of the literacy clinic programs are then tasked with the responsibility to provide evidence of the benefits the clinic bestows upon university students, clients, their families, and any other participants. Because clinics are often isolated from outside departments (Bader & Wiesendanger, 1986), the lack of partnership in instruction and learning further creates difficulties in this argument.

Disagreement over implementation of methodological approaches can cause dispute within a department, which can result in the elimination of a university-run literacy clinic altogether. Traditional literacy clinic programs have utilized the diagnostic-prescriptive pedagogical approach (Cooter & Flynt, 1987), a take on learning that requires the tutor or practitioner to identify weaknesses within a student's skill set and remediate them to proficiency. This approach does not allow for enrichment of children already at levels of proficiency, nor does it allow children to explore and potentially discover talents in other areas of literacy. Program staff who disagree on the methods and approaches to learning can raise concerns with university officials and either delay or cancel efforts to continue the literacy clinic programming.

Scrutiny for Literacy Clinics

The need for all individuals to be literate individuals today brings about several critiques and criticisms for literacy clinic programs around the country (Ortlieb & McDowell, 2016). It has been proven that with early intervention, proper assessments, and instruction, the need for reading intervention later in the schooling process may not be present (Snow, 2002). Literacy clinics have long focused on models for literacy intervention that were created decades ago and that were designed for the Caucasian student (Cleland, 1982); however, these models do not address the needs of the diverse population literacy clinics aim to serve.

Attending literacy clinic programs is a way for students to receive individualized, one-on-one or small group instruction that is designed to meet their specific needs. Students must have access to clinics, both financially and proximity-wise (Cassidy & Hanes, 1992) for them to receive these intervention services. Because every child can improve their reading skills and because classroom instruction does not always meet the academic needs for every child (Ortlieb et.al., 2013), clinics have the responsibility of making themselves accessible to children of

varying ages, backgrounds, and locations. Children who did not attend quality preschool programs may be at risk in later grades for literacy deficits, as early predictors of literacy achievement in the later grades are correlated with the use of unrestricted vocabulary in the preschool setting (Snow & Matthews, 2016). One way that this risk can be mitigated is through early intervention in a literacy clinic setting.

An important aspect of delivering effective instruction in the literacy clinic setting is the knowledge and implementation of best practices that serve to aid in the development of literacy skills and the acquisition of content knowledge, especially for children who have literacy deficits. Pre-service teachers may not have had the experience necessary to provide this rich, diverse service to children attending the clinic. Using a scripted curriculum that is pre-determined may not be sufficient. Tutors in the clinic should be well-practiced and well-researched, drawing from a massive evidence base to best serve the students attending clinic tutoring sessions (Ortlieb & McDowell, 2016).

Discussed briefly above is the issue of providing instruction through the diagnostic-prescriptive pedagogical approach (Cooter & Flynt, 1987), also known as the student-deficit approach (Dunston, 2007). This approach to learning perpetuates children's negative attitude toward reading, as the focus is on what they cannot do successfully and what is "wrong" with them. Motivation to read is positively correlated with reading success, as demonstrated through an extensive body of literature (Sideridis et.al., 2006; Unrau & Schlackman, 2006; Ashdown & Bernard, 2011; McGeown et.al., 2015). When literacy clinics utilize a deficit approach to intervention, not only do instructional opportunities face limitation, but a child's sense of success can become diminished.

Development of the University Literacy Clinic Stakeholders

While the primary focus of the literacy clinic is to enhance the literacy ability of clients attending programming (Smith, 1965; Cassidy & Hanes, 1992; Ortlieb & McDowell, 2016), clinics also exist to further the education of pre-service teachers or other teaching professionals who are seeking clinical application to develop or enhance their teaching practice (Bates, 1984; Bader & Wiesendanger, 1986). Though university clinic models vary from campus to campus, the pedagogical advancement of the tutors serving the clinic is often equally as important to the overall mission of the university-run literacy clinic. This section will explore the ways in which clients and teachers, both pre-service and experienced, can grow in their own literacy journeys, or practice, through engagement in the university literacy clinic setting.

Novice Teacher Development

Novice teachers, otherwise referred to here as pre-service teachers or teacher candidates, are the individuals serving as tutors or support personnel in the literacy clinic who are pursuing a teaching degree, either undergraduate or graduate. Novice teachers typically are completing either their year-long internship or semester-long student teaching. These individuals likely have little to no experience with classroom teaching when entering their novice teaching year. The degree-seeking programs may not be related solely to literacy; rather, these programs can be general to the field of teaching specific grade ranges (e.g., elementary, middle school, or high school). Typically, novice teachers have not yet earned accredited teaching licensure and are pursuing the path to securing the necessary credentials to serve as a licensed educator.

The opportunity for observation plays a critical role in the development of novice teachers, as this allows the pre-service teacher to understand and interpret behaviors, formulate a

plan, and discuss future learning opportunities for the child. Through observation of both children participating in lessons and other teachers delivering those lessons, pre-service teachers can assess whether the issue of skill or content acquisition is within the learner or the way the instruction is being delivered. Teachers must be able to reflect and determine any missteps they have taken themselves before they can posit that the learner has a significant deficit (Dozier & Deeney, 2013). Through gauging how effectively students are being met in their Zone of Proximal Development (Vygotsky, 1978), pre-service teachers can make recommendations to their peers about how to adjust instruction, as well as modify their own practices according to the needs of their student.

Pre-service teachers have the unique opportunity to learn not just from the university faculty overseeing the clinic and peers, but the children who are participating in clinic services. Tutors recognized weaknesses/areas for consideration during the early days of clinic, which then allows them to partner with clinic faculty in designing an individualized approach to best serve the child. Through implementation of these interventions, pre-service teachers can learn through experience what works for specific children and what does not. They will acquire the skills necessary to monitor and adjust, reflecting after each session to determine what will provide exemplary support to their clinic student (Dozier & Denney, 2013). The process of working with both clinic faculty and the child will create a learning opportunity for the pre-service teachers to better grasp what their role will be when in the classroom setting as a teacher post-graduation.

The literacy clinic will likely be one of the earlier teaching experiences for pre-service teachers; thus, the clinic will serve to inform teacher candidates on how to teach literacy concepts and will assist in the development of beliefs about literacy concepts (Lonberger, 1992). Courses taken related to reading and literacy impact the pre-service teachers' beliefs on reading

(Stansell et.al., 1982), which creates an opportunity for teacher educators and clinic faculty to promote best practices in the university classroom and in the clinic setting. Lonberger's 1992 study of 37 pre-service teachers enrolled in an introductory reading methods course showed that most candidates not only altered their views on reading and the ways in which the skill develops but could also articulate personal methodologic beliefs that could be seen in their lesson plans. The traditional views of reading the pre-service teachers held before taking this course were transformed almost completely after receiving instruction in this introductory course (Lonberger, 1992).

The overarching goal of the literacy clinic as it relates to a teacher preparation program is to provide teacher candidates with an opportunity to "learn how to effectively teach a child to 'read, write, and think critically' prior to obtaining [their] own classroom[s]" (Milby, 2013, p. 388). Pre-service teachers can observe, plan, teach, and reflect through participation in the university-run literacy clinic. Exposure to students from different ages, backgrounds, ability levels, etc. will give teacher candidates an inside look at what to expect in their own future classrooms. Involvement in the literacy clinic can provide the opportunity to apply their coursework in this real-world setting (Milby, 2013), better preparing them for what is to come in the classroom.

Experienced Literacy Teacher Development

While the goal of novice teacher development in the literacy clinic is to provide a space for teacher candidates to learn and refine pedagogical skills, the literacy clinic serves a different purpose for experienced literacy teachers. Though some overlap is present between the experiences of novice and veteran teachers (observation, practice, and partnership with university faculty), experienced teachers are not participating in a literacy clinic to learn how to

teach; rather, they are refining their skills to enhance their classrooms and create richer learning opportunities for their students (Milby, 2013). The collaborative aspect between experienced literacy teachers and university clinic faculty allows for a more nuanced and expert approach to instruction for the children.

Serving in the university literacy clinic affords experienced literacy teachers the opportunity to work with children that are not typically in their classrooms or even in their licensure certification grade range. Stepping out of their comfort zone promotes the learning of new concepts for the veteran teacher, as well as implementation of various strategies that work across different ages of children. Experienced teachers can incorporate not previously accessed resources, such as magazines, online sites, graphic novels, etc. to reach students where they learn best (Dunston, 2007). Knowledge and experienced gained in the clinic can then transfer back to their students in the classroom.

Perhaps one of the more valuable opportunities experienced literacy teachers have in the clinic is the ability to video record their teaching and reflect on it (Dunston, 2007) in a low-stakes situation where evaluation of performance is not necessarily used for yearly professional growth plans. Reflection on teaching skills and how different methods of instruction are received can build resilience and self-efficacy within an experienced teacher (Dozier & Deeney, 2013; VanDeusen & Block, 2018) when mistakes are seen as learning opportunities rather than failures. Reflection should encourage the teacher to "identify a situation, process, or experience that is puzzling, interesting, celebratory, or otherwise intriguing and view it through multiple lenses" (Shanahan et.al., 2013, p. 305). This is a skill that must be developed (Shanahan et.al., 2013); teachers require repeated opportunities to practice and become proficient reflectors. The literacy clinic offers abundant opportunities for practitioners to develop reflective practices.

Becoming an active participant in research within the literacy clinic setting provides veteran teachers with the chance to restructure classes and the ways in which instruction is delivered through discovery of natural phenomena and behaviors (Christensen & Walker, 1992). Through examination of the children's reactions to teaching techniques, experienced teachers can report on the effectiveness of a myriad of pedagogical approaches and how they work to serve children with various abilities. This can be done summatively through formal publications or formatively through storage and sharing of data within a school or clinic.

Client Development

University-based literacy clinics have a varying age range of students served. While the age of the students served differs depending on clinic location, the goal is largely the same: to help children who have difficulties reading (Bracken, 1987). This goal has remained consistent over time, though the expansion of many clinics' missions have grown to include enrichment for students who are proficient or advanced readers (Ortlieb & McDowell, 2016). The broadness of the offerings within a literacy clinic dictates total enrollment and intervention type, which is likely why most literacy clinics today aim to include multiple options for tutoring.

Milby (2013) posits that "providing students with individual instruction to supplement high-quality classroom teaching provides needed instructional gains for struggling readers" (p. 389), research that is echoed by other scholars throughout the past several decades. The literacy clinic, as mentioned in the introductory paragraphs of this paper, provides this supplemental instruction to students in a one-on-one or small group setting that may not otherwise be possible in a classroom setting. The exposure to additional instruction, as well as the targeted, specific lessons written and taught for the individual child, presents an opportunity for the child to continue growing and flourishing in areas of struggle.

Contrasting with reading struggles is the chance to enrich existing skills, which brings children every year to clinics across the country. The literacy clinic at the University of Central Florida (UCF) was born out of necessity, as community members did not want another reading clinic to serve struggling readers only; they desired a clinic that would serve all children. The Literacy Enrichment Programs offered through UCF focus on providing experiences in literacy that incorporate technology with the goal of instilling increased motivation to read and write (Kelley & Wenzel, 2013). Motivation to read is prolifically linked to reading achievement in literature (Sideridis et.al., 2006; Unrau & Schlackman, 2006; Ashdown & Bernard, 2011; McGeown et.al., 2015) and thus fostered within the literacy clinic to propel the learning of its clients.

Family involvement in a child's literacy journey has also long been positively correlated in research with literacy ability (Becher, 1985; Denny, 1983). The literacy clinic aims to incorporate families into the very fabric of the work conducted both on site and at home. Collaborative lesson plans can be prepared and taught to children so that their families are included in the conversation, whether it is immediate feedback or after a learning session. For example, authors Dozier and Smit designed a collaborative learning night for children, tutors, and parents in which the children and teachers wrote side-by-side, sharing their writing with their small group after. When family members arrived for pick-up, they were asked to listen to their child's writing. They could be found contributing their own ideas to their child's writing, further deepening the collaborative process and reinforcing that they were invested in his/her literacy experience (Dozier & Smit, 2013). Including families in multiple ways such as this benefit the client immensely.

Modifications and Adaptations of the University Literacy Clinic

Twenty-first century students require modern structures to create optimal learning opportunities and to accommodate for the ever-changing landscape of the educational sphere. The literacy clinic is not immune to these needs; this setting faces the same set of challenges as the traditional school, plus the increased pressure to provide these structures for children as young as pre-kindergarten through collegiate students in graduate teacher preparation programs. According to one study, individuals ranging from preteen to adulthood engage in more than 20 hours of media per day (Rosen, 2010). Integration of technology and various media sources can be seen across nearly every school and university in America. Literacy clinics across the country have recognized the necessity for change and have implemented new modifications and adaptations to serve its clients.

Perhaps the most common way to alter structure in the clinic is to include digital and multimodal resources and methods of instruction. Infinite possibilities exist for technology inclusion; however, clinic faculty must be mindful that integration is purposeful and contributory to learning goals. The technological pedagogical content knowledge (TPACK) framework is being considered and utilized by many scholars in the field, as it can supply "a strong foundation for future technology integration research [as well as] guidance for how teacher education programs might approach training candidates who can use technology in content-specific as well as general ways" (Graham, 2011, p. 1959). Use of this framework allows clinic faculty to train their pre-service teachers to use technology in the literacy clinic setting, which in turn allows for children to benefit from the technological elements of learning. While the TPACK has garnered excitement from organizations such as the Society for Information Technology and Teacher Education (SITE) and the American Educational Research Association (AERA) for its wide

appeal to practitioners and researchers in the field, there are some flaws within its design, including construct definitions and their relationships/fuzzy rationale for constructs (Graham, 2011). Despite these flaws, this framework allows for full technology integration into content and pedagogical knowledge (Baran et.al., 2011), creating a strong case for its usage in the 21st century literacy clinic.

Activities in which digital technologies are incorporated work to serve learners of all ages in the literacy clinic setting. Technology can foster strong instruction specifically in a tutoring environment, as the tutors are able to personally select the educational materials/technologies necessary for their individual students' needs. Devices such as Kindles or other eReaders are relatively inexpensive and allow for differentiated instruction within the literacy clinic. The Kindle by Amazon has a text-to-speech function, an assistive technology that allows students to track the print they are reading while listening to the audio (Rhodes, 2013). Use of laptop computers has been positively associated with student writing performance, as demonstrated by several studies that correlated writing performance and writing content produced with student success in these areas (Gulek & Demirtas, 2005; Grimes & Warschauer, 2008). Smartphone or other handheld personal digital devices provide flexibility for teacher candidates and clients for use in research, playing games, and as a reward (Rhodes, 2013).

Though integration of technology is necessary and proven to work in well-established bodies of research, complications may arise when trying to move to a more virtually sustained clinic model. Training for students at every level will likely be necessary; this means that faculty and other clinic staff members must be fully aware of how to use technologies, as well as how to train others on how to utilize them effectively. Limited experience on a laptop or with typing on a keyboard can present additional challenges to young students especially and may hinder their

abilities to learn. However, despite these potential obstacles, the benefits of technology integration far outweigh the challenges (Rhodes, 2013). Vygotsky's social constructivist model states that tools are often necessary to better obtain the goals of an activity; thus, educational technology may need to be incorporated by the clinic facilitator or pre-service teacher tutors in order for learning objectives to be reached (Kouicem, 2020).

Outside of technology integration is the growing popularity of social-emotional learning (SEL) in the educational environment (Bierman et.al., 2010; Durlak et.al, 2011; Low et.al., 2015; Yang et.al., 2018; Caldarella et.al., 2019). Focus on teacher-student relationships must be at the forefront of learning for the student to succeed. This is true across all ages and grade levels, and it is true for the literacy clinic setting as well (Dozier & Deeney, 2013). Getting to know clients of the clinic and their families will allow tutors and clinic faculty to better prepare lessons and deliver them effectively (Kroeger & Lash, 2011). Weekly conversations have proven beneficial for all stakeholders in the clinic, as families can see what their children are doing, tutors can gain insight into the child's home life, and clinic faculty can observe and better prepare their pre-service teachers or graduate students for the future classroom setting (Dozier & Deeney, 2013). Because SEL approaches and relationship building have been so widely accepted by researchers, it is natural that literacy clinics would modify their existing structures to assimilate this construct.

Online Tutoring

The wake of the COVID-19 pandemic during spring 2020 created an opening for many institutions, schools, and other educationally related services to shift learning online. While research is still emerging about the effectiveness of online education, a few studies have evaluated the impact of online tutoring on students. A 2021 study conducted by Carlana & La

Ferrera found that students in Italian middle schools who participated in free virtual tutoring during lockdown showed large improvements academically, socially, and emotionally compared to students who were not enrolled in the virtual tutoring program. The Tutoring Online Program (TOP) lasted for 5 weeks and was taught by university students who volunteered their time to work with these students. Special considerations were given to students from low socioeconomic backgrounds. Though the study focused primarily on outcomes for student participants, it was mentioned that TOP tutors may have been impacted by way of empathy and understanding of luck versus hard work in relation to success. Conclusions from this study specified that even after schools reopen following the COVID-19 outbreak, the virtual tutoring program run by volunteer university students could still prove effective for vulnerable students (Carlana & La Ferrera, 2021).

Another study looked at the effects of a pilot online tutoring program, CovEd, in the United States. This program utilized 230 university student tutors who were matched with 6th through 8th grade students in a Chicago middle school. Tutors worked with students for 30 minutes a day, two times a week, over the course of 12 weeks. Results showed that while there were positive results on student improvement, the results were statistically insignificant. Study authors noted that a future challenge in this program may be recruitment of university tutors, as volunteer efforts proved large in the beginning of the pandemic, though they may decrease as time progresses (Kraft et.al., 2022).

The International Literacy Association (ILA) released a position statement in 2019 titled *Children's Rights to Literacy Education* that detailed their beliefs on children's access to equitable and fair literacy education. This statement included four main positions: the child's right to qualified literacy educators, integrated support systems, supportive learning

environments and high-quality resources, and policies that ensure equitable literacy instruction. Because face-to-face education was largely halted during Spring 2020, those who designed and implemented online education, including university Camp tutors, had the responsibility to provide access to each of these rights above through virtual means.

Self-Efficacy in the Teaching Profession

Self-efficacy is a necessary trait for educators (Lisenbee, 2017) and their sense of achievement within their profession. Self-efficacy in the field of teaching can be defined as "teachers' judgments about their abilities to promote students' learning" (Hoy & Spero, 2005, p. 343). Research has shown that not only does a teachers' sense of self-efficacy relate to student achievement, but also to overall work ethic, goal setting, and resiliency when faced with challenges (Bandura, 1977). Teacher education programs are one of the first lines of defense for pre-service teachers and thus, the promotion and building of efficacy within teacher candidates is critical to future success. This section will explore the link between self-efficacy in teachers and performance outcomes, followed by a review of research supporting the importance of fostering efficacy within teacher candidates participating in a teacher preparation program, specifically within the area of literacy instruction. Finally, supports that should be embedded within teacher preparation programs to further develop teacher efficacy within candidates will be discussed.

Self-Efficacy and Performance Outcomes for Teachers

The beliefs of a teacher about his or her own self-efficacy may often specify how the professional measures his or her personal abilities to create or facilitate worthwhile change within a student (Gibson & Dembo, 1984). Continuing in this vein, it is reasonably assumed that if an educator posits that a student's learning can be mitigated by strong teaching, and that same

individual also asserts that he or she is a strong teacher, then this educator can conclude that the learning outcomes in his/her classroom will be greater and more positive than someone who does not hold the same beliefs about one or more parts of this statement (Gibson & Dembo, 1984). Because the body of research that correlates teaching efficacy and student achievement is expansive (Armor et.al., 1976; Berman & McLaughlin, 1977; Tschannen-Moran & Hoy, 2001), it stands to reason that teachers who hold a strong sense of self-efficacy in their practice can improve performance outcomes for their students.

Several implications arise from the belief that self-efficacy influences students' performance outcomes in the teaching profession. Because teachers' sense of effectiveness provides a base for their instructional decisions (Woodcock, 2011), self-efficacy plays a direct role in the learning experiences of students. This learning experience will ultimately influence the students' ability to achieve based on their engagement with the learning task.

Two facets of efficacy should be considered when thinking about a teacher's self-efficacy. One, the teacher's own beliefs "about their personal abilities to influence their students' learning and achievements" and two, the teacher's personal confidence "concerning the extent to which teaching can overcome external influences on the student" (Woodcock, 2011, p. 24). Both strands of efficacy can affect a teacher's practice in different ways, affecting his/her students' ability to learn and succeed variously. An educator who has high personal teacher efficacy (i.e., the belief that he/she can influence his/her students' learning through his/her instructional abilities) may also experience low general teacher efficacy (i.e., the belief that outside factors in a student's life cannot be overcome in the classroom) or vice versa (Woodcock, 2011). Any combination of holdings related to self-efficacy can influence student performance outcomes.

Teachers who have a higher sense of efficacy are more willing to experiment with teaching practices learned through professional development opportunities (Fritz et.al., 1995), whereas teachers who do not believe they can effect change in the classroom will resist the ideals taught in these courses. Administrators who hope to utilize continuing education courses for their teachers must also constantly aid in their faculty's sense of efficacy, both personally and professionally. Without the reminder and push that one's view of self has detrimental effects on students' success, teachers may not feel the need to continue learning and growing.

A large implication for low teacher efficacy is the understanding that teachers who struggle to believe in their capability to impact students or bring about change in the educational setting leave the profession earlier than those who have high teaching efficacy (Durgunoglu & Hughes, 2010). Additionally, the educators who do not have strong efficacy fail to set strong goals, find motivation, and persevere in the face of a challenge (Allinder, 1995; Stripling et.al., 2008). This supports the importance of building strong efficacy, both personally and generally, in the field of teaching should educators wish to continue successfully in their teaching roles.

Self-Efficacy in Teacher Preparation Programs

Pre-service teachers develop their personal beliefs about what it means to be a teacher and what the classroom experience is like prior to entering the classroom setting as a pre-service or in-service professional (Pajares, 1992). These convictions are hard to negate (Hoy & Spero, 2005); once learned and accepted, it is difficult to reverse what the individual holds true. Hoy and Spero (2005) further posit that due to this fact, teacher educators have the highest chance to impact teacher candidates' beliefs during the early years of their teacher training programs. This signals to the teacher educator that it is imperative to develop strong, healthy views of teaching, learning, and the profession. This must be instilled prior to these candidates securing their first

teaching job. Once the candidate enters the workforce, it has also been demonstrated that efficacy will influence their job satisfaction (Caprara et.al., 2003), thus bringing additional importance to engrain the ideals of efficacy during the early years of teacher development programs.

Pre-service teachers participating in a teaching internship often experience high levels of efficacy (Durgunoglu & Hughes, 2010) as many impactful experiences occur in the student teaching practicum setting (Hoy & Spero, 2005). Research has shown that while efficacy levels may fluctuate during the years of in-service teaching, they are rarely as high as they are during a teacher preparation program (Soodak & Podell, 1997). Teacher educators have the unique opportunity to capitalize on these elevated levels of personal and teaching efficacy for their students to not only improve their overall teaching abilities, but also target specific areas of need within their students.

Newer research has found that university students participating in online tutoring services had positive correlation with their "perceptions of academic capabilities (i.e., self-efficacy), which in turn, were associated with their academic achievement outcomes" (Hanham et.al., 2021, p. 12), which is pertinent information to pre-service teacher educators who are considering utilizing a virtual method of practicum for their students. Developing pre-service teacher self-efficacy is one of the responsibilities of a teacher preparation program (Miller, 2021); thus, accessing more than one entry point to pre-service teacher teaching experience may be necessary.

Supports for Consideration

Literature has shown that for teacher candidates to experience enduring self-efficacy once in a teaching role, teacher education programs must "facilitate the development of deep learning approaches [that are] better able to produce students with…problem-solving capabilities" (Gordon & Debus, 2002, p. 486). This means that surface learning will not be sufficient in serving teacher candidates in a preparation program; rather, teacher candidates must be provided opportunities to problem-solve within meaningful situations and specific, context-based practices (Gordon & Debus, 2002). Because self-efficacy is tightly related to an individual's beliefs about his or her own views on a given task, as well as success in completing a challenge (Bandura, 1997), it is necessary that teacher educators cultivate a sense of accomplishment within their teacher candidates in addition to supplying them with meaningful learning experiences.

Gordon and Debus' 2002 study found that teacher candidates with a greater personal teacher efficacy not only demonstrated greater measures of resiliency, but also an increased ability to complete the intricate demands required of a prosperous teacher. Opportunities to build resiliency can be integrated into program coursework, teaching practicums, or into the problem-solving, deep learning tasks described above. Superficial beliefs about teaching in the classroom can be created when participating only in surface learning (Christensen et.al., 1995), leaving teacher candidates' efficacy vulnerable once they have entered practice. It is the responsibility of a teacher preparation program to support candidates by placing them in realistic situations that will occur once in the classroom post-graduation so that they can develop the grit and resilience necessary to succeed as a teacher.

Practicum experiences have proven to be invaluable in building teacher efficacy for teacher candidates (Gordon & Debus, 2002; Lisenbee, 2017), as the practice given to pre-service

teachers in these settings prepared them for the scenarios that would likely be faced once they are practicing teachers. The practicum experience allows candidates to practice problem solving, build perseverance, and engage in deep learning scenarios. Each of these skills have been shown to be crucial for teacher success and ultimately teacher efficacy. Because this single support allows for the formation of these foundational needs, it is suggested that teacher preparation programs consider implementing strong practicum requirements for students.

Pre-service teachers should have exposure to several types of learners hailing from a multitude of different cultures, backgrounds, and life experiences. Paugh and Brady (2013) discuss how "the social and political context of [pre-service teachers'] teacher education experience requires learning to adapt instruction to a range of learners" (p. 221). Exposing teacher candidates to students who have limited English language skills, have special needs, come from low-income homes, etc. is necessary to inform their future practice. Pre-service teachers need also to understand the local contexts in which they teach (Paugh & Brady, 2013), as students' lived experiences will vary, even within the same geographical area. Holding these understandings will better allow the pre-service teacher to differentiate his/her instruction for each individual student.

Lastly, relationships between teacher educators and pre-service teachers are strong agents in the development of efficacy in teacher candidates. When relationships are forged between instructor and student, a sense of understanding emerges, both on an academic and personal level (Dozier & Deeney, 2013). Just as teacher educators expect their teacher candidates to form relationships with their students to positively impact self-efficacy, so is the same in the higher education sphere. Teaching should have a focus on "enlarging hearts, minds, and spirits" (Zimmerman, 2011, p. 36), regardless of the age of the student. Having a foundation built on

trust between instructor and student will allow pre-service teachers to explore their roles in the classroom more freely and will encourage them to experiment with practices that may be more difficult but that will yield higher academic successes for children.

Theoretical Framework

I conducted this study using a case study design with a social constructivism lens (Creswell, 2013) so that the voice of each stakeholder was uniquely heard and compared. As stated in Chapter One of this dissertation, each individual experience of the pre-service teachers participating in this study was likely unique and personal. The focus on the specific context of the individual was considered, as each participant does not bring the same prerequisite knowledge, background, or world views. As the researcher, I will "rely on the participants' views of the situation" (Creswell, 2013, p. 25) to better understand the role that efficacy played in their learning as an elementary literacy pre-service teacher learner.

The voice of the individual was elevated in this study; thus, Vygotsky's social constructivist theory guided the analysis and the design of this study. Pedagogical implications of using Vygotsky's social constructivist theory relate largely to how the pre-service teacher interacted with both their Camp student, their peers, and their professors within the Literacy Camp setting. It is necessary and important for both teacher educators and pre-service teachers to consider the Zone of Proximal Development within their learners and teach them within the bounds of their limits (Kouicem, 2020). Additionally, because an individual's self-esteem can be impacted when there is a perception of need from a group (Devi, 2019), the collaborative aspect of Literacy Camp lends itself further to this framework.

Gap in the Literature

After reviewing the extensive body of literature found related to the university literacy clinic, teacher efficacy, and student efficacy, it became apparent that there are few studies linking these concepts together. Further, the shift to virtual learning caused by onset of the COVID-19 pandemic has left a considerable gap in the literature as related to virtual literacy clinics and efficacy outcomes. There were no studies reviewed that targeted the specific scope of this study, thus presenting a need for the present study to be conducted.

Chapter Three: Methodology

The university literacy clinic provides an opportunity for pre-service teachers to learn not just from the university faculty overseeing the clinic, but the children who are participating in clinic services. Pre-service teachers serving as tutors have the opportunity to recognize weaknesses/areas for consideration during the early days of clinic, which then allows them to partner with clinic faculty in designing an individualized approach to best serve the child. Through implementation of these interventions, pre-service teachers can learn through experience what works for specific children and what does not. They will acquire the skills necessary to monitor and adjust, reflecting after each session to determine what will provide exemplary support to their clinic student (Dozier & Denney, 2013). The symbiotic relationship between pre-service teacher tutor and K-6 student participant creates a unique opportunity for all parties involved to learn and grow while building personal and professional efficacy.

The goal of this qualitative case study was to explore how the university literacy clinic impacted pre-service teachers' overall efficacy and confidence as it related to literacy instruction. Additionally, this study aimed to assess how the method of instructional delivery impacted pre-service teachers' teaching experience in the clinic setting. Stated in Chapter 1, I was the lecturer assigned to one of the two sections of Literacy Assessments and Intervention and was responsible for the instruction of 14 of the 23 pre-service teachers that consented to participate in this study. Additionally, I served as the graduate assistant in the university clinic. I facilitated one of the two sections of literacy camp in which I oversaw the instruction of 8 of the 14 first through seventh grade students that submitted questionnaire data to this study. Because of this, my reflexivity in this study required a conscious examination of "the biases, values, and experiences that [I brought] to a…research study" (Creswell, p. 216, 2013).

This chapter is organized to first outline the research questions, followed by the sample design, research design, and data analysis. Threats to the study are explored, as well as protections in place to bolster the validity of the study.

Research Questions

This qualitative research study addressed the following question and sub-question:

Central Question: How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?

Sub-question 1. How does the method of instructional delivery impact the teaching experience of the pre-service teacher?

Sample Design

This section will detail the sample design, which will describe the sample selection, setting, sampling scheme, sample size, and protection of human subjects through the IRB process. The sample selection and sample size of this study are limited to those participating in the university literacy clinic's program, Literacy Camp. This convenience sampling (Creswell, 2013) included 23 pre-service teacher interns.

Sample Selection

Pre-service teacher intern participants had to be enrolled in one of two sections of CIED 5173: Literacy Assessments and Intervention during the Fall 2021 semester. Pre-service teachers completed this course and served as the tutors in the university literacy clinic. They completed their practicum coursework through involvement in Literacy Camp.

Setting

This study took place in the University of Arkansas Clinic for Literacy located in Fayetteville, Arkansas. The clinic was first established during the Spring 2015 semester. A pilot study was launched at a local elementary school to form a relationship between local school districts and the university. An on-campus clinic was established during the Fall 2016 semester. Students grades kindergarten through sixth were invited to enroll in the clinic's tutoring program, titled Literacy Camp, where they would receive personalized instruction from university pre-service teachers completing either their senior year of Bachelor of Science in Education (B.S.E.) coursework or their Master of Arts in Teaching degree. Professors serving in the Childhood or Elementary Education departments oversaw clinic and Camp operations. Literacy Camp was offered three times per year, during the spring, summer, and fall semesters. A small fee is charged to students who enroll; the fee was between $50 and $100 depending on the instructional delivery method (University of Arkansas, 2022).

The worldwide COVID-19 pandemic forced clinic personnel to discontinue Camp during the Spring 2020 semester. Students enrolled were refunded their tuition and services were stopped. There was no Camp session during the Summer 2020 term. Camp services resumed during the Fall 2020 semester in a fully virtual format. Due to the evolving nature of the pandemic, as well as increased access to K-6 students, Literacy Camp has continued to meet via Zoom for all sessions since the Fall 2020 semester.

Sampling Scheme

This study utilized a convenience sampling scheme (Creswell, 2013). Participants met one criterion to participate in this study (i.e., enrollment in CIED 5173); thus, a lack of

recruitment to this study was present. All participants in Camp were given the opportunity to contribute their data to this study.

Sample Size

Pre-service teachers were enrolled in one of two sections of CIED 5173 being offered during the Fall 2021 semester. There were 14 pre-service teachers enrolled in my section and 12 pre-service teachers enrolled in the corresponding section. However, only 23 university elementary pre-service teacher candidates consented to participate in this study; thus, only their data was accessed. Though not seen as study participants, Camp students had the option to include their questionnaire data in this study. There were two 1st grade students, five 2nd grade students, three 3rd grade students (two of these students consented for participation), four 4th grade students (three of these students consented for participation), two 5th grade students, and one 7th grade student (this student did not consent to her data being used). The university literacy clinic typically serves students grades K-6; however, the 7th grade student showed reading deficits placing her at approximately a 5th grade level, thus presenting the need for her enrollment in this Camp. There were no kindergarten or sixth grade student enrollments this term.

The sampling design of this study lent itself to ample data collection, in turn allowing for the answering of the research questions. The sampling design is consistent with the research design.

Table 1

Sampling Design

Sampling Selection	Pre-service teacher enrollment in one of two sections of CIED 5173: Literacy Assessments and Intervention
Setting	University of Arkansas Clinic for Literacy
Sampling Scheme	Convenience Sampling Scheme
Sample Size	23 Pre-service teachers enrolled in CIED 5173

Protection of Human Subjects via IRB Process

Prior to the collection of data for this study, permission was granted by the University of Arkansas' institutional review board (IRB) (See Appendix A). There were no anticipated risks to completing this study. Pre-service teacher interns were required to complete the open-ended efficacy survey and turn in all required documents as part of normal coursework. There was a slight chance of inconvenience of time to the pre-service teachers not enrolled in my section of CIED 5173, as they were required to email their coursework to me. A potential benefit to participating in this study was the opportunity for pre-service teachers to reflect on their teaching and growth throughout the semester. Assuming Literacy Camp student and parent permission, audio recordings were taken for questionnaire data transcription in confidentiality and deleted after the completion of this study. Pre-service teacher interns were able to discontinue their participation in this study at any time.

Research Design

This qualitative research study used a case study research approach, utilizing several means of data collection, including a pre-efficacy survey (see Appendix B) and post-efficacy survey (see Appendix C) for pre-service teachers. An end-of-camp reflection questionnaire (see Appendix D) was given to Literacy Camp students so that the data from these questionnaires could be used as supplementary data to pre-service teacher responses. Additionally, pre-service teachers submitted data from 10 weekly debrief forms (see Appendix E). Qualitative methodology was selected for this study so that the data could be analyzed inductively to "gain new perspectives on things about which much is already known" (Hoepfl, 1997, p. 49). While this study was unique in nature, the concept of teaching and learning efficacy outcomes are not; thus, the qualitative design allowed for a deeper dive in this area to bring new understanding of efficacy outcomes in the virtual literacy camp setting.

A case study approach was chosen to conduct this study, as it best corresponded to the theoretical framework and research questions. Case study design lends itself to exploring a specific case within a real-life setting (Yin, 2018). This study was conducted in the specific context of the university Literacy Camp, thus presenting the need for the case study design. Further, this study utilized the single case study model (Stake, 1995), defining the single case as the Literacy Camp and all its participants. Because there were no embedded subunits in this case study, the holistic case study approach was used (Yin, 2018). This research design corresponded with both the research questions of this study and the instrumentation of this study.

Table 2

Research Design

Research Philosophy	Social Constructivism
Research Approach	Case Study Approach (Single & Holistic)
Sampling Design	Convenience sampling scheme with sample size of 23 pre-service teachers enrolled in CIED 5173
Data Collection Methods	1. Pre-efficacy survey from pre-service teachers 2. Post-efficacy survey from pre-service teachers 3. Weekly daily debriefs from pre-service teachers 4. Camp questionnaire from Literacy Camp students[a]
Data Analysis Methods	Category and Thematic Coding Anaylsis
Findings & Discussion	Interpretation and Description of survey & reflection responses and of formative documentation

[a] Literacy Camp students are not seen as participants for this study; however, their questionnaire data were included as supplemental data to participant responses.

Instrumentation Design

This study collected credible data from participants through use of open-ended surveys and collected documentation (Creswell, 2013; Yin, 2018). The pre-efficacy survey and post-efficacy survey given to pre-service teachers was modeled after Hoy & Tschanen-Moran's 2001 *Teacher's Sense of Efficacy Scale (TSES)*. This instrument was designed around three main themes: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. The survey questions given to pre-service teachers aligned to one of

these three themes and were adaptations of the questions originally written on the TSES instrument. It should be noted that this instrument was used solely for the writing of the researcher-constructed survey; it was not used to score, scale, or interpret participant responses. An open-ended, end of Camp reflection questionnaire was given to all K-6 Camp students. This questionnaire asked students to reflect on their experience at Literacy Camp. This questionnaire was aligned with the three themes present in Muris' 2001 Self Efficacy Questionnaire for Children (SEQ-C), which are academic self-efficacy, social self-efficacy, and emotional self-efficacy. Though this questionnaire is being listed as part of instrumentation, Camp student responses were used only as supplemental data; these students were not seen as study participants.

Documentation was collected from all pre-service teachers which included formative measures of pre-service teacher and K-6 student learning. The formative documents collected were 10 daily debriefs that were submitted by the pre-service teachers to the instructor of CIED 5173 following Camp each week to describe what went well, what did not go well, and what can be changed in the future to better the Camp experience for the K-6 student.

Table 3

Instrumentation Design

Instrument	**Planned**	**Actual**
Pre-efficacy survey	23	23
K-6 student questionnaires	14	14

Table 3 (Cont.)

Instrumentation Design

Weekly Daily Debriefs	230	203[a]
Post-efficacy survey	23	23

[a] Weeks 1 and 2 of daily debriefs were collected as one document for one section of CIED 5173; student daily debriefs occasionally were not submitted to me.

Research Procedure

After IRB approval was received, pre-service teacher participants and Camp students were informed of the study and asked for their participation through the means below. All participants were aware that their participation in this study was voluntary and could be discontinued at any time.

Pre-service Teacher Participants

All information collected from pre-service teacher candidates was required as part of normal coursework for CIED 5173. Participants were asked to include their data in the study and were informed that a follow-up interview may be requested. Each participant was asked to sign an Informed Consent form (see Appendix F) to allow data collected from their pre- and post-efficacy surveys and formative documentation (10 weekly daily debriefs) to be used as part of this study. All data collected was coded inductively to "put information into different arrays, reflecting different themes and subthemes" (Yin, 2018, p. 167).

Pre-service teachers participating in this study were all females. Participants were completing their Master of Arts in Teaching (M.A.T.) degree, a yearlong program that ran concurrently with a yearlong internship in the local public schools. These teacher candidates

earned a Bachelor of Science in Education (B.S.E.) in Early Childhood Education in May 2021. The coursework completed during the B.S.E. program was methodological with a practicum component for application; however, due to the COVID-19 pandemic and shift to virtual learning, these teacher candidates did not have the opportunity to teach in the local school districts prior to beginning their internship experience or service in the university literacy clinic. The Literacy Assessment Course, CIED 5173, was taken during the first semester of their M.A.T. degree and was ongoing during their internship placement.

Due to the number of students enrolled in Camp, there was no way to facilitate a one tutor to one student experience. Because of this, several tutoring groups contained two pre-service teachers and one student. One section of CIED 5173 (that was not assigned to me) served students exclusively in a two-to-one scenario. This section contained six tutoring groups, for a total of 12 tutors and six Camp students. Of these participants, nine tutors and six Camp students consented to the use of their data. My section of CIED 5173 contained 11 tutoring groups: three two-to-one groups and eight one-on-one groups. Of these participants, 14 tutors and eight Camp students consented to the use of their data.

Literacy Camp Students

An end-of-Camp reflection questionnaire was collected from Literacy Camp students through an informal survey completed by their camp tutor and voice recorded. I transcribed each voice recording and coded inductively for themes. Parents were asked to sign an Informed Consent form (see Appendix G) for their student's data to be used in the study. Student assent was attached to the Informed Consent form, which asked students to assent to their data being used in this study. It should be noted that these students were not seen as study participants;

however, Informed Consent was necessary to include their data as supplemental pieces of information to participants' data.

Research Timeline

The research timeline is detailed in Table 4 below. IRB approval was secured prior to data collection for this study.

Table 4

Research Timeline

Research Task	Timeframe
Conducted self-efficacy pre-assessment	September 2021
Received IRB approval	November 2021
Conducted self-efficacy post-assessment	December 2021
Collected end-of-Camp reflection questionnaires	December 2021
Compiled all Camp-related documents	December 2021
Analyzed data	January 2022-March 2022
Presented and defended study	April 2022

Data Analysis

Once all data were collected, the data analysis described here was followed. First, data were collected from all sources and separated into the four instruments listed in Table 3. Following collection and sorting of all data, each instrument underwent the inductive coding

process to identify open codes (Yin, 2018). Once open codes had been established, they were sorted into axial codes, followed by selective coding to form themes (Creswell, 2007). All findings from this study will be described in the Results and Discussion portion of this paper. The data analysis proposal was consistent and aligned with this study's research questions, sample design, and research design.

Study Validity and Reliability

There was a potential threat to the construct, internal, and external validity of this study, as well as reliability (Yin, 2018) and transferability (Lincoln & Guba, 1985). Credibility was established through a member check and peer debriefing (Lincoln & Guba, 1985). Below are the steps that were taken to mitigate and control these potential threats.

Construct Validity

Multiple sources of evidence (see Table 3) were included in the data collection and analysis process to "encourage[e] convergent lines of inquiry" (Yin, 2018, p. 44). A chain of evidence was also followed, meaning that findings can be "traced in either direction (from findings back to initial research questions or from questions to findings)" (Yin, 2018, p. 134).

Internal Validity

When looking at a causal comparison (e.g., x leads to y), a concern in internal validity arose, as there was the possibility that an outside factor (z) may have influenced or caused the outcome (Yin, 2018). Thus, explanation building was used to explain what had been found in the data of the case study, answering "'how' or 'why' some outcome has occurred" (Yin, 2018, p. 179).

External Validity

The difference between analytic and statistical generalizations must be noted to prevent any misguiding of the reader; thus, these generalizations will be noted in the Findings and Discussion chapters of this study. Asking “how” or “why” questions can ease the concern of external validity, as “how” questions correspond with a descriptive case study and “why” questions speak to an explanatory case study. The research questions were established prior to the study commencing (outlined in the research design section) and were aligned with the theoretical framework of this study (Yin, 2018). Each of these factors worked to alleviate threats to external validity.

Reliability

While there are rarely opportunities for repeating a case study, it is still necessary to duly document the procedures of the case study (Yin, 2018). Thus, a case study protocol was used, as described in the previous sections of this paper. Because the protocol was well-established in literature (Saldana, 2009; Yin, 2018), it is reasonable to assume that procedures could be replicated in other studies.

Transferability

A full, detailed description of the participants and setting for this study has been provided so that transferability to other situations can be determined by readers (Lincoln & Guba, 1985). Providing a thorough depiction of study characteristics, readers and future researchers can use the interconnected details provided in this study to decide whether they are able to transfer these findings to their own unique situations.

Credibility

Three participants from this study conducted the process of *member checking* (Lincoln & Guba, 1985) in which they reviewed findings from this study to ensure that the results were representative of their experience in the Literacy Camp. The purpose of member checking is to ensure credibility for a study (Creswell, 2007). Each participant agreed that the findings presented in Chapter 4 of this study were accurate and adequately described their participation in the university literacy clinic's program, Literacy Camp.

Throughout the data collection process, as well as the coding process, peer debriefing (Lincoln & Guba, 1985) ensued with my dissertation chair so that she could view the data through an outside, third-party lens. She was able to independently assess the data to further guarantee the results were unbiased and remained free of my predisposed notions as the lecturer for one of the two sections of CIED 5173. Peer debriefing sessions happened regularly throughout the data collection, data analysis, and writing processes.

Chapter Four: Results

Consistent with the data analysis process for case studies, several rounds of coding were completed to best analyze the data set (Creswell, 2007; Yin, 2018). I first compiled and thoroughly reviewed all the data prior to beginning the coding process. Significant statements were extracted from the data set. These statements were grouped into open codes and labeled according to the participants' own words, following a process known as *in vivo* coding (Creswell, 2007). These open codes were coded several more times, narrowing down to a set of inclusive axial codes, and ending with main themes that emerged. I was then able to reach the conclusion portion of this research. These results will be discussed throughout this chapter.

Data analysis for this research was completed in a series of stages. First, data were compiled from all sources. A numerical code for participants was established so that anonymity could be maintained throughout the coding process. Next, I extensively reviewed the data collected from participant surveys and daily debriefs. This data spanned 12 weeks' time. I read through each of the data points several times before beginning the coding process.

After the review of data, I began the open coding process, where I directly pulled participant's responses to create open codes. An inductive method of coding was used, meaning that codes emerged naturally from the data set. A total of 50 open codes came from the three main data sources: efficacy pre-survey, efficacy post-survey, and 10 weeks of daily debriefs. The first data set that I coded was the efficacy post-survey. This data was the newest, thus I deemed it necessary to review first. I then coded the efficacy pre-survey to find overlaps in codes and to see whether the students had adequately enacted their plans from the beginning of the semester. Lastly, I coded the 10 weeks of daily debriefs. I did this by coding across each week to gain a better understanding of the overall growth of the participants from week to week. Once all the

open codes were established, I defined each code, providing supporting evidence in the form of participant responses.

Following the open coding process came the formation of axial codes. Open codes were combined and resulted in the creation of 11 axial codes. The final stage of data analysis was to sort axial codes through the selective coding process into main themes. Eleven axial codes became four separate themes. These themes provided explanation in answering the question of whether involvement in a university literacy camp impacted pre-service teachers' self-efficacy, as well as how the method of instruction impacts the overall learning experience for tutors.

Open Codes

According to Creswell, open coding serves as a way for data to be compiled into "major categories of information" (2007, p. 86). The open coding process began through an extraction of participant responses of the post-efficacy survey, followed by the pre-efficacy survey. About half of the open codes emerged from these two data sets. I completed the open coding process with the daily debriefs, where the other half of the open codes presented themselves. A total of 50 open codes were inductively found throughout the initial coding process.

Table 5 names each of the 50 codes and provides the frequency, or number of times, each code appeared in the data. The table is ordered so that the highest frequency of code is listed first, down to the least used code last. Cases of codes with the same frequency are listed in alphabetical order. It is important to note that codes with higher frequencies were typically found across all data sources, while codes with lower frequencies were typically found only in one of the data sources.

Table 6 contains the title, definition, and supporting evidence for definitions of each of the 50 open codes. A narrative explanation for each of the codes follows Table 6 to provide detailed information not included in the table.

Table 5

Open Codes

Open Code	Frequency in Data
Student differentiation through interest	48
Technology distractions/issues	43
Learning/teaching strategy incorporation	42
Building relationships and rapport with students	41
Need to use time more wisely	40
Brain breaks	35
Technology incorporation	34
Questioning	26
Mis-selecting content/activities	21
Providing review of learning	21
Interactive activities	19
Engaging virtually	18
Tutor error in instruction/content	18
Use of assessment	18
Working with partner	18
Creating an environment for learning	16
Effective instruction	16
Game incorporation	16
Limiting non-technology related distractions	16
Adjusting/correcting mistakes from last week	14
Need to adjust to student academic needs	14

Table 5 (Cont.)

Open Codes

Need to give clearer directions	14
Misinterpreting student ability	12
Not anticipating student misconceptions	12
Student understanding checks	11
Tutor preparedness	11
Real life application	10
Reflection on how assessment was administered	10
Student differentiation through ability	10
Varied instruction	10
Gradual release of responsibility	9
Need to adjust to student SEL/non-academic needs	9
Need to build classroom management	9
Positive praise	9
Student differentiation by learner profile	9
Setting outline for the day	8
Adjusting to student needs during lesson	7
Communicating with student	7
Tutor demeanor	7
Explaining directions well	6
Keeping a good pace	6
Student connections to Camp topic	6
Need to engage student	5
Proud of teaching choices	5
Using physical materials	5
Need for clearer content instruction	4
OK to make mistakes	4
Reminders to stay on task	4

Table 5 (Cont.)

Open Codes

Involve families	3
Confidence in teaching	2

Table 6

Open Codes, Definitions, and Supporting Evidence

Open Code	Definition	Supporting Evidence
Student differentiation through interest	The tutor created personalized instruction around the student's individual personal preferences	• "Incorporate personal interests into the lesson." (Participant 1, pre-survey) • "We learned last week that [student] loves to draw so we focused our brain breaks on drawing our favorite things." (Participant 16, daily debrief)
Technology distractions/issues	Technology elements (including but not limited to Zoom, computers, keyboard, mouse, etc.) creating problems for the student, tutor, or both during the Camp session	• "I quickly noticed within the first couple weeks of camp that headphones were a distraction for her (and me) …" (Participant 3, post-survey) • "Our only set back this week once again was technical issues." (Participant 6, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Learning/teaching strategy incorporation	Including a specific teaching strategy (ex: scaffolding) or learning strategy (ex: Grab the Odd One Out) in a Camp session	• "Meaningful work that scaffolds their knowledge." (Participant 11, pre-survey) • "We used an adapted version of Elkonin Boxes, Kilpatrick Invisible tokens, Grab the Odd one Out, and Kilpatrick One-Minute activities as the main strategies." (Participant 17, post-survey)
Building relationships and rapport with students	Participant is trying to get to know the student and fostering care and trust between student and tutor	• "I have kept up with having [student] read the I can statement. I think it creates that relationship of us as a team. The relationship that has been formed over zoom is clear." (Participant 15, daily debrief) • "Allow the student to share more personal aspects to help us gain a better understanding of him and how he learns." (Participant 19, pre-survey)
Need to use time more wisely	Tutor does not appropriately use their Camp time on necessary instruction, tasks, activities, etc.	• "The pacing of the lesson did not go as planned once again." (Participant 13, daily debrief) • "I overestimated the time it would take him to complete all of the activities." (Participant 18, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Brain breaks	A time during Camp sessions where the tutor allows the student a brief break from their learning by engaging them in a non-academic activity	• "Implement plenty of brain breaks" (Participant 3, pre-survey) • "Gave her brain breaks" (Participant 21, post-survey)
Technology incorporation	Including elements of technology (including but not limited to Google Slides, Google Docs, Kahoot, online games, etc.) during the Camp session	• "Using Google Slides for our session worked really well" (Participant 7, daily debrief) • "Activities that made the student have to manipulate something on the screen" (Participant 10, post-survey)
Questioning	The tutor asks direct questions to the student to deepen their knowledge about a topic or to gauge student understanding	• "DOK levels of questioning" (Participant 12, pre-survey) • "I implemented questioning" (Participant 13, post-survey)
Mis-selecting content/activities	The tutor does not accurately or adequately choose an academic activity or academic content appropriate for the student during that specific Camp session	• "The mentor text I chose did not have as many organizational features as I hoped to point out." (Participant 1, daily debrief) • "I also think I need to do a better job at choosing books." (Participant 8, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Providing review of learning	The tutor either does or does not include a review of prior learning during the Camp session; this may have helped or hurt a student during that specific lesson	• "It is clear that we need to go back and review previously taught concepts and spelling patterns." (Participant 9, daily debrief) • "We went back and reviewed the explicit teaching of these skills and completed more practice." (Participant 17, daily debrief)
Interactive activities	Activities that require active participation from the Camp student and tutor	• "Utilizing…interactive games/worksheets" (Participant 6, pre-survey) • "Made my PowerPoints a little more interactive" (Participant 20, post-survey)
Engaging virtually	The tutor uses technological means to engage the student in their learning	• "I shared my screen so that the attention was held on what was in front of my student." (Participant 15, post-survey) • "I also think we did well to integrate some activities into the virtual environment." (Participant 17, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Tutor error in instruction/content	The tutor does not accurately describe a topic or misrepresents the actual meaning of a topic during the Camp session	• "I think I need to look into more ways to provide explicit instruction that is not just me telling him as he does not always seem to absorb it." (Participant 20, daily debrief) • "I have a hard time figuring out what to say when she does not quite get a concept." (Participant 21, daily debrief)
Use of assessment	The tutor chooses an assessment (formative or summative) to determine where the student stands academically	• "Assessments can be fun activities or simple discussions and check ins." (Participant 5, pre-survey) • "Formative assessments were carefully taken every week." (Participant 12, post-survey)
Working with partner	Several Camp tutors worked in pairs of two; participants who worked with a partner described that experience	• "I think that [partner] and I work really well together." (Participant 3, daily debrief) • "[Partner] worked the slides while I recorded [students] answers. That worked well in today's lesson." (Participant 11, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Creating an environment for learning	The tutor and/or student does specific things to enhance or improve the student's learning environment, creating circumstances for the student to best learn	• "Have reliable internet; emphasize the importance of being in a quiet place away from distractions; communicate the importance of having good lighting" (Participant 2, pre-survey) • "Student was always in the same room with a reliable connection and no distractions." (Participant 22, post-survey)
Effective instruction	The tutor believes that the instruction they provided during the Camp session that day was effective in impacting student understanding of a specific topic	• "I think I did a good job on explaining the sound and identifying the sound in the words provided on the flashcard." (Participant 2, daily debrief) • "The read aloud activity was executed well." (Participant 19, daily debrief)
Game incorporation	A specific game was included in a Camp session	• "Another tool that we used was word wall that contained online games that we could create and use for practice." (Participant 6, post-survey) • "Games…that she can participate in virtually" (Participant 16, pre-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Limiting non-technology related distractions	The tutor uses management skills to mitigate distractions for her student during the Camp session	• "Make sure that the student is in a quiet area; having the student wear headphones helps prevent distraction from outside noises" (Participant 10, pre-survey) • "Today when our student was not engaged, I quickly and politely asked her to stop what she was doing and work with me. This worked really well because after she stopped, I continued to ask her to discuss the things we were doing instead of me only telling her about them, so she was able to stay engaged in the learning." (Participant 17, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Adjusting/correcting mistakes from last week	The tutor recognizes that a mistake was made the previous week or that specific adjustments to content/lesson flow should be made during the present Camp session. Conversely, something positive or neutral that was observed by the tutor the previous week may be incorporated into the following week's session.	• "Last week I had asked my student what he liked best about literacy camp and he said that he enjoyed Bingo. Since he enjoys it and it is a great way to assess spelling, I used it again." (Participant 5, daily debrief) • "Last week I really struggled to give [student] enough explicit instruction…[this week] I instructed [student] to try writing out all of the words with all the possible endings and then picking which one it looks right and he had a much higher accuracy rate." (Participant 20, daily debrief)
Need to adjust to student academic needs	The tutor either needs to make the activity/content easier, harder, or different depending on student demonstration of their academic knowledge	• "This showed us that we thought he understood those previously learned patterns; however, it is clear that we need to go back and review previously taught concepts and spelling patterns." (Participant 9, daily debrief) • "I will just improve instruction and adjust to what she needs." (Participant 21, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Need to give clearer directions	The tutor does not adequately or accurately describe directions for content and/or an activity during a Camp session	• "I feel that my directions to for my student to make revisions and use the checklist might not have been clear in the YouTube video and Google Slides." (Participant 8, daily debrief) • "We could have recorded wither videos of us explaining or provided audio explanations of directions." (Participant 23, daily debrief)
Misinterpreting student ability	The tutor recognizes that she did not accurately understand the student's academic abilities and thus the content and/or activity was inappropriate for the student at that time	• "[Student] had more prior knowledge than we expected..." (Participant 4, daily debrief) • "We went through the explicit instruction and activities of substitution of ending sounds fairly quickly and misjudged the student's readiness for the check in." (Participant 10, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Not anticipating student misconceptions	The tutor does not predict what her student may or may not understand prior to instruction or activities during the Camp session	• "[Partner] and I made the mistake of assuming that [student] had played Kahoot before, but she actually hasn't." (Participant 3, daily debrief) • "The only other thing that did not go as well as planned was when we asked her to list some words that follow the "Floss-z" rule....We did not anticipate that to happen as often as it did." (Participant 6, daily debrief)
Student understanding checks	The tutor allows the student to reflect on their own learning and allows the student to determine to what level he/she understands the content from the Camp session	• "Ask our student to give us a thumbs up, sideways thumb, or thumbs down to let us know how he was understanding the content" (Participant 2, post-survey) • "I decided to ask [student] to give me a thumbs up, sideway thumb, or a thumbs down over how he felt about long vowels a, e, and i. This worked because [student] was able to reflect on his learning." (Participant 7, daily debriefs)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Tutor preparedness	The tutor is either prepared or not prepared with content knowledge, lesson plans, technology set up, etc. prior to the start of the Camp session	• "Be prepared; prepare for things that may go wrong" (Participant 9, pre-survey) • "We had the independent practice on a google document instead of having the student write it down. Unfortunately, we did not send it to her." (Participant 12, daily debrief) • "We planned everything really well." (Participant 14, daily debrief)
Real life application	The tutor encourages the student to find a connection between a Camp topic and something that will impact the student in the real world	• "I wanted them to understand how learning the content would benefit them throughout their entire education and life." (Participant 13, post-survey) • "Connections to the real world…transferring this once again to her interests" (Participant 15, pre-survey)
Reflection on how assessment was administered	The tutor thinks about how she proctored one or more of the assessments given to her Camp student	• "I felt as though I rushed through the CORE phonics." (Participant 5, daily debriefs) • "Assessment...would have gone smoother if the student had editing access to the answer sheet when answering comprehension questions." (Participant 19, daily debriefs)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Student differentiation through ability	The tutor creates personalized instruction around the student's individual academic readiness	• "I can encourage their strengths and work on their weaknesses." (Participant 14, pre-survey) • "I tried to pick more challenging words for him since he is so advanced." (Participant 18, daily debrief)
Varied instruction	The tutor utilizes several types of instructional strategies within the course of a lesson to provide the student with multiple entry points to learning	• "Changing the types of learning you are doing through the lesson" (Participant 8, pre-survey) • "Varied the instruction I was giving my student" (Participant 21, post-survey)
Gradual release of responsibility	The "I do it, we do it together, you do it together, you do it alone" model of teaching	• "Engage in the gradual release of responsibility" (Participant 1, post-survey) • "The flow of gradual release allowed for us to feel like we had properly prepared her." (Participant 16, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Need to adjust to student SEL/non-academic needs	The tutor needs to take into consideration the emotional or non-academic needs of a student during the Camp session and make changes based on her observations	• "I need to work on providing my student with more breaks during class." (Participant 1, daily debrief) • "We are aware that [student] is very invested in the book collection called "Wings of Fire." We did not plan the lesson with this in mind, but [student] wants to talk about the book and wants to do lessons that relate to her favorite books." (Participant 22, daily debrief)
Need to build classroom management	The tutor does not adequately prevent distractions or hold the student's attention in the learning environment and needs to do so	• "We should have used classroom management skills to keep our student on task." (Participant 10, daily debrief) • "Although our student got back on task quickly, she did enjoy talking quite a lot...This would be part of our management and us getting comfortable with firmly but kindly making a transition." (Participant 23, daily debrief)
Positive praise	The tutor provides positive feedback to the student to encourage or affirm a specific behavior/achievement	• "Use encouraging words and praise throughout" (Participant 9, pre-survey) • "Encourage her with short praises" (Participant 17, post-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Student differentiation by learner profile	The tutor creates personalized instruction around the student's individual learning preferences (visual, auditory, kinesthetic)	• "Include several visuals to help for student engagement…visuals were an important aspect to the student's learning." (Participant 7, post-survey) • "Find out what her learning style is in order to engage her in lessons" (Participant 21, pre-survey)
Setting outline for the day	The tutor lets the student know from the beginning of the session what to expect during the Camp session that day	• "Gave my student an outline of what we would be doing that day" (Participant 5, post-survey) • "Have a PowerPoint for reference of the schedule" (Participant 15, pre-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Adjusting to student needs during lesson	The tutor must change course of learning on-the-spot to accommodate the student's emerging needs	• "The guided practice was a great practice for the student because it was interactive and we adjusted it when we felt it wasn't challenging enough for him making for an opportunity to build on knowledge." (Participant 11, daily debrief) • "When I noticed him struggling to delete the second sound, I had him break the word apart into all its sounds. Then I asked him what sounds were left when we removed the second sound. I guided him to recognize the separate sounds and then he was able to put those sounds back together to form the new word. By the end of the lesson, he seemed to grasp this concept well." (Participant 13, daily debrief)
Communicating with student	The tutor talks with the student during the Camp session to better understand student needs	• "[Partner] and I were able to communicate with [student] effectively during the lesson." (Participant 2, daily debrief) • "Talk with the student the entire time through instruction" (Participant 10, pre-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Tutor demeanor	How the tutor conducts herself emotionally during a Camp session	• "I can also maintain a positive attitude." (Participant 7, pre-survey) • "I also showed a lot of excitement in my teaching today with those connections and in turn I could see the reciprocation." (Participant 15, daily debrief)
Explaining directions well	The tutor accurately and adequately provides directions to the student about an activity and/or academic content	• "I believe my directions were clear enough and my student successfully opened up the google slides." (Participant 1, daily debrief) • "I was able to explain instructions clearly during the guided and independent practice." (Participant 2, daily debrief)
Keeping a good pace	The tutor can complete all necessary content instruction, activities, and assessment within the Camp period	• "We were able to stay on track and keep a good pace." (Participant 9, daily debrief) • "Everything we had planned was finished in a timely manner." (Participant 14, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Student connections to Camp topic	The tutor encourages the student to find a connection between a Camp topic and something in his/her everyday life	• "Ask him to share experiences he has had related to the topic" (Participant 7, pre-survey) • "The schema activation helped him make a connection to the Army." (Participant 11, daily debrief)
Need to engage student	The tutor does not adequately engage the student in his/her learning during the Camp session and recognizes that she needs to do so	• "Keeping [student] engaged during explicit instruction is something that is important, working to find ways to allow this through technology is something we can keep working on." (Participant 4, daily debrief) • "I did a review of the content we have learned over camp, but I wish I made it more interactive to help it be more engaging and stick." (Participant 21, daily debrief)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Proud of teaching choices	The tutor describes feeling proud of or happy with her instructional choices during the given Camp session	• "One instructional move that I am proud of from this lesson is that during the assessment, she missed 4 out of the 8 words. So, immediately in response to her misspelling the words I told her to practice the 5-step strategy that we used last week and we did it with the words that she had just misspelled." (Participant 3, daily debrief) • "I decided to continue work with syllable junctures and I was really glad that I did…I am glad I decided to continue reinforcing the previous lesson." (Participant 20, daily debrief)
Using physical materials	Non-technology related materials that are used during the Camp session	• "Allow students to type, draw, and write all using technology and non-tech options" (Participant 4, pre-survey) • "Include using white boards or just ordinary writing materials" (Participant 6, pre-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Need for clearer content instruction	The tutor does not accurately or adequately describe the academic content during a given lesson	• "When I was attempting to review from the previous week, I noticed that my teaching was not as clear as I hoped based off the student's responses." (Participant 1, daily debrief) • "I need to grow in my explanation of vowel teams." (Participant 5, daily debriefs)
OK to make mistakes	The tutor lets the student know that it is acceptable to make mistakes during a Camp session	• "Okay to make mistakes" (Participant 10, post-survey) • "We've established that our clinic is a safe space that allows for mistakes – because we can always learn from mistakes." (Participant 23, daily debriefs)
Reminders to stay on task	The tutor lets the student know that he/she needs to focus on the Camp task at hand if he/she has stopped paying attention or changed their focus during the Camp session	• "It would take a simply redirection to get him back on task in the rare event he is not." (Participant 18, pre-survey) • "If I notice her not paying attention, we will take a quick brain break and I will ask her to put away distractions and restate the expectations for the literacy camp time." (Participant 21, pre-survey)

Table 6 (Cont.)

Open Codes, Definitions, and Supporting Evidence

Involve families	The tutor includes the student's family member(s) in anything related to the student's Camp experience	• "Provide your student (and their families) with all the necessary resources" (Participant 11, pre-survey) • "We have become great at the parent meetings and easily discuss the daily topics and information with our student's mom." (Participant 17, daily debrief)
Confidence in teaching	The tutor reports feeling confident in their teaching abilities or teaching choices during a Camp session	• "I practiced and had a set-in stone explanation of diphthongs prepared which helped me be more confident in my teaching." (Participant 5, daily debrief) • "It has worked to keep a similar routine in order to provide structured content and understand the schedule that I will follow. It has helped me with confidence in administering the literacy camp lesson." (Participant 15, daily debrief)

Student Differentiation Through Interest

The code *student differentiation through interest* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. It refers to one of the three main ways teachers personalize instruction for their students; differentiation through interest means that the pre-

service teacher used knowledge of her student's interests to customize one or more parts of a lesson to that specific interest. This code appeared a total of 48 times in the data, making it the most widely used open code.

Pre-service teachers reported 15 times on the pre-survey that they planned to differentiate their lessons according to student interest for several reasons, including to motivate the student (Participant 16) and keep the student interested (Participant 18). Differentiation by interest appeared on the post-survey 10 times, revealing that the participants largely followed through with their plan to include K-6 student interests in mind when planning instruction. Participant 7 stated that she "always included her interests," and Participant 14 said that she would "write lessons based on what was interesting to the student."

Daily debriefs revealed the code a total of 23 times, showcasing how the pre-service teachers incorporated their students' interests into daily lessons. It should be noted that this code was used across every week of debriefs. This code, in addition to one other, was one of two codes that was found in every week of the debriefs, as well as in the efficacy pre-survey and efficacy post-survey. Participant 1 was able to differentiate by interest during Week 4, stating that she "chose a text about winter, the student's favorite season," which "helped to engage the learner." Slide format was also used to differentiate by interest, as Participant 13 pointed out saying that she "themed his PowerPoint based on the Lego movie because I know this is one of his interests."

Showcased throughout every data source, student differentiation through interest was used to engage students in their learning. This was done through inclusion of images in slide presentations, material selection, content inclusion, and a variety of other strategies. Participants

reported utilizing differentiation by interest more than twice the amount of differentiation by ability and learner profile combined.

Technology Distractions/Issues

The code *technology distractions/issues* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. It refers to the fact that by using technology, problems arose during the Camp period, be it through technical difficulties or the Camp student and/or tutor losing focus due to a technological element. This code appeared a total of 43 times, making it the second most used open code.

Participants referenced technology distractions/issues 10 times on the pre-survey, indicating the anticipation of issues with technology prior to the Camp term beginning. When asked how to prevent and mitigate instructions in the virtual environment, Participant 1 stated that their "student sometimes gets distracted by other screens on his computer," and added that she would need to issue "reminders to stay on task and to close other browsers." Participants 2, 7, 17, 21, and 22 said that they would like to ensure that their students have strong internet connection, with Participant 22 reporting that she will also make sure that her personal internet connection is strong.

Predictions from the pre-survey, specifically related to internet connection, were mirrored throughout both the post-survey and daily debriefs, as a few participants relayed information about how internet connection distracted from their lessons. Participant 7 said on a daily debrief that during Week 7 of instruction, she lost instructional time due to losing connection with her student. Participant 17 stated on the post-survey that her student's internet connection was slow at the beginning [of Camp], which presented issues for her tutoring.

Other technological issues discussed by participants included inability to share remote access with their students, ensuring that their student's volume and/or camera were working on their computers, and keeping their student engaged while working through technology-related issues. This code was used 7 times during the post-survey and 26 times in the daily debriefs, making it the second most used code overall in the daily debrief data, as well as the second most used across all data sources.

Learning/Teaching Strategy Incorporation

The code *learning/teaching strategy incorporation* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. It includes both general and specific strategies used by the pre-service teachers to promote learning for their students. Strategies were aligned either to how the pre-service teacher taught her student (ex: through use of scaffolding) or a set strategy that the pre-service teacher encouraged her student to use in her endeavor to gain understanding of a topic (ex: Word Box Manipulation). This code appeared a total of 42 times, making it the third most used open code.

Participants reported their intended use of learning/teaching strategies 8 times in the pre-survey, specifying several ways they planned to conduct their students' learning. Teaching strategies included explicit instruction (Participant 2) and use of Bloom's Taxonomy (Participant 8). Learning strategies included Elkonin Word Boxes (Participant 10) and Grab the Odd One Out (Participant 17). These strategies were consistent with answers given by participants in both the post-survey and daily debriefs, with answers becoming more specific as the weeks of the debriefs progressed. Participants reported finding strategies that worked for their students and decided to stick with those, as they believed that the instructional methods were effective in promoting student learning. Participant 21 stated in her daily debriefs that her student responded

well to explicit instruction in week 4, thus she chose to use it again as the main source of instruction during week 5. Similarly, Participant 13 found that sound boxes were a successful tool in teaching her student how to learn a specific skill, so she used it again in subsequent weeks of instruction. This code was found 23 times in the daily debriefs.

The post-survey data revealed teaching/learning strategies not previously found in the daily debriefs or pre-surveys. Participant 6 described how she was able to use the 5 Step Drastic Strategy for spelling with her student, as the student reported that this strategy was one she used in school. Participant 11 stated that she used discussion techniques to engage her student in learning. Other participants, including Participant 17, used adapted strategies from what they had described in their pre-survey. This code was found 11 times in the post-survey.

Supporting data from Camp students revealed that Camp Student 13 used strategy instruction taught by his tutors when playing an er, ir, and ur spelling game. He remembered the word by "splitting it", then chose "the one that looks the most right." Camp Student 2 also reported using the learning strategy of "making a picture in [his] brain" during word problems.

Building Relationships and Rapport with Students

The code *building relationships and rapport with students* was found across all three data sources: pre-survey, post-survey, and daily debriefs. This refers to the connection that the pre-service interns hoped to foster between themselves and their students, as well as a bond and trusting relationship that would further allow students to learn and grow in the Camp environment. This was the fourth most used open code, with it appearing a total of 41 times in the data.

Pre-service teachers planned to build relationships and rapport with their students as shown through pre-survey data; however, these statements were often general, with participants saying they would "allow the student to share more personal aspects to help us gain a better understanding of him and how he learns," (Participant 19) and that they hope their students "see that I care about her as a learner and that I am there to help her reach her goals" (Participant 21). This open code appeared 12 times in the pre-survey.

Instances of relationship and rapport building were present 23 times in the daily debriefs, with participants reporting specific and general efforts to forge connections with their students. Weeks one and two were the heaviest for relationship building (per daily debrief data), as pre-service teachers hoped to establish rapport with their students to establish a strong foundation for the Camp term. Participant 11 led her student in a discussion she titled "What Makes Us Unique" during the first session of Camp, reporting that she hoped this would allow her and her teaching partner to get to know their student better. Participant 13 completed an ice breaker prior to starting assessments during week 1, which she stated "helped [her] relate to him." Efforts were made throughout the weeks to maintain relationships and rapport per daily debrief reports; the only weeks there was no use of this open code were weeks three and five.

Post-survey data shows a decline in the number of times this open code was used, with it only appearing 5 times. Though participants did show efforts of building relationships in their debrief data, it was mentioned only briefly in post-survey data, as the focus was not primarily given to this aspect of Camp. Participant 3 stated that she "made it a priority to get to know her [student] as a learner and as a person," and Participant 6 said that she "listen[ed] to my student first."

Data collected from the K-6 students affirmed that pre-service teachers worked to build relationships with their students, as several of the K-6 student responses were related to spending time with their teachers. Camp Student 8 reported that the thing he was the proudest of himself for during Camp was "showing [tutor] [his] toys." Camp Student 12 reported that she was the proudest of "spending time with [her] teachers."

Need to Use Time More Wisely

The code *need to use time more wisely* appeared in only one data source: daily debriefs. Though this code was only found in one source of data, it arose a total of 40 times, making it the fifth most used open code. It refers to when pre-service teachers reported that they either planned too much time for an activity/lesson, not enough time for an activity/lesson, or did not use their time appropriately, often resulting in disjointed or incomplete instruction. Most of the pre-service teachers participating in this study had never completed a one-one-one intervention or individual tutoring; thus, pacing proved problematic for several tutors. This code appeared across all 10 weeks of the daily debrief data.

Participants stated weekly that they over planned a lesson and that they did not have enough time left to finish everything they had planned. Course instructors asked that tutors came prepared each week with additional content; this is not what the participants were describing in their answers. For example, Participant 15 reported in six separate debriefs that she either felt rushed through her lesson or that she focused too much time on one part of her lesson that she did not feel her instruction was adequate in other areas. Other participants, such as Participant 18, did not plan enough, leaving extended periods of time left at the end of the lesson. Occasionally participants would state that they planned more or less based on what their student

needed in the previous week, but for Participant 20, this backfired during week 4, as she noted that she had too much time between the activity and independent practice.

Brain Breaks

The code *brain breaks* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. This code describes the inclusion of brain breaks for the purpose of allowing the student a brief reprieve or escape from their normal Camp learning. It was heavily discussed in both the pre- and post- surveys, with a total of 31 uses between the two surveys. It arose only 4 times during the daily debriefs.

Pre- and post- survey data showed that participants planned to use brain breaks and followed through with that plan, with over half of the participants describing their intent and subsequent use of brain breaks during the Camp period. Pre-survey data showed that "active brain breaks" (Participant 5) and "interactive brain breaks" (Participant 7) would be used to keep students engaged in their learning. Post-survey data echoed these sentiments, with brain breaks being mentioned the most in response to survey question four, "What did you do to prevent and mitigate disruptions in the virtual literacy camp environment to ensure your student was an active participant in their learning?" Participants did not generally give many details about the brain breaks, stating only that they were offered or provided to the student.

Daily debrief data did not have a heavy focus on brain breaks, with them being mentioned only in weeks one/two and eight. Participant 13 reported that using brain breaks during the early sessions of Camp allowed her student to stay on task. Because the daily debrief forms asked participants to report on what went worked, what did not work, and what the next

steps are, it stands to reason that brain breaks were not often included based on the criteria of the assignment.

Technology Incorporation

The code *technology incorporation* was found across all three sources of data: pre-survey, post-survey, and daily debriefs. This term refers to how technological activities, elements, or resources were utilized during the Camp session; it does not include specific issues or challenges participants faced in relation to technology.

Specific ways for technology to be incorporated were listed in each of the data sources. Uses of technology included online response platforms such as Flipgrid (Participant 3), video sources (YouTube, Participant 13), and interactive sites for the tutor and student to collaborate (Google Slides, Participants 1, 8, and 17). Pre-service teacher participants utilized technology in every lesson, as the Camp was fully virtual. Technology incorporation was mentioned in all 10 weeks of daily debrief data.

Questioning

The code *questioning* was found across all three sources of data: pre-survey, post-survey, and daily debriefs. This code refers to how tutors used specific questions or questioning techniques to either elicit a response from their Camp students, or, how tutors utilized specific questions or questioning techniques to deepen or extend their student's knowledge related to a Camp topic. Questioning appeared only twice in the daily debriefs while it was present a combined total of 24 times in survey data.

Pre-service teachers planned to use specific questioning techniques such as Depth of Knowledge (DOK) questions (Participants 8 and 12), as well as ask questions that would "call

for a little more higher-level thinking" (Participant 18). Post-survey data confirmed that participants used questioning in instruction; however, daily debrief data did not show an emphasis on questioning. Post-survey data also showed that while questioning in general was used, specific examples or strategies were not provided in participant responses. Responses such as "asked many different questions" (Participant 15) and "questions ranged" (meaning the tutor utilized a variety of questions) (Participant 23) were most common.

Mis-selecting Content/Activities

The code *mis-selecting content/activities* was found only in one source of data: daily debriefs. This code arose most when participants described what did not work during Camp lessons. It refers to the pre-service teachers' incorrect selection of a content element or student activity during instruction. This code did not arise until week 6 of the daily debriefs.

Tutors often reported making mistakes when choosing elements of a lesson, showcased below by Participant 1:

> Today what didn't work was part of my guided practice. Reflecting back, I should have included some guided practice on identifying these strategies within a larger piece of writing rather than jumping straight into applying them in a collaborative writing piece.

Other examples include choosing worksheets that are too difficult for the student to complete independently (Participant 11), incorporating the wrong type of book as a model (Participant 8), or not including enough of a specific element (ex: visual activity for ending blend deletion) within a lesson (Participant 10).

Providing Review of Learning

The code *providing review of learning* was found only in one source of data: daily debriefs. This code refers not only to pre-service teachers including review as necessary, but also omitting review of learning when it was needed. This code was first seen in week 5 of debrief data.

While tutors often recognized that their students may need to review what they learned in previous weeks, often a review would be left out of a lesson, which participants noted as presenting challenges for their students. Participant 9 noted that she and her partner believed that their student understood the weekly spelling pattern; however, they discovered that the student did not, and mentioned that a review would be necessary before the student was ready to move to the next skill. Conversely, it was mentioned many times in the data set that pre-service teachers adequately utilized reviews that benefitted the students' overall understanding of content. Participant 5 stated that during week nine, she chose not to move on to a new concept and instead reinforce diphthongs in a review session, something she stated was "a good idea" and helpful. Another example of this was when Participant 3 affirmed her decision to review, stating that "we made the right decision to have a review day with [student]." Previous debrief data from Participant 3 recounted that her student struggled to grasp concepts, thus the need for review was prevalent in several weeks.

Interactive Activities

The code *interactive activities* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. These activities are ones that require active interaction from the student and tutor for learning to occur. While these activities appeared generally on the pre- and

post-surveys, there were only five mentions of them in the daily debriefs, as they often were coded under a more specific code.

Pre- and post-survey data revealed the fact that participants planned to use or did use some type of interactive activity, though it was not always specified what the activity may entail. Participant 2 stated in the pre-survey that she "want[ed] to make sure what he is doing is interactive," but did not describe how that could take form. Similarly, Participant 11 said in her pre-survey response that she planned to "add as much interactive activities as possible," though no description of those were given. Post-survey data mirrored these open types of responses, with answers such as "make my PowerPoints more interactive" (Participant 20) and "used interactive activities" (Participant 9). Daily debrief data showed a specific example from Participant 13 about how she used interactive sound boxes to elicit participation from her student in the activity.

Engaging Virtually

The code *engaging virtually* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. While it was only found twice in debrief data, it presented a total of 14 times between the pre- and post-surveys. This code refers to how tutors were able to interact with their students and capture their attention in the virtual setting of Camp.

Pre-service teachers engaged with their students virtually by accessing virtual platforms for collaborative practice such as Nearpod (Participant 1, post-survey) or by allowing the students to "choose what color to highlight the consonant blend [to show] an organizational pattern" (Participant 15, daily debrief). The participants' apparent goal for engaging students virtually was to find a way that they could involve their student in learning through a virtual

method. Virtual engagement was present in debrief data; however, it was often coded under a more inclusive open code.

Tutor Error in Instruction/Content

The code *tutor error in instruction/content* appeared in only one source of data: daily debriefs. This code is different to *mis-selecting content/activities* because with a mis-selection, tutors typically calculated student readiness, ability, or interest incorrectly, whereas with this code, tutors made a mistake in their own explanation of instruction or content. Because Camp topics are not always ones that have been taught in the past by pre-service teacher participants, personal understanding of instruction or content knowledge in an area of literacy needed to be gained prior to teaching a specific lesson.

Participant 7 pointed out a way that she made a mistake in content when she highlighted in week five an error on an example in a Google Slide that had to be corrected for student understanding. Participant 17 demonstrated below how she misunderstood the scope and sequence of phonemic awareness elements, as well as how to teach ending sound deletion:

> One thing that didn't work was that we decided to combine teaching deletion and substitution of ending sounds...we learned that the learning progression supports teaching this at a later date. When teaching to delete the ending sounds of blends and diagraphs, I got confused on one and deleted the whole blend not just the ending sound. We had to go back and re-teach.

Examples throughout daily debriefs are consistent with incidences showcased above. Tutors repeatedly acknowledged mistakes and gaps in their own learning and understanding that then contributed to the passing of misinformation during their lessons. It should be noted that in most every incidence of improper content instruction, the pre-service teacher did correct the mistake with her student later in the lesson or in subsequent weeks.

Use of Assessment

The code *use of assessment* appeared across two sources of data: pre-survey and post-survey. It should be noted that assessments were mentioned throughout daily debriefs; however, it was often coded under a more inclusive open code. This code refers to inclusion of student assessment to better understand where a student's strengths and weaknesses, gaps, etc. are in a specific content area. Summative assessments were required during the first two weeks and last week of the Camp term. Assessments varied based on student age and grade level, as well as ability and readiness. Additionally, formative assessments were required on a weekly basis. These varied in terms of length and subject; the assessment type was individually determined by each tutoring group based on the students' individual intervention.

Pre- and post-survey data revealed participants' plans and implementation of assessments in their Camp lessons. Participant 21 mentioned in the pre-survey that she would assess her student's writing, then followed up in the post-survey stating that she assessed during every Camp session. Mention of formative assessments through games such as Bingo (Participant 5) and Jeopardy (Participant 3) were found in the post-survey. Participants mostly discussed how they would formatively assess. Tutors understood that they were required to pre- and post-assess using research-based, summative assessments, as this was written in the course syllabus. It stands to reason that because of this, tutors did not report on summative assessments as often as formative assessments.

Working with Partner

The code *working with partner* appeared in only one source of data: daily debriefs. Due to the number of student enrollments in Camp, several of the tutors worked in pairs of two. There

were 23 total pre-service teacher participants; of these, 15 tutors worked in a group (eight total group settings across consenting participants) and eight tutors worked independently. This code appeared only in the data of consenting participants who worked with a partner. Partners consisted of two tutors in the same section of CIED 5173 who were assigned to the same Camp student. These tutors turned in all data separately; daily debriefs and surveys were written individually.

Instances of this code mostly included specific roles each partner took during a lesson. Participant 11 stated during the first week's daily debrief that she and her partner wanted to adjust their roles in giving an assessment and documenting answers during the following week. Other comments about partner interaction were more general, such as remarks like Participant 6's, who said, "as far as [my partner] and I splitting the workload and giving assessments, I think that has gone really well." There was no mention of a negative partner experience in any of the daily debrief data; positive or neutral comments were present throughout. The impact of co-teaching was relayed by Participant 6 during her final debrief:

> I am very grateful for getting this opportunity because I have learned so much about co-teaching; I have improved on my timing/pacing of lessons as well as planning the lessons. I also think that I have improved a lot on co-teaching in general.

While not every pre-service teacher had the opportunity to co-teach, the added element of working with a partner to plan, implement, and reflect on lessons did prove impactful for some of the participants.

Creating an Environment for Learning

The code *creating an environment for learning* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. While it was only found once in the daily debriefs,

the overall essence of creating an environment for learning was present; however, it was typically coded under a more inclusive open code. This code refers to ways in which the learning environment was made more conducive for learning. This could be an action taken by the tutor and/or the student to ensure that the learning setting was one that would allow for optimal instruction.

Pre- and post-survey data both revealed ways in which the pre-service teachers hoped to develop an environment for learning. Often, this included securing the setting by encouraging the student to be in a quiet environment (Participants 8 and 22), asking the student to wear headphones (Participant 10), or having technology in Do Not Disturb mode (Participant 15). Tutors also created an environment for learning by developing and setting expectations with their student for learning (Participant 20). Pre-service teachers aimed to think of ways to ensure that their students could receive adequate instruction prior to it being delivered through creating the environment for learning. One such example of this comes from Participant 15, where she stated the following in her pre-survey:

> We will both be in quiet rooms. I will have a PowerPoint for reference of the schedule and brain breaks planned. I will also have my computer on do not disturb. I will make sure she has all her materials ready so that there are not disruptions of leaving.

The tutor created a plan before Camp began so that she knew both she and her student would be in an environment that was most conducive to learning.

Effective Instruction

The code *effective instruction* appeared in only one source of data: daily debriefs. This code refers to how the pre-service teacher gauged her own sense of effectiveness when it came to a piece of instruction in a given Camp lesson. It was solely based on the judgement of the individual providing the instruction. Examples of effective instruction were found in the “what

worked?" section of the daily debriefs, as tutors reflected on how they delivered instruction during that day. This code first emerged on the week six daily debriefs.

Participant 18 shared an experience of effective instruction, saying, "I am happy to report that I have taught him what homophones are to the point where he will randomly say a new word that is a homophone if it comes up in the lesson." Other examples of this code include successful execution of a specific activity (Participant 19) and splitting a lesson into multiple parts to guide student understanding (Participant 7). During the final week of instruction, Participant 20 shared the following:

> The student was able to recall most of the rules we taught which showed me that I did a proficient job providing instruction.

Participants often made assertions about their own teaching, as demonstrated above, based on how their camp students responded to their instruction both in a specific lesson and over the course of the Camp term.

Game Incorporation

The code *game incorporation* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. Tutors aimed to include games in their lessons to engage their students and to extend their learning. While this code arose only 3 times in the daily debriefs, game incorporation was present in lessons; however, it was typically coded under a more inclusive open code.

Pre-service teachers reported in their pre-surveys plans to incorporate games into the lessons that students could play virtually (Participants 1 and 16), as well as games that would engage the learner (Participant 6) and have a focus on learning (Participant 23). Evidence of

execution was found in the post-surveys, with participants stating that their student enjoyed playing games like Jeopardy (Participant 3) or a variety of games in general (Participant 8). Participant 18 reported in three separate daily debriefs that she used a match game, sorting game, and crossword puzzle, respectively, with her student during the Camp period to solidify his learning of content. Games varied widely across the tutoring groups; however, most every pre-service teacher reported utilizing some type of game during their time with their K-6 student.

Limiting Non-Technology Related Distractions

The code *limiting non-technology related distractions* appeared across two sources of data: pre-survey and daily debriefs. Non-technology related distractions include those things in the learning environment that take away from the student's focus, or, in rare cases, the tutor's focus. These distractions are unrelated to technology and do not have to do with internet connectivity, other tabs in a browser, faulty sound, etc. Tutors anticipated having several distractions, as evident per their pre-survey data. Participants believed that they would need to ensure that their students had good lighting (Participant 2), no siblings present to take away from learning (Participant 3), and no background noise (Participants 6, 8, 10, 14, 15, 19, and 22). Additionally, Participant 13 expected that toys and other objects in the student's room may distract him from learning. Post-survey data did not show any evidence of the tutors needing to mitigate these things; however, daily debrief data did present a challenge with Participant 8's dogs barking during two separate weeks.

Adjusting/Correcting Mistakes from Last Week

The code *adjusting/correcting mistakes from last week* appeared in only one source of data: daily debriefs. Often, tutors found that something that went right or wrong the week before

needed to be addressed in a subsequent lesson. Adjustments were made (ex: a student responded well to a specific type of teaching) or mistakes were corrected (ex: in the case of improper instruction) during a later Camp session. Examples of this can be found beginning in week four of the daily debriefs. Participant 1 reported the following on her week three daily debrief:

> I do not think my explanation or directions for using this technology aspect were clear enough.

The statement below was then reported on her week four daily debrief:

> This time I believe my directions were clear enough and my student successfully opened up the Google Slides.

This example shows an adjustment for directions; however, other examples follow a similar trend, with mistakes being made one week and adjusted or corrected the next.

Need to Adjust to Student Academic Needs

The code *need to adjust to student academic needs* appeared in only one source of data: daily debriefs. This code, first found in week three of daily debrief data, arose when tutors recognized that their instruction, content, or activities were not matching up with what a student needed academically. This may have been because a student was too advanced in their learning, not quite ready for a certain activity, or the tutor's selection was not in line with what a student needed to know for that lesson. Participant 11 reported that the difficulty level of a worksheet chosen for her student during week four of instruction was too easy and that the student needed to be challenged further. Participant 21 stated that because she did not give her student enough time to brainstorm, the student's writing was disorganized. Examples such as these showed the tutors' reflection on how they needed to do something differently in the future to accommodate for a student's specific academic needs.

Need to Give Clearer Directions

The code *need to give clearer directions* appeared in only one source of data: daily debriefs. Tutors often found that the ways in which they explained directions did not adequately inform their students on how to complete a given task, activity, or assignment, which usually led to difficulties for their students. This code appeared in all but two weeks of daily debrief data. The need for clearer directions was sometimes reported generally, such as when Participant 10 stated, "we should have been more clear and direct in our instructions and expectations of the independent practice." Other times, specific problems were cited, like when Participant 15 reported, "I do not think the spinner was effective. I need to be clearer on the instruction with that method." This code arose when tutors reflected on what did not work during a lesson and was often provided as explanation for why an activity or task did not go well.

Misinterpreting Student Ability

The code misinterpreting student ability appeared in only one source of data: daily debriefs. Different from *need to adjust to student academic needs*, this code arose when tutors realized that their original notions of student academic ability were incorrect; thus, they did not deliver appropriate instruction, or they did not properly plan activities/assignments within a lesson. This code showed first in week three data and appeared in subsequent weeks, save for the final week of Camp when tutors were reviewing and administering post-assessments.

Participant 16 reported on her week three daily debrief that her student had more prior knowledge than they expected, resulting in the need for added complexity to lessons to enrich the student's learning. This example showed a time where the student's knowledge base was much wider than the tutor expected. There were also data points found that demonstrated instances in

which the student's ability was lower than anticipated. Participant 7 selected a word scramble as independent practice for her student that proved to be far too challenging for her student, though she previously believed that it was an appropriate level of difficulty for him.

Not Anticipating Student Misconceptions

The code *not anticipating student misconceptions* appeared in only one source of data: daily debriefs. This referred to both academic and non-academic misconceptions. Pre-service teachers were required to anticipate misconceptions during the lesson planning phase of Camp preparation; however, they reported frequently that there were things that they missed and learned on the spot during Camp. Because the tutors have practiced many of these tasks, activities, and lessons with students in their internship settings, they often assumed that their Camp students would also understand how to complete the same tasks. Participant 3 found that her student had never played Kahoot prior to week three's lesson, something that she did not anticipate. This presented a challenge during the instructional period, as she had to then explain directions and how to access Kahoot during the lesson. Academic misconceptions arose as well, such as when Participant 6 selected a word list for her student that included words that could be spelled in more than one way. This confused the student, as she did spell the word correctly, but not using the pattern that the tutor had originally intended for the lesson.

Student Understanding Checks

The code *student understanding checks* appeared in across all three sources of data: pre-survey, post-survey, and daily debriefs. Tutors used these checks to gauge how their student was feeling about his/her own learning. These were not used as formative assessments to guide instruction per se; however, they were used to allow the student to reflect on his/her learning

journey, which may have been an influencing factor on how the tutors proceeded with instruction in following weeks. Data found under this code included ways in which tutors checked in with students about their learning: thumbs up, thumbs sideways, thumbs down (Participants 7 and 9, daily debrief), allowing students to rate their feelings on certain skills (Participant 17, post-survey), or general understanding checks (Participant 4, post-survey).

Tutor Preparedness

The code *tutor preparedness* appeared across two sources of data: pre-survey and daily debriefs. Tutors determined their own preparedness for lessons and reflected on it; this code did not arise based on professor feedback or determination of pre-service preparedness. This code typically related to pre-service teachers not adequately or accurately preparing for a lesson, be it through personal understanding of content or having all materials, resources, and lesson components ready for the student. While tutors reported that they planned to have all plans created and set prior to Camp (Participants 9 and 11, pre-survey), daily debrief data showed that tutors were not organized during Camp (Participant 23), omitting elements from instruction due to incomplete planning (Participant 19) and did not come prepared with materials ready (Participants 6, 12, 19, and 21). Though the negative was pointed out often by participants, many tutors did recognize when they felt they were well prepared for Camp, and these instances were noted as well.

Real Life Application

The code *real life application* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. Pre-service teachers planned to frame lessons through the lens of applicable, everyday instances to better engage their students. Participant 23's student was in the

seventh grade, which informed the tutor that she needed to approach Camp from a more mature angle. She reported in her pre-survey that she intended to tell her Camp student that not only was Camp going to help her in her future education, but that participating in this study would also help future students. Participant 19 set out to find a way to "express the relevancy to his life and his studies," while Participant 10 said that she would "relate the information to the student's life." Three instances of real-life application were found in the post-data, with tutors aiming to link Camp teachings to what the student does at school and in everyday life (Participant 10) and reminding students how this content would impact them throughout their future education and life (Participant 13).

Reflection on how Assessment was Administered

The code *reflection on how assessment was administered* appeared in only one source of data: daily debriefs. Pre-service teachers were required to pre-assess their students during weeks one and two of Camp, followed by a post-assessment session during the final week of Camp. This code arose only on the daily debriefs for those weeks. Tutors reflected on not just how they gave the assessments (Participants 5, 9, 19, 20), but also on whether enough assessment data was taken (Participant 23). Each instance reported for the pre-assessment included a critique of self; however, data from the final week of debriefs showed that tutors felt more confident in how they administered the assessments, with participants including positive and negative statements about assessment administration. Participant 18 said, "I think I administered the assessments better than I did the first time because at this point in the semester I am very familiar with administering assessments." Repeated exposure to assessments allowed tutors to have more control over the assessment period, thus yielding responses like this one.

Student Differentiation Through Ability

The code *student differentiation through ability* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. One of the three main ways a tutor can differentiate, this code fell significantly behind *student differentiation through interest*, with 38 fewer instances. Tutors were required to tailor instruction specifically to their students' academic needs; thus, the underlying understanding is that the Camp period was fully differentiated to a student's ability, even though it may not have been expressly stated by pre-service teachers in their survey responses or daily debrief write-ups. Participant 6 reported in the post-survey that she was able to include instruction with which her student said she was struggling. Participant 23 stated in a daily debrief that she was sure to make material challenging for her student without it being too hard. These efforts were made by every Camp tutor; however, it was not readily apparent in the data, given the nature of the interventions.

Varied Instruction

The code *varied instruction* appeared across two sources of data: pre-survey and post-survey. The practice of using varied instruction was present in daily debriefs; however, related data was coded under a more inclusive code. Tutors utilized a variety of techniques for teaching, as demonstrated in their post-surveys. Participant 11 kept her instructional decisions general, citing "various exposures to content" being offered, while Participant 15 detailed attempts of varied instruction, citing use of explicit instruction, segmenting and blending, and questioning. Varied instruction also took the form of using many different activities, games, and resources, all of which were described by participants in pre-surveys.

Gradual Release of Responsibility

The code *gradual release of responsibility* appeared across two sources of data: daily debriefs and post-survey. While this is technically a teaching strategy developed by Pearson and Gallagher in 1983, participants referenced this strategy enough on its own to warrant a separate open code. Tutors utilized this model during lessons, with participants describing the fact that the gradual release process adequately prepared their student to understand a specific concept (Participants 4, 16, and 23). When pre-service teachers were asked the question, "What types of learning strategies…did you use to engage your student in their literacy intervention?" on the post-survey, five participants responded that they engaged students through the gradual release of responsibility model. This strategy is taught to teacher candidates in most every course offered through the elementary education teacher preparation programs at the University; it is also a model that students were expected to utilize and show use of on their Camp lesson plans.

Need to Adjust to Student SEL/Non-Academic Needs

The code *need to adjust to student SEL/non-academic needs* appeared in only one source of data: daily debriefs. This code arose when tutors recognized something that they needed to change to better accommodate their students' social-emotional needs or something that was unrelated to academic content. Participant 8 noted in her week three daily debrief that she needed to find a way to get the student more comfortable talking during Camp lessons. Participants 14 and 22 shared a student, and each of them noted that they were not using the student's favorite book, *Wings of Fire*, in the lesson, though they recognized that they needed to incorporate that, as it was important to their student. Occasionally, tutors would note that students easily tired out during a lesson, and that they should provide additional breaks to make up for this. Participant 23 discussed this in her week six daily debrief, recognizing the need to allow her student additional

time to take her eyes off the screen for relaxation. Tutors were instructed prior to the Camp term to meet the needs of the whole student, which includes SEL and non-academic elements to learning.

Need to Build Classroom Management

The code *need to build classroom management* appeared in only one source of data: daily debriefs. Arising first in week three of daily debrief data, this code spoke to the pre-service teachers' lack of management skills in the virtual setting. Tutors reflected on their own management of student behavior to determine if they needed to improve the ways in which they addressed or handled student actions in the Camp setting. Pre-service teachers faced challenges with students excessively talking during lessons (Participants 12 and 23) or said that they did not have the management skills in place to keep their student on task (Participants 10 and 17). This code is different to *reminders to stay on task* because tutors stated that it was specifically their lack of classroom management that resulted in a student not being on task. Statements that fell under this code always had the term "classroom management" present; this code was inclusive only to citations with this phrase, as related statements fit better into other open codes.

Positive Praise

The code *positive praise* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. It appeared only one time in the daily debriefs, with Participant 8 stating that she aimed to "boost her [student] up so she had lots of confidence in herself going into making revisions." However, pre- and post-survey data showed that tutors did utilize positive praise when speaking to their students as a way to encourage them and affirm how they were doing throughout Camp. General notions of "constantly praised his hard work" (Participant

2) and “encouraged her with short praises” (Participant 17) were found regularly in post-survey data. Pre-survey data found that Participants 8 and 9 planned to motivate their students through specific praises, though these two tutors did not mention that again in their post-surveys.

Student Differentiation by Learner Profile

The code *student differentiation by learner profile* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. The least commonly used differentiation method, it was found just nine times across the data sources. Participant 1 noted the following about her student’s learning preferences:

> My student is a visual and auditory learner so I was thinking about finding a mentor text that is a read aloud on YouTube for my student to watch. [I will] complete visual examples to go along with the lesson.

She then followed up in the post-survey to show that she used this knowledge, stating, “I incorporate[d] more visuals since the student indicated that's how he learns best.” Other learning styles were also present, as Participant 5 recognized in a daily debrief that her student was a tactile learner, thus the need for her to make her activities more interactive was present. Pre-service teachers were encouraged by Camp leaders to differentiate instruction for students according to interest, ability, and learner profile; most tutors accounted for these differing needs, while some did not consider all three types.

Setting Outline for the Day

The code *setting outline for the day* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. This code only arose once in daily debrief data, with Participant 8 stating the first week that she had a slide show prepared and discussed the plan of learning with her student prior to beginning the lesson. It was an expectation that every pre-service teacher

provide an outline of learning to their students at the beginning of Camp every day; it is possible that tutors were doing this, but that because it was an expectation, they did not regularly discuss it in their daily debriefs or surveys. Setting an outline for the day involved tutors explaining to their Camp students what they could expect during a specific Camp session. Participant 12 set this with an "I can" statement, while Participant 5 simply gave her student the outline what they would being doing that day.

Adjusting to Student Needs During Lesson

The code *adjusting to student needs during lesson* appeared in only one source of data: daily debriefs. This code referred to the flexibility needed by tutors to adjust on-the-spot to student needs during a Camp session. Because of unanticipated misconceptions, technology issues, or any number of other circumstances, pre-service teachers often found themselves in the position of needing to change course at a specific moment within instruction. Participant 13 demonstrated a time where she had to adjust in-lesson to student academic struggles:

> When I noticed him struggling to delete the second sound, I had him break the word apart into all its sounds. Then I asked him what sounds were left when we removed the second sound. I guided him to recognize the separate sounds and then he was able to put those sounds back together to form the new word. By the end of the lesson, he seemed to grasp this concept well.

While this may not have been her original plan, flexibility and willingness to change how instruction was delivered resulted in meaningful learning for the student.

Communicating with Student

The code *communicating with student* appeared across two sources of data: pre-survey and daily debriefs. Though this code only arose seven times, tutors constantly communicated with their students; instances of this fell under more inclusive open codes. Pre-service teachers

often placed special focus on talking with their student about learning goals, as shown by Participant 23 during week three of instruction, when she reported in her daily debrief that "through our conversations, we got to know the areas she felt she needed more help in…this will help us guide further instruction." Participant 2 noted in her final two daily debriefs that she and her partner "were able to effectively communicate with [their] student during the lesson," something that most tutors did not note in their reflection of lessons. This tutor chose to place specific importance on strong communication.

Tutor Demeanor

The code *tutor demeanor* appeared across all three sources of data: pre-survey, post-survey, and daily debriefs. It was present most in pre-survey data, where pre-service teachers determined how they planned to present themselves to students. Tutor demeanor describes how the participant portrayed their attitudes towards the student, the student's learning, and the Camp setting overall. Maintaining a positive attitude (Participant 7) or showing excitement for Camp (Participant 3) were ways tutors hoped to connect with their students. Daily debrief data showed that a tutor's excitement for learning resulted in student excitement for learning (Participant 15). The only mention of this code in the post-survey was again from Participant 7, who stated that she did "maintain a positive and exciting tone and attitude throughout every Camp session."

Explaining Directions Well

The code *explaining directions well* appeared only in one source of data: daily debriefs. It is the exact opposite of the code *need to give clearer directions*, as data that fell under this code showed strong use of instruction as related to instructions or directions on an activity or assignment. Participant 2 reported, "I was able to explain instructions clearly during the guided

and independent practice," three separate times in her daily debriefs. Only three other mentions were given to explaining directions well, and each was a general statement of how the tutor believed that she did a solid job of providing clear directions to the student for one or more pieces of instruction.

Keeping a Good Pace

The code *keeping a good pace* appeared in only one source of data: daily debriefs. It is the exact opposite of *need to use time more wisely*, as data that fell under this code showed strong and appropriate use of time during the Camp session. Tutors mostly noted this during weeks one and two of Camp, with four of the six instances of this code occurring throughout these two weeks. Statements were general, with participants mentioning that "we were able to stay on track and keep a good pace," (Participant 9) and "everything we had planned was finished in a timely manner" (Participant 14). This code was specifically noted because of its stark juxtaposition to the code *need to use time more wisely*. Pre-service teachers noted their inattention to pacing 40 times, while they only mentioned their ability to pace well six times.

Student Connections to Camp Topic

The code *student connections to Camp topic* appeared in two sources of data: pre-survey and daily debriefs. Different to *real life application*, this code speaks to a student's ability to form connections on their own between something in Camp and something that they have encountered in their daily lives. Tutors were not actively pointing out connections; rather, the student was naturally making these throughout a lesson.

Participant 15 noted during week seven of instruction that her student had been making connections between what was happening during Camp and at school. Her student affirmed this, stating the following in the questionnaire given to Camp students at the conclusion of Camp:

> In school when we're doing phonics or something, I [see] a ur, er, ir thing [and] then I just know it because I'm like oh I know this because I was in literacy camp doing it.

Other connections were topical with Participant 11 recognizing a connection her student made to the Army based on that day's schema activation. While these connections may or may not have been intentional on the part of the tutor, the student is the one who actively discussed the connection and led the discussion around it.

Need to Engage Student

The code *need to engage student* appeared in only one source of data: daily debriefs. This code first arose during week six of instruction, where two tutors (Participants 4 and 16) noted that they needed to keep their student actively engaged during explicit instruction. This code did not show up again until the final week of Camp, where Participants 15, 20, and 21 all stated that they wish they had found ways to make their lessons that day more engaging for their students. Tutors worked throughout the semester to engage their students through countless strategies; this was evident in a large portion of the open codes. However, these instances show that tutors did not always feel that they were adequately engaging their student in his/her learning.

Proud of Teaching Choices

The code *proud of teaching choices* appeared in only one source of data: daily debriefs. This code was added separately instead of being absorbed into another, similar open code, as responses found under this code typically included the word "proud" in them. Participant 23

reported that she "[was] proud" that she and her partner were able to quickly transition to an asynchronous method of teaching during week five of instruction. Participant 3 described being "proud" of an instructional decision made in relation to her student's spelling lesson. While this word was not always present, a close relative of the word appeared in the form of the phrase "I am glad I did" (Participants 3 and 20). Pre-service teachers who showed pride in their instructional decisions made sure to note that, especially during the later weeks of Camp.

Using Physical Materials

The code *using physical materials* appeared in only one source of data: pre-survey. While many tutors noted in their daily debriefs and post-surveys that physical materials were used, it was not the purpose of their statements, and thus that data was coded under more inclusive open codes. When asked on the pre-survey if they were making additional considerations to their student's learning, given that the Camp setting was online, participants listed several tangible items they would ask their students to use, including paper or a white board (Participants 5 and 6) or other ordinary materials like a notebook (Participant 23). Participant 4 stated that she wanted her student to be able to "type, draw, and write all using technology and non-tech options." Many pre-service teachers had not ever had the opportunity to teach virtually prior to Camp; thus, their repertoire of teaching was limited to what they observed in a classroom setting, which typically utilized primarily physical materials.

Need for Clearer Content Instruction

The code *need for clearer content instruction* appeared in only one source of data: daily debriefs. Different to *need for clearer directions*, this code encompasses issues specific to content delivery and does not include inconsistencies with general directions. Content instruction

may also have been unclear due to insufficient explanation of a topic, such as when Participant 1 recognized during week five of instruction that her teaching may not have been clear based on the responses she received from her student. Participant 20 found that she lacked content instruction as it related to ending spellings within a word and noted that she needed to add instruction related to endings that do not fall into a pattern generalization. Lack of clear content instruction often impacted student learning and was something that had to be addressed by pre-service teachers in subsequent weeks.

OK to Make Mistakes

The code *OK to make mistakes* appeared across two sources of data: post-survey and daily debriefs. Though this code appeared only four times, statements that fell under it showed strong conviction on the part of the tutors to ensure that their students knew that it was acceptable to make mistakes at Camp. Participant 23 stated the following during week three of Camp:

> We've established that our clinic is a safe space that allows for mistakes – because we can always learn from mistakes.

Echoing this sentiment were Participants 10 and 14, stating in their post-surveys that they would let their students know it was okay to make mistakes and that they would be able to go back and correct them.

Reminders to Stay on Task

The code *reminders to stay on task* appeared in only one source of data: pre-survey. While pre-service teachers did include reminders for their students to stay on task, as noted in daily debriefs, this data was coded under more inclusive open codes. Pre-survey data showed that

tutors anticipated needing to redirect their students should they be off task. Reasons cited for off-task behavior included technology (Participant 1) and talking about things other than their work (Participant 5). Efforts to mitigate off-task behaviors were discussed, with Participant 21 describing a plan to begin a brain break and then restate expectations for Camp time should a distraction arise.

Involve Families

The code *involve families* appeared across two sources of data: pre-survey and daily debriefs. Mentions of family involvement were extremely limited, with this arising in the data a combined total of three times. Pre-service teachers were required to send parents a daily report, as well as check in with them regarding their child's progress at the end of Camp every week. Despite this, tutors rarely chose to include how families could be or were included throughout the Camp term. Participant 11 noted in her pre-survey that it would be important for her to ensure that the student and the student's family had all necessary resources prior to Camp beginning. Participant 17 made mention of her and her partner's parent meetings at the end of Camp each week, stating that they had become "great" at the parent meetings and were able to provide information to their student's mom.

Confidence in Teaching

The code *confidence in teaching* appeared in only one source of data: daily debriefs. Though only mentioned twice in the data sets, this code stood on its own due to the nature of comments from participants. Participant 5 stated the following:

> I practiced and had a set-in stone explanation of diphthongs prepared which helped me be more confident in my teaching.

This quote captures what went into the teacher becoming confident: preparation, practice, understanding of content, and delivery. Each of these elements had to work in unison to provide the pre-service teacher with the ability to feel confident in her teaching ability.

The final incident of confidence in teaching (Participant 15) is below:

> It has worked to keep a similar routine in order to provide structured content and understand the schedule that I will follow. It has helped me with confidence in administering the literacy camp lesson.

Like Participant 5's response, this quote also shows prerequisites to teaching confidently; in this case, it was establishing a routine and flow of learning.

Axial Codes

Following the open coding process, codes were grouped into more inclusive codes called axial codes, allowing me to better identify the core phenomena in the present study (Creswell, 2007). The 50 open codes were condensed down to 11 axial codes. Each of the axial codes is listed in Table 7, along with each open code that was placed within it and the total frequency of the open codes within that axial code. Axial codes are in order frequency. Open codes within each axial code are listed in alphabetical order. Narrative description of the axial codes will follow.

Table 7

Axial Codes

Axial Code	Open Codes	Total Frequency of Open Codes
Considering the individual student	• Adjusting to student needs during lesson • Building relationships/rapport with student • Communicating with student • OK to make mistakes • Positive praise • Student differentiation through ability • Student differentiation through interest • Student differentiation through learner profile	135
Teaching strategies	• Gradual release of responsibility • Learning/teaching strategy incorporation • Questioning • Setting outline for the day • Varied instruction	95
Tutor areas for growth	• Need for clearer content instruction • Need to adjust to student academic needs • Need to adjust to student SEL/non-academic needs • Need to build classroom management • Need to engage student • Need to give clearer directions • Need to use time more wisely	95

Table 7 (Cont.)

Axial Codes		
Technology benefits	• Engaging virtually • Game incorporation • Interactive activities • Technology incorporation	87
Managing students	• Brain breaks • Creating an environment for learning • Limiting non-technology related distractions • Reminders to stay on task	71
Preparation	• Adjusting/correcting mistakes from last week • Providing review of learning • Tutor preparedness • Using physical materials • Working with partner	69
Misinterpretations	• Misinterpreting student ability • Mis-selecting content/activities • Not anticipating student misconceptions • Tutor error in instruction/content	63
Technology frustrations	• Technology distractions/issues	43
Tutor self-agency	• Confidence in teaching • Effective instruction • Explaining directions well • Keeping a good pace • Proud of teaching choices • Tutor demeanor	42
Utilizing assessment	• Reflection on how assessment was administered • Student understanding checks • Use of assessment	39

Table 7 (Cont.)

Axial Codes		
Connections outside of Camp	• Involve families • Real life application • Student connections to Camp topic	19

Considering the Individual Student

The axial code *considering the individual student* appeared most frequently in the data, with 135 mentions across all three data points. Eight open codes fed into this axial code: *adjusting to student needs during lesson, building relationships/rapport with student, communicating with student, OK to make mistakes, positive praise, student differentiation through ability, student differentiation through interest,* and *student differentiation through learner profile*. Participant responses demonstrated their emphasis on prioritizing the needs of the student first when planning for, implementing, and reflecting on teaching. Pre-service teachers participating in Camp understood that they were to provide a completely unique and individualistic intervention for their Camp student, which is evident through responses falling under this axial code.

Tutors first prioritized finding a way to differentiate for their students through interest, with pre-service teachers utilizing brain breaks, books, games, and content that they believed their students would enjoy based on statements K-6 students made about what they liked. Following this, pre-service teachers hoped to build relationships with their students, and found that they were able to do this by differentiating, providing positive feedback to their students, and communicating with their students, reminding them that they are at the center of their own

learning. Students participating in Camp often reported that being with their tutors was what made them the proudest during Camp, which showcases that the tutors' efforts to make students the focal point of learning was impactful.

Participants showed through their responses on daily debriefs and in the surveys that they listened to what their students needed and wanted so that they could immediately begin differentiating their instruction. Participant 7 stated in her week two daily debrief that "after getting to know [my student] last week I thought it would be a good idea to include a space word search as a brain break, considering that he wants to be an astronaut when he grows up." Small ways to engage the learner were found in every week of daily debriefs, with comments such as, "I also chose a text about winter, the student's favorite season" (Participant 1), and, "I have formed a great relationship with my student and that has helped me to create my lesson plans as well as change my wording and questioning" (Participant 5) showing how much the tutors cared to tie in little things about their student into every facet of intervention.

Teaching Strategies

The axial code *teaching strategies* tied for the second most frequently used axial code, with 95 mentions across all three data points. Five open codes fed into this axial code: *gradual release of responsibility, learning/teaching strategy incorporation, questioning, setting outline for the day,* and *varied instruction*. Pre-service teachers demonstrated their knowledge on how to effectively teach students in the one-on-one virtual setting through their responses that fell under this axial code. Participants were able to implement what they knew about best teaching practices into their interventions, then accurately reported and reflected on what strategies and techniques they specifically used.

Tutors participating in this study had already completed a four-year Bachelor of Science in Education (BSE) degree in Childhood Education prior to serving in the Camp. During this time, they completed coursework to teach them about effective teaching strategies to use both in the general classroom and in a personalized instructional setting. Due to the COVID-19 pandemic, pre-service teachers had not yet been able to participate in face-to-face practicums; the Camp setting was one of the first and earliest exposures to practicum teaching participants received. Despite this, tutors were able to apply in Camp what they learned during previous coursework. Participants used new strategies listed in their course textbook as well, including Grab the Odd One Out and Elkonin Boxes, to strengthen their teaching. Explicit instruction (Participants 1, 4, 5, 10, 16, 19, 20, and 21) was relied on heavily, as many K-6 students had limited exposure to Camp topics prior to beginning Camp. Modeling (Participants 2, 3, 6, 20, and 22) and scaffolding (Participants 16 and 21) were two other strategies referenced often by participants, showing that the gradual release of responsibility model was utilized during instruction.

Tutor Areas for Growth

The axial code *tutor areas for growth* tied for the second most frequently used axial code, with 95 mentions across all three data points. Seven open codes fed into this axial code: *need for clearer content instruction, need to adjust to student academic needs, need to adjust to student SEL/non-academic needs, need to build classroom management, need to engage student, need to give clearer directions,* and *need to use time more wisely*. Responses falling under this axial code are reflections of the tutor's awareness of self through a critical lens. Participant responses included in this section spoke to something they needed to change instructionally, strategically, or logistically for the benefit of the student.

Participants were far more insightful about things they needed to improve rather than what they were doing well, with 53 more mentions of this axial code than *tutor self-agency*. Tutors cited numerous ways for self-improvement; most frequently, participants recognized how their lack of time management during the Camp session was impacting the students' experiences. Participant 15 detailed the following experience in her week one/two daily debrief:

> Time will always be a factor. The vocabulary assessment took much of our time in the second week, that it felt the other assessments and their directions were almost rushed. If I had more time I would have rather started with the first-grade fluency passage. However, since she was doing well on the vocab, I decided to give the second-grade fluency. I was able to give all three, which will give me a strong idea of what needs attention there. Due to time, I had to pick what parts of the Phonics core needed to be assessed. This part felt very rushed. I would have liked to explain the silly words better, so that she had an understanding not to try and form a real word.

This response demonstrated not only understanding of misuse of time, but also reflected on how directions could have been given differently or more clearly to improve student understanding of an assessment task.

Non-academic needs were also considered, with participants recognizing that students can often become overwhelmed in the learning process and that it is their job to keep the tone upbeat throughout the Camp session. Participant 8 recounted a time when her student was working on editing her writing:

> One thing I think I could have done better in is how I phrased the edits. I felt like I was thinking really hard about it and constantly catching myself to ensure that when it came to editing her paper, she still had self-confidence around her writing. I think I should have done even more specific praise before we jumped into the edits.

Recognizing the need to improve student morale proved important to the tutors. Responses, like the one above, show that the pre-service teachers did not just aim to grow students academically, but also to boost their confidence as learners. When this area fell short, tutors reflected on it and thought through ways to fix it during future Camp sessions.

Technology Benefits

The axial code *technology benefits* was the third most used axial code, with 87 mentions across all three data points. Four open codes fed into this axial code: *engaging virtually, game incorporation, interactive activities,* and *technology incorporation*. It should be noted that *game incorporation* and *interactive activities* fell under this axial code because virtual methods had to be accessed for tutors to utilize games and other interactive activities during Camp lessons. Responses under this code acknowledged the benefits that technology brought to tutors and students in the virtual Camp setting.

Tutors reported technology benefits over challenges over twice as much, with this axial code cited 44 more times than *technology frustrations*. Data showed that participants found a variety of ways to engage their students in the virtual setting through use of technological elements such as games, virtual activities, virtual platforms, and Zoom features. YouTube videos (Participants 1, 8, and 18) were shown during Camp to extend students' knowledge on topics within a lesson. Tutors were able to provide remote access (Participants 4, 14, 16, and 22) through Zoom so that students were able to manipulate controls on the screen to participate in learning activities more actively. The Google Suite, including Google Docs and Slides (Participants 1, 6, 8, 12, 14, 17, 19, 22) allowed students to edit content in live time, creating an atmosphere of collaboration between tutor and student. Though participants faced challenges with technological elements (to be discussed in the *technology frustrations* section), they were

largely able to overcome these to create a digital environment of learning for students that proved to be engaging and inviting.

Managing Students

The axial code *managing students* was mentioned 71 times across all three data points. Four open codes fed into this axial code: *brain breaks, creating an environment for learning, limiting non-technology related distractions,* and *reminders to stay on task*. Participants noted regularly throughout daily debriefs, as well as on their pre- and post- surveys, that managing students in the virtual environment required some additional considerations, as they were not in the same physical space as their Camp student. Some of these considerations will be noted during the *technology frustrations* section.

The most cited issue related to student management issues were outside interferences. Participants 3 and 6 shared a student whose sibling happened to be in Camp as well, which proved to be a distraction for their student. Several tutors reported that their students were not in a quiet area, which impeded their learning. Though these mentions were found throughout the data, they were not as frequent as references to brain breaks, which served as a way for tutors to provide a brief reprieve to their students during the Camp period. K-6 students found these to be helpful, as cited in several of their questionnaire responses. One K-6 student responded that having brain breaks allowed her to stay more focused on her learning.

Tutors were dedicated to creating an environment in which their students could adequately grow and learn. Participant 13 reported the following in her post-survey about how she strived to do this for her Camp student:

> I attempted to prevent disruptions during the literacy camp by maintaining an active learning environment for the student. I ensured all parts of the lesson included a way for

> the student to participate, answer questions or demonstrate their learning. I also gave student the opportunity to talk to or show me something unrelated to literacy camp before and after the lesson to prevent disruptions from occurring during instructional time.

This response showcases the tutor's dedication to not only managing student behaviors, but also how she can engage him in his learning to create an atmosphere in which the student can thrive.

Preparation

The axial code *preparation* was mentioned 69 times across all three data points. Five open codes fed into this axial code: *adjusting/correcting mistakes from last week, providing review of learning, tutor preparedness, using physical materials,* and *working with partner*. Several stages and types of preparation went into completing interventions in the Camp. Tutors first had to plan and prepare pre-assessments based on their students' ages/grade levels. Following the administration of these assessments, tutors then had to create a tentative plan of intervention for the entire Camp term. Each week, tutors wrote and submitted their lesson plans for learning, which included elements of team teaching, materials to be used, technology elements to be accessed, and several other pieces of instruction. Following the intervention period, tutors had to prepare for a parent conference which described student progress during their time in Camp.

While not every tutor had a partner, many did, and thus preparation of how Camp tasks would be divided were necessary for these participants. Most references to team teaching were positive, following in the vein of Participant 9's experience:

> [My partner] and I were able to engage [our student]. [My partner] and I were able to smoothly administer the assessments with teamwork. We were able to stay on track and keep a good pace. We were able to make connections with one another and get to know [our student] more.

Tutors with or without a partner had to complete intense preparation each week, often drawing on their experiences from weeks before. Correcting mistakes or adjusting lesson components based on their prior experiences proved to be necessary, with incidences of this appearing 14 times throughout daily debriefs. Making these adjustments, in conjunction with providing a review of learning when necessary, often worked to solidify the students' knowledge about Camp topics.

Misinterpretations

The axial code *misinterpretations* was mentioned 63 times in only one data point: daily debriefs. Four open codes fed into this axial code: *misinterpreting student ability*, *mis-selecting content/activities, not anticipating student misconceptions,* and *tutor error in instruction/content*. Different to *tutor areas for growth,* though continuing in the same vein, *misinterpretations* speak specifically to ways in which the tutors did not fully understand their student, the scope of learning, or the content that was being delivered.

Though tutors extensively learned about their students' abilities, interests, and how they best learned, they often reported that they did not completely gauge their students' readiness for learning. This went both ways, with tutors mentioning students were ahead of where the pre-service teacher expected, or that they were not yet ready to approach a topic. Additionally, tutors did not always pair appropriate content or activities with a learning topic, which also caused problems for students. Participant 3 details such a time below:

> For the independent practice we decided to do a word scramble. When we came up with the activity, we did know that the word scramble might be a little too difficult. We decided we would model the activity first, so that [student] would know what to do. Even with the modeling, the activity was too difficult. [My student] asked "How do you know

> which diphthong to use in a word? (au, or aw). This question was unexpected...next time, we need to be 100% prepared for the questions he might ask.

This example described how the tutor not only mis-selected content, but also was unsure on how to answer the student's content questions, indicating that she did not understand the content herself. The tutor also noted that they had begun to anticipate a misconception but continued with the plan anyways, showing that they in fact did not grasp the entirety of the student's abilities.

Technology Frustrations

The axial code *technology frustrations* was mentioned 43 times across all three data points. Only one open code fed into this axial code: *technology distractions/issues*. This axial code is unique because it only classified one open code under it; however, this was necessary due to the learning environment of Camp and the challenges that tutors and students faced because of a fully virtual setting. Responses under this code describe the pitfalls of virtual learning, including technology shortcomings and distractions created by the digital environment.

Completing a full intervention solely through digital means presented regular problems to tutors, as demonstrated by the number of mentions associated with this code. Ensuring that students remained on camera (Participant 3), accounting for lag time on Zoom (Participant 16), and slow internet connection (Participant 17) were considerations that tutors had to make weekly to provide high-quality learning experiences for their students. Participant 10 stated in her post-survey that had Camp been in person, student engagement would have been "more manageable." Hiccups such as YouTube videos not loading (Participant 19) or a student being unable to share their screen (Participant 18) slowed down the flow of learning. Instances such as these led to

tutors feeling frustrated and sometimes discouraged with Camp being conducted through digital means.

Tutor Self-Agency

The axial code tutor self-agency was mentioned 42 times across all three data points. Six open codes fed into this axial code: *confidence in teaching, effective instruction, explaining directions well, keeping a good pace, proud of teaching choices,* and *tutor demeanor*. Though this code was mentioned about half as many times as *tutor areas for growth,* its inclusion showcases that the tutors did see strengths within themselves and were willing to discuss those in their daily debriefs and surveys. Participant responses falling under this axial code demonstrate positive reflections tutors made about themselves or their instructional abilities.

Seen mostly in later weeks of daily debriefs, tutors began to recognize their own strengths as educators. Participant 1 stated the following on her week six daily debrief:

> Today, my independent practice was a big success...this activity was both engaging, purposeful, and targeted the intended learning goals. I concluded that my instructions were clear and the activity aligned well with the learning goals that were taught earlier. I also think that my explicit instruction was successful.

This response demonstrated this pre-service teacher's awareness of her successful instruction, which she was able to conclude by how the student responded to her lesson. Other participant responses falling under this axial code were similar, as pre-service teachers started to feel more comfortable in their own abilities.

Tutors also found that when they were more confident in their own abilities, their students were as well, with Participant 15 mentioning the following in her final daily debrief:

> There was more confidence by both parties in visiting the work that has been done and continuing to build on that self-efficacy.

Because teaching self-efficacy is impacted by performance outcomes in students (Gibson & Dembo, 1984), it is worth noting that this participant found that not only her efficacy was impacted, but also the student's self-efficacy.

Utilizing Assessment

The axial code *utilizing assessment* was mentioned 39 times across all three points of data. Three open codes fed into this axial code: *reflection on how assessment was administered*, *student understanding checks*, and *use of assessment*. Pre-service teachers administered assessments at the beginning and end of Camp, as well as integrated formative assessments into every lesson. Formative assessments were often completed through student understanding checks, where tutors would allow students to reflect on their own learning to determine their own growth and progress. Pre-service teachers also reflected on how assessments were administered so that they were able to make corrections if needed in subsequent weeks. Assessment was a required and critical component of Camp, as tutors used assessment data to guide instruction.

The use of formative assessments proved to be a driving force in instruction, with tutors describing how they used these informal measures to plan future instruction. Tutors found ways to vary these, such as assessing through Bingo (Participant 5) or word sorts (Participant 17). Allowing students to check for understanding themselves often proved beneficial, as demonstrated by Participant 7's response:

> I decided to ask [student] to give me a thumbs up, sideway thumb, or a thumbs down over how he felt about long vowels o and u, just like we did last week. This worked because [student] was able to reflect on his learning.

This participant described a similar process the week before, which was effective enough that she used it again the following week.

Connections Outside of Camp

The axial code *connections outside of Camp* was mentioned 19 times across all three points of data, making it the most infrequently mentioned axial code. Three open codes fed into this axial code: *involve families, real life application,* and *student connections to Camp topic*. This code is necessary to include because data showed that tutors made pointed attempts to facilitate connections to a student's everyday life to make Camp learning more relevant.

Participant 10 "tried to show our student that what we would be teaching her applies to many things that she does in her everyday life and at school," a strategy that several tutors employed when trying to create relevancy of learning for their students. Some of the K-6 students formed connections on their own, as students were working on many of the Camp skills during the school day and would point that out to their tutors (Participants 15 and 18). Tutors also tried to involve families in their students' learning so that they were informed and aware of what was occurring during weekly lessons.

Selective Codes

The final stage of the coding process came through the selective coding of axial codes into four inclusive themes. Creswell defines selective coding as the process in which the researcher "takes the model and develops propositions that interrelate the categories in the model or assembles a story that describes the interrelationship of categories in the model" (2007, p. 86-87). The selective coding process resulted in four selective codes or themes. Each axial code was placed within one of the selective codes. These selective codes (or themes) provided explanation

in answering the question of whether involvement in a university literacy camp impacted pre-service teachers' self-efficacy. Table 8 showcases each of the four selective codes and the axial and open codes within them, as well as the total frequency of the open codes within that selective code. The selective codes are in order of frequency. Axial codes within each selective code are listed in alphabetical order. Open codes within each axial code are listed in alphabetical order. A brief narrative description of the selective codes will follow; the Discussion section of this paper will fully explore the implications of each selective code.

Table 8

Selective Codes

Selective Code	Axial Codes	Open Codes	Total Frequency of Open Codes
Building a Learning Culture	• Managing Students • Preparation • Teaching Strategies	• Adjusting/correcting mistakes from last week • Brain breaks • Creating an environment for learning • Gradual release of responsibility • Learning/teaching strategy incorporation • Limiting non-technology related distractions • Providing review of learning • Questioning • Reminders to stay on task • Setting outline for the day • Tutor preparedness • Using physical materials • Varied instruction • Working with partner	235

Table 8 (Cont.)

Selective Codes

Tutor as the Learner	• Misinterpretations • Tutor Areas for Growth • Tutor Self-Agency	• Confidence in teaching • Effective instruction • Explaining directions well • Keeping a good pace • Misinterpreting student ability • Mis-selecting content/activities • Need for clearer content instruction • Need to adjust to student academic needs • Need to adjust to student SEL/non-academic needs • Need to build classroom management • Need to engage student • Need to give clearer directions • Need to use time more wisely • Not anticipating student misconceptions • Proud of teaching choices • Tutor demeanor • Tutor error in instruction/content	200

Table 8 (Cont.)

Selective Codes

Student First Approach to Intervention	• Connections Outside of Camp • Considering the Individual Student • Utilizing Assessment	• Adjusting to student needs during lesson • Building relationships/rapport with student • Communicating with student • Involve families • OK to make mistakes • Positive praise • Real life application • Reflection on how assessment was administered • Student connections to Camp topic • Student differentiation through ability • Student differentiation through interest • Student differentiation through learner profile • Student understanding checks • Use of assessment	193
The Virtual Environment	• Technology benefits • Technology frustrations	• Engaging virtually • Game incorporation • Interactive activities • Technology distractions/issues • Technology incorporation	130

The selective coding process resulted in four main codes, which will also be referred to as themes. The first selective code, *Building a Learning Culture*, includes three axial codes: *managing students, preparation,* and *teaching strategies*. Fourteen open codes fell under this

theme with a total of 235 mentions found across all three data points. This theme speaks to the ways in which pre-service teachers were able to effectively manage students within the virtual learning environment, prepare and plan a full intervention, and implement a variety of teaching strategies to foster student growth and learning.

The second selective code, *Tutor as the Learner*, includes three axial codes: *misinterpretations, tutor areas for growth,* and *tutor self-agency*. Seventeen open codes were contained within this theme, which included 200 mentions across all three data points. This theme demonstrates how the tutors, just like the K-6 students, were active participants in their own learning throughout the Camp term. Pre-service teachers were not just responsible to provide instruction for their K-6 students, but they were also expected to learn about best teaching practices and grow their own abilities.

The third selective code, *Student First Approach to Intervention*, includes three axial codes: *connections outside of Camp, considering the individual student,* and *utilizing assessment*. Fourteen open codes were found within this code, thus including 193 mentions found across all three data points. This theme highlights how tutors were able to truly provide a unique, highly personalized experience to their Camp students. Each element described within this theme details the levels of importance pre-service teachers placed on creating an intervention that suited the needs of their specific learner.

The final selective code, *The Virtual Environment*, includes two axial codes: *technology benefits and technology frustrations*. Five open codes were housed under this code, a total of 130 mentions found across all three data points. The fact that Camp was completed completely through digital means forced tutors to consider elements to teaching and learning that they had not previously considered, thus affecting the overall experience had by both pre-service teachers

and K-6 students participating in Camp. Responses contained within this theme work to paint a picture of how the virtual environment changed the landscape of instruction during the Camp term.

Summary

Three main data sources, including an efficacy pre-survey, an efficacy post-survey, and 10 weeks of daily debriefs, were collected from 23 pre-service teacher interns over the course of 12 weeks. Each data point was carefully analyzed, underwent *in vivo* coding, open coding, axial coding, and were finally coded into selective codes to provide explanation in answering the question of whether involvement in a university literacy camp impacted pre-service teachers' self-efficacy. Fifty open codes were sorted into 11 axial codes, which were then sorted into 4 selective codes or themes.

Data from all sources suggests that pre-service teacher candidates participating in this study utilized elements of strong teaching. Participants recognized not only what they were doing well as tutors in the University's literacy clinic, but also what they could improve within their teaching repertoire. Because a teachers' sense of effectiveness provides a base for their instructional decisions (Woodcock, 2011), it can be assumed that self-efficacy plays a direct role in the learning experiences of students. Further, personal teacher efficacy, defined as the belief that one can or cannot influence his/her students' learning through his/her instructional abilities (Woodcock, 2011), is boosted when a teacher recognizes that their instructional decisions are having a positive impact on his/her student. The pre-service teachers participating in this study reported feeling that their decisions led to their students' understanding of Camp topics and content; thus, it is reasonable to believe that participation in the university literacy clinic

impacted pre-service teachers' overall efficacy as it relates not only to literacy instruction, but general teaching abilities. This interpretation will be further explored in the Discussion section.

An emphasis was also placed on the virtual learning environment, as evident through the fourth selective code, *The Virtual Environment*. The pre-service teachers participating in this study recognized benefits and challenges when teaching in a virtual setting, reporting their experiences with virtual teaching consistently throughout all points of data. Thus, it is reasonable to believe that the method of instructional delivery impacted the participants' experience serving as a tutor in the university literacy clinic. This interpretation will also be further explored in the Discussion section.

Chapter Five: Discussion

Overview

Research has shown that self-efficacy is a necessary trait for educators (Lisenbee, 2017) and that not only is it related to student achievement, but to resiliency, goal setting, and work ethic in the face of challenges (Bandura, 1977). The onset of the COVID-19 pandemic in March 2020 created unforeseen challenges for students, teachers, and education systems around the world. Schools had no choice but to shift to virtual methods of delivery, resulting in a unique opportunity to explore new approaches to teaching and learning. Teachers were put in the position to adapt to changes overnight, though they were still responsible to provide high quality, equitable instruction for all students (International Literacy Association, 2019). The pandemic also presented a new set of challenges for educational entities other than schools, including university run literacy clinics, while also supplying them with the opportunity to shift from an in-person to virtual setting, resulting in new entry points to education.

Though several studies have emerged since the beginning of the pandemic about online learning and tutoring (Carlana & La Ferrera, 2021; Kraft et.al., 2022), an extensive search of the literature presented no research directly related to how pre-service teachers' self-efficacy was impacted by participation in a virtual literacy clinic through virtual means only. This qualitative case study was completed to explore the impacts participation in a virtual university literacy clinic had on 23 pre-service teachers' efficacy as related to literacy instruction. Additionally, because the global pandemic presented a need to complete instruction through virtual methods only, it was necessary to also investigate the problem as related to the method of instructional delivery.

Research Questions

One main research question and one sub-question was explored throughout this qualitative case study:

Central Question: How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?

Sub-question 1. How does the method of instructional delivery impact the teaching experience of the pre-service teacher?

Several data collection instruments were utilized to answer these questions, including a pre-efficacy survey, post-efficacy survey, and 10 daily debriefs. Data were analyzed to reveal four main themes. Themes that emerged from the data detailed how self-efficacy was impacted through participation in a university literacy clinic, as well as how the method of delivery impacted the pre-service teachers' teaching experience.

This final chapter describes the main findings of this study and considers the implications that arise. Chapter Five is organized into five main sections: summary of findings, implications, delimitations, limitations, and recommendations for future research.

Summary of Findings

Previously discussed throughout Chapter Three, specific design elements showed how a qualitative case study approach (Creswell, 2013; Yin, 2018) was utilized to investigate the impact of participation in the university literacy clinic on pre-service teachers' efficacy, as well as how the method of instruction impacted their teaching experience. Explanation building using "how" or "why" questions was necessary to ensure internal validity (Yin, 2018); thus, participant

data were collected using these types of questions. Chapter Four detailed the 23 participants' experiences with teaching in a virtual literacy clinic, demonstrating several commonalities across pre-service teachers' responses.

First, three axial codes, *managing students, preparation,* and *teaching strategies*, combined to create the first theme, *Building a Learning Culture*. This described how the pre-service teachers worked to ensure a cohesive learning experience for their students. Next, three axial codes, *misinterpretations, tutor areas for growth,* and *tutor self-agency*, combined to create the second theme, *Tutor as the Learner*. This detailed how the pre-service teachers not only served as the teachers, but also as learners themselves. After this, three axial codes, *connections outside of Camp, considering the individual student,* and *utilizing assessment*, combined to create the third theme, *Student First Approach to Intervention*. This showcased the fact that pre-service teachers provided a truly unique and personalized approach to teaching and learning for the benefit of their students. Lastly, two axial codes, *technology benefits* and *technology frustrations,* combined to create the final theme, *The Virtual Environment*. This highlighted how involvement in the university literacy camp through virtual only means affected the tutors' overall experience related to teaching and learning. The first three themes spoke heavily to the central research question, while the final theme related primarily to the sub-question.

Central Question Findings

The central research question of this study asked, "How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?" Three main themes emerged from tutor data to support an answer to this question: *Building a Learning Culture, Tutor as the Learner,* and *Student First Approach to Intervention*.

The first and most mentioned theme, *Building a Learning Culture*, signals that pre-service teachers recognized the importance of planning coherent instruction that assured students were engaged in their work by selecting content and activities that were appropriate for their development. Tutors utilized classroom management skills, as well as teaching and learning strategies, to provide their Camp student with high levels of learning. When pre-service teachers misjudged or made a mistake in a prior week, they were sure to correct those errors in subsequent weeks, adjusting to ensure that their students were receiving high quality instruction.

The second theme, *Tutor as the Learner*, shows how the pre-service teacher did not serve strictly in an instructor role during Camp; rather, they were also responsible for their own learning. Tutors recognized several mistakes they made throughout the Camp session; however, these blunders were followed by ways the tutors could move forward and grow from those errors. During the middle weeks of Camp, data began shifting toward positive affirmations of self, with tutors rejoicing in their abilities and writing about ways that they provided successful and meaningful instruction. Phrases like “I am proud” and “I am so glad” in relation to instructional decisions began to surface. Though pre-service teachers struggled some weeks to accomplish the goals they set for themselves, they were able to reflect and determine ways in which they should grow, often referring to those earlier comments to demonstrate their progress.

The third theme, *Student First Approach to Intervention*, solidifies the pre-service teachers’ attempts and successes in prioritizing the needs of their individual learners in the Camp setting. Tutors strived to differentiate all aspects of intervention to fit the needs of their specific student, stopping at nothing to guarantee that their students would have a bountiful and transformative experience. The desire to create a trusting and caring bond with their students through the formation of relationships indicated that the pre-service teachers understood how

learning cannot occur without a strong foundation between learner and instructor (Dozier & Deeney, 2013). Involving the student in his/her learning proved important to these pre-service teachers, as they were sure to communicate regularly with their students, ask for their feedback, and guarantee relevancy to the students' real lives.

Each of these themes works to answer the central question to this study by demonstrating that the pre-service teachers' experience in the university literacy clinic did impact their self-efficacy. This will be further explored in the Discussion and Implications sections of this chapter.

Sub-question Findings

The sub-question of this study asked, "How does the method of instructional delivery impact the teaching experience of the pre-service teacher?" One main theme emerged from tutor data to support an answer to this question: *The Virtual Environment*.

The final theme, *The Virtual Environment*, demonstrates the ways in which the pre-service teachers felt that the learning environment was a help or hinderance to learning and teaching in the Literacy Camp. While tutors were able to engage their students virtually through interactive activities and games, as well as through platforms that allowed for collaboration between instructor and student, they also reported the pitfalls that the digital setting created. Several distractions arose, as did technological issues that were out of anyone's control. Specifically in the first weeks of instruction, tutors described their frustrations with slow internet, inability to screen share, and lack of student attention due to virtual distractors. Though these issues were often resolved, pre-service teachers consistently wrote about how technology inappropriately interfered with their lessons. Despite this, there were double the number of positive mentions regarding technology usage found in the data. More positives began to emerge

as the weeks went on and the tutors became more familiar with how to navigate technology and overcome barriers. Tutors were able to use digital outlets to provide a meaningful learning experience that not only benefitted the student academically, but also engaged them in their education in ways that many had not experienced in the past.

This theme serves to answer the sub-question of this study acknowledging how the pre-service teachers' experience was impacted by the method of instructional delivery. This will be further explored in the Discussion and Implications sections of this chapter.

Discussion

This study was led by the understanding that the experience of each learner is unique in nature; thus, the voice of the individual should be elevated and centered. A social constructivist lens was used (Creswell, 2013) so that the perceptions of involvement for each stakeholder were heard and compared. Vygotsky's social constructivist theory (1978) was utilized, as the needs of each learner had to be accounted for, as did the collaborative nature of this Literacy Camp (Devi, 2019; Kouicem, 2020). Through analyzing the findings of this study, several links were also made to Charlotte Danielson's 2007 *Framework for Teaching*, as well as the Interstate Teacher Assessment and Support Consortium (InTASC) standards for teaching (Council of Chief State School Officers, 2011). Pre-service teachers participating in this study were evaluated according to these frameworks in their internship placement, as well as throughout their teaching in course practicums. They were offered feedback from supervising university faculty according to their lesson plans and teaching performances. Additionally, each indicator in the Danielson framework was explicitly taught to the teacher candidates during the first month of internship. While a causal link cannot be confirmed, it stands to reason that pre-service teacher responses were consistent with this framework and the InTASC standards because of their familiarity with

them. This section will explore how the social constructivist framework, as well as the Danielson and InTASC models, aid in understanding how pre-service teachers' self-efficacy was positively impacted by their experiences in the virtual university literacy clinic. A separate section will be included to further discuss how the virtual environment impacted pre-service teachers' experience serving as a Literacy Camp tutor.

Social Constructivism

The social constructivist point of view centers the learner's unique experience and considers the cultural surroundings and prior experiences of the learner (Vygotsky, 1978). This study examined the unique experiences of 23 pre-service teachers serving in the university literacy clinic, an environment in which none of them had previously encountered. Not only had these tutors never taught in the literacy clinic, many had little or no prior teaching experience due to the shift to online learning caused by the onset of the pandemic in March 2020. Because these teacher candidates were all starting out with different skill sets for teaching literacy, it was necessary to view their experiences as individual and unique.

The Camp setting was collaborative in nature, with over half of the participants working with one peer to create and implement an intervention for their student. Those who did not partner with a peer or co-tutor still worked in tandem with their peers, as weekly class time allowed for group discussion and planning for those with similar intervention types. Interaction between tutors and students was filled with constant collaboration, as course learning was conducted synchronously through Zoom. Vygotsky asserted that individuals within a learning environment "should be encouraged to integrate with other learners, teachers, or other sources of knowledge such as books, journals, computers, etc." (Kouicem, 2020, p. 365). Pre-service teachers were regularly accessing their peers, students, and supplementary materials as sources

of knowledge; this was evident in their pre-survey, post-survey, and daily debrief data. Vygotsky's suggestion that learning is best constructed through interaction with others (Brau, 2018) is affirmed in the data from this study. Tutors described how interaction with their students, peers, technology, and content helped to expand their knowledge on how to deliver effective instruction.

Because the beliefs of a teacher about his or her own self-efficacy may often specify how the professional measures his or her personal abilities to create or facilitate worthwhile change for a student (Gibson & Dembo, 1984), it is reasonable to deduce that pre-service teachers grew in their self-efficacy, based on reports in which they felt they were positively impacting their students. Participant responses regularly showed that they felt, as a result of their instruction, their students improved academically. A strong example of this is demonstrated in Participant 20's final daily debrief:

> The student was able to recall most of the rules we taught which showed me that I did a proficient job providing instruction.

It is showcased again Participant 18's last daily debrief:

> This review day made me realize that my past lessons have been very effective because he flew through my review and review questions.

These two excerpts are representative of the responses from many Camp tutors in relation to the delivery of instruction that positively impacted their students, which were described in Chapter Four.

Teachers' sense of effectiveness provides a base for their instructional decisions (Woodcock, 2011), which is explored throughout each of the four main themes found in the data.

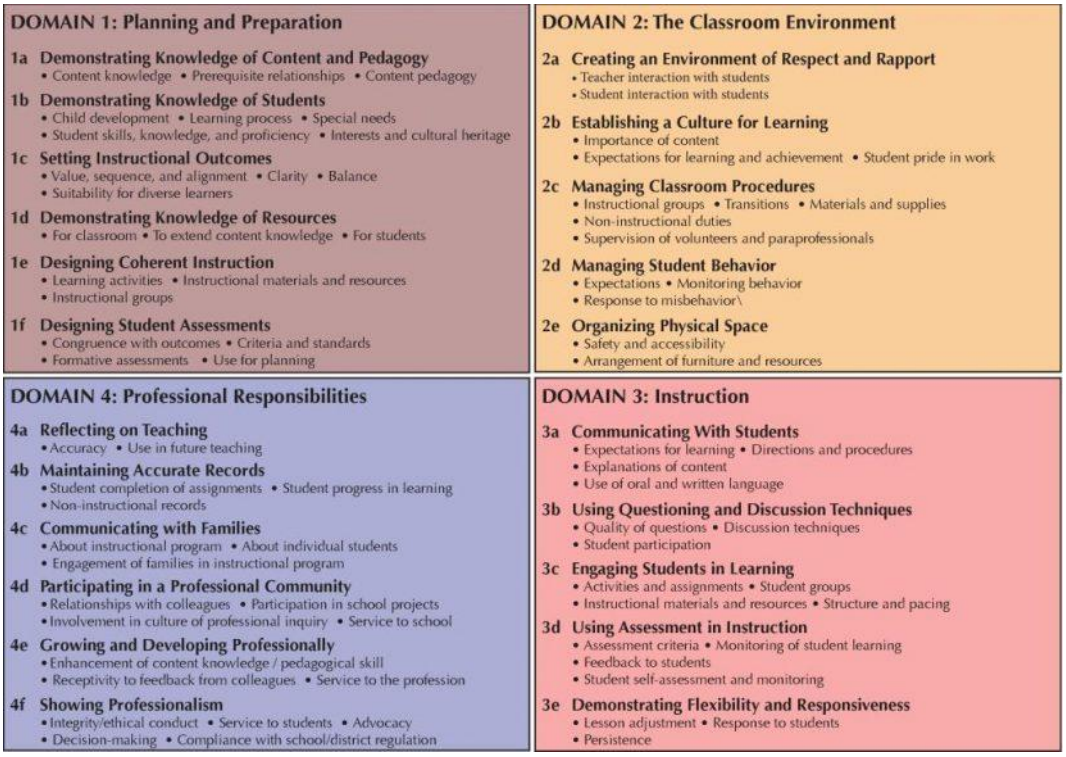
Best teaching practices, as set by Danielson (2007) and the InTASC standards (Council of Chief State School Officers, 2011), must be considered and implemented for teachers to make strong instructional decisions. Tutors showcased how they were able to design, carry out, and assess meaningful instruction. This was not something that was gauged by a professor; rather, the pre-service teachers revealed in their responses that they believed they were able to effectively provide these services to their students. While teaching in the Literacy Camp, pre-service teachers persevered through challenges (see *Tutor as the Learner*), set strong goals, and helped students to meet them (see *Building a Learning Culture*). This was accomplished while maintaining a collaborative atmosphere for learning through peer interaction, through synchronous instructional delivery, and through utilization of educational resources. Each of these components are stipulated by Vygotsky as necessary within a social constructivist learning environment. Teachers who fail to do these things demonstrate low levels of efficacy (Allinder, 1995; Stripling et.al., 2008), but the pre-service teachers in this study proved there was no challenge that was insurmountable, including technology barriers.

Charlotte Danielson's *Framework for Teaching*

Four domains and 22 indicators for effective teaching are encompassed within Charlotte Danielson's 2007 *Framework for Teaching*, shown below in Figure 1:

Figure 1

Framework for Teaching



Note. The Framework for Teaching. Copyright 2007 by Charlotte Danielson.

Pre-service teachers participating in this study were also completing a yearlong internship in which their professors assess their progress based on this framework. Teacher candidates can earn a score on a rating scale from one (unsatisfactory) to four (highly effective) for each of the indicators (Danielson, 2007) based on their teaching performance. Because pre-service teachers have been taught that earning effective or highly effective scores on this model indicates strong teaching, it is understandable that many of their responses on the pre-survey, post-survey, and daily debriefs were aligned with Danielson's framework.

Open codes were created largely with the words of the participants, otherwise known as *in vivo* coding (Creswell, 2013). Open codes such as *creating an environment for learning* relate

directly to Danielson's indicator 2b, Establishing a Culture for Learning. Several other instances of similar language usage can be seen, including open code *use of assessment* and Danielson's indicator 3d, Using Assessment in Instruction, as well as open code *involve families* and Danielson's indicator 4c, Communicating with Families. Though there was no direct mention of Danielson's framework by pre-service teachers in any of their data, the correlation between their responses and this framework is apparent.

Research supports that pre-service teachers mostly develop their beliefs about teaching during their teacher preparation programs, meaning that teacher educators have the highest chances to influence candidates' efficacy during these formative years (Hoy & Spero, 2005). It has been conveyed to these 23 pre-service teachers repeatedly and relentlessly that the Danielson Framework for Teaching describes effective teaching; thus, these teacher candidates have likely come to believe and accept that to be a strong teacher, scoring in effective or highly effective categories signifies their place as a successful educator. Self-efficacy is closely related to an individual's beliefs about his or her own views on a task, as well as completing a challenge (Bandura, 1997), which means that for self-efficacy to grow, pre-service teachers must strive to obtain high scores on the models by which they are assessed. Participant responses showed that they did in fact believe they were successful in meeting the demands of a model such as this. Participant 13's post-survey response below showcases how several aspects of this framework were addressed in her teaching:

> The strategies I used during the intervention included many phonemic awareness strategies such as sound boxes, stretching sounds and word rubber banding. These all required the student to actively participate in their learning and demonstrate their learning of each phonemic awareness skill addressed. I implemented questioning in all parts of the lesson to help monitor the students learning and allow them to take ownership of their learning. A pre and post assessment was administered before and after the literacy camp period to measure the student's phonemic awareness and then

> compare end results to analyze progress. Formative assessments were administered weekly to help determine the student's ability to meet each week's learning goal. Each of these formative assessments was directly related to the aspect of phonemic awareness focused on during the given week.

This response aligns with indicators within Domains 1 and 3 of Danielson's model, as well as with themes *Building a Learning Culture* and *Student First Approach to Intervention*. Other responses were in line with other domains while also fitting into one of the four themes, as seen below in Participant 3's post-survey response:

> We often encouraged her with short praises when she completed difficult tasks well and we often discussed how we noticed she was working hard or putting a lot of effort into a hard task. We also tried to build a relationship with our student and incorporate learning activities that she seemed to enjoy or mentioned that she did specifically.

Her response falls into Domain 2, as well as the theme *Student First Approach to Intervention*. It is important to note these overlaps, as again, pre-service teacher self-efficacy is related to how they perceive their effectiveness as an instructor, and this group of 23 pre-service teachers have come to believe that effectiveness is directly correlated to Charlotte Danielson's *Framework for Teaching*.

Interstate Teacher Assessment and Support Consortium (InTASC) Standards for Teaching

Similar to Danielson's Framework for Teaching (2007), InTASC standards (Council of Chief State School Officers, 2011) are frequently referenced by the teacher educators serving this group of pre-service teachers. This framework is comprised of 10 standards, each with sub standards outlining Performances, Essential Knowledge, and Critical Dispositions under each standard. The sub standards contain several indicators for effective teaching. Though teacher candidates who participated in this study were primarily evaluated using Danielson's framework,

their knowledge of the InTASC standards was evident specifically in the theme *Tutor as the Learner*, as the InTASC Standard #5: Application of Content, subsection Essential Knowledge, aligned strongly.

The theme *Tutor as a Learner* revealed participant's beliefs about the effectiveness of their teaching, with both mistakes and triumphs cited. InTASC Standard #5, the subsection, Essential Knowledge, provides educators with a list of how they should show understanding of the scope and sequence of learning, as well as how to incorporate meaningful and relevant learning activities and tools in the learning environment. Pre-service teachers' responses were often in the form of self-reflection on how they were able or unable to accomplish these goals. Such an instance is demonstrated below in Participant 21's daily debrief response:

> I wish I would have included more time for her to write and practice those skills, rather than reviewing exactly what they are. I am not good at giving clear feedback.

This participant response showed that the pre-service teacher was thinking critically about how her plan for instruction was not aligned with what the student needed, while also recognizing how she, as an educator, has shortcomings with her own response to student work.

Though there were times when the pre-service teachers showcased their Camp lessons in a critical light, there were many examples of when the tutors believed their instruction met InTASC Standard #5 goals, including the response below from Participant 15's post-survey:

> I used explicit instruction to teach phonics rules. This required explaining the rule and the commonalities of the phonics rule. The student would then repeat back or explain the examples in her own words to discuss the rule. Segmenting and blending was used as a strategy for the more unfamiliar spelling patterns. We also used fill in the blanks and pictures to create concrete examples of the phonics skills. I asked many different questions throughout the lesson. Some questions were quick recall questions to hold attention, while others were questions that had the student inferring on a rule or reason for such a spelling and how/why the spelling is read in that way. Why is it meaningful

> to know that? I used formative assessments to track the progress of the student throughout literacy camp. The student completed some form of oral reading, one that either we both created or one that I created. The student's decoding skills were checked by her accuracy and automaticity to read words that incorporated the specific phonics skill instructed on that day.

This response speaks to several of the indicators within Standard #5 while also aligning to the positive side of *Tutor as a Learner*, as well as *Building a Learning Culture* and *Student First Approach to Intervention*.

Regardless of a critical or positive look at how the pre-service teacher performed, the data revealed that participants were thoroughly reflecting on their experiences as both teachers and learners, something that the Danielson framework (2007) and InTASC standards (Council of Chief State School Officers, 2011) both indicate is a necessary standard for educators. Through reflection, the pre-service teachers were able to modify their instruction in future weeks, which allowed for maximum student learning. Because these participants were familiar with the InTASC Standards of Learning and the Danielson Framework for Teaching, they knew that reflecting on teaching would be a necessary part of the Camp experience. The pre-service teachers proved that they were able to problem-solve and work through misconceptions and misunderstandings within their own knowledge to better provide an accurate learning opportunity for their students. Without the opportunity to close their own gaps (Gordon & Debus, 2002), the pre-service teachers would not have been able to improve their self-efficacy in this manner.

Addressed specifically in InTASC Standards #6 and #8 is the inclusion and effective use of technology. The theme *The Virtual Environment* relates directly to the indicators within these standards, as pre-service teachers had the responsibility to provide equitable and

purposeful instruction through digital means only. Participant responses indicated a mixture of feelings related to technology integration (explored in Chapter Four); however, the pre-service teachers were careful to include all necessary technological components to provide a strong intervention and learning experience for their students. Both the challenge and how the pre-service teacher overcame the technology hurdle can be seen in Participant 9's post-survey response:

> It is hard to learn through a computer screen, especially with how explicit our instruction had to be. It was tough and, in a perfect world, we would have used a lot of hands-on activities if it were not taught online. Because of this, we had to figure out ways to keep our student engaged and learning at the same time. We made sure that our student read off the screen pretty often to keep her engaged. We also used activities that made the student have to manipulate something on the screen often as well.

As previously stated in this section, self-efficacy is increased when a challenge is overcome (Bandura, 1997), and providing instruction through virtual only means certainly proved challenging for most of the tutors. Though the struggles were addressed, there was almost always a reexamination of how they were conquered and how the student and pre-service teacher both persevered through them in a virtual setting.

Practical Implications

The purpose of this qualitative case study was to explore how the university literacy clinic impacted pre-service teachers' overall efficacy and confidence as it related to literacy instruction. Additionally, this study aimed to assess how the method of instructional delivery impacted pre-service teachers' teaching experience in the clinic setting. Twenty-three participants submitted data in the form of an efficacy pre-survey, efficacy post-survey, and 10 daily debriefs. Analysis of these data sets revealed four main themes: *Building a Learning*

Culture, *Tutor as the Learner*, *Student First Approach to Intervention,* and *The Virtual Environment*. Two important implications are discussed below: implications for literacy clinics and implications for pre-service teacher education.

Implications for Literacy Clinics

Practicum experiences have proven to be invaluable in building efficacy for teacher candidates (Gordon & Debus, 2002; Lisenbee, 2017), as these types of experiences allow pre-service teachers to practice problem solving, build perseverance, and engage in deep learning opportunities. Results from this study have indicated that pre-service teachers who participated in a literacy clinic's program, Literacy Camp, were able to engage in problem solving through overcoming challenges with technology, misjudging student abilities and needs, and designing a personalized, differentiated intervention for one student. Evidence of strengthened perseverance and endurance was shown in data under open codes beginning with "need," as well as open codes related to strong teaching choices, such as *proud of teaching choices* and *confidence in teaching*. Situations in which pre-service teachers were forced to think critically became apparent weekly, as tutors were responsible to answer student questions without delay, provide real time feedback, and adjust to misconceptions or misinformation a student may have presented during a lesson.

Though a historical barrier for the literacy clinic has been funding (Cassidy & Hanes, 1992), the pre-service teacher tutors in this study were unpaid, meaning that there was no overhead cost for instructors. This university had Zoom technology in place for all university students and faculty members; thus, there was no additional fee to the clinic itself for the virtual space. Additionally, with new research emerging that states virtual tutoring improves student academic, social, and emotional outcomes (Carlana & La Ferrera, 2021; Kraft et.al., 2022),

literacy clinic directors may want to consider implementing an online option for tutoring. It was found during this study that K-6 student participants were not all located central to the university's campus; however, because there was no physical requirement for in-person attendance, more students were able to participate and thus more tutors were able to take part in this practicum experience. Beyond this, synchronous learning was utilized, meaning that tutors and students were able to see each other while completing instruction. This presents another case for virtual tutoring to be explored.

Development of pre-service teachers within the literacy clinic setting has proven to be instrumental in the facilitation of self-efficacy improvements, as shown through the results of this study. While a primary focus is placed on developing the learner (Laster, 2013), literacy clinic personnel may want to shift their missions to include a central attention on the growth of the teacher candidates self-efficacy and instructional abilities serving within their clinics. This could work to build a stronger case for allocation of funds and university students to the literacy clinic.

Implications for Pre-Service Teacher Education

It is the responsibility of teacher preparation programs to develop a sense of self-efficacy within teacher candidates (Miller, 2021), which has been proven to happen through pre-service teacher participation in a practicum experience (Gordon & Debus, 2002; Lisenbee, 2017). The university literacy clinic provides ample opportunities for teacher candidates to participate in a practicum experience. The onset of the COVID-19 pandemic largely halted in-person teaching experiences, meaning that many pre-service teachers were enrolled in student teaching experiences without any prior teaching experience, just as most participants in this study were.

Utilizing the services of the literacy clinic can provide an entry point to practicum, especially when in-person learning is restricted.

The teacher candidates in this study aligned many of their instructional decisions and thus answers to Charlotte Danielson's 2007 *Framework for Teaching* and the InTASC Teaching Standards (2011). The emphasis that many pre-service teacher programs place on specific frameworks for effective teaching may not be used in every state that a candidate within a given program decides to teach; thus, a question arises of whether it is appropriate to engrain certain frameworks as "good" in the minds of teacher candidates. Even though all states may not use the Danielson *Framework for Teaching*, they all have models that are used for assessment that are similarly aligned. The state where this study takes place continues to use the research of Danielson's *Framework for Teaching* and associated ratings to assess highly effective teaching. An implication of conditioning teachers to be used to only one style of assessment arises and should be considered when teacher preparation programs are evaluating their candidates.

Research has shown that pre-service teacher self-efficacy was positively correlated with participation in online tutoring services (Hanham et.al., 2021), demonstrating that face-to-face methods of instruction are not the only impactful methods of learning. Participants in this study showed self-efficacy growth in a variety of ways despite having never met their student in person. Though most educational entities have shifted back to in-person learning in at least some capacity, the landscape of education is unlikely to ever return to "normal," with school districts across the country utilizing alternative methods of instruction (AMI), largely through asynchronous and synchronous methods of learning that occur through a digital device. It is reasonable to assume that pre-service teachers who will graduate in the coming years will be

required by their respective schools or institutions to have knowledge of how to conduct learning through a screen.

Pre-service teachers participating in the literacy clinic setting were responsible to meet the needs of one individual student. Typical coursework does not provide instruction for teacher candidates on how to plan and implement individual interventions; emphasis is usually placed on whole group or small group instruction. However, practicing teachers are often required to complete one-on-one tutoring or meet the needs of students through the Response to Intervention (RtI) model; thus, it is necessary to equip them with the tools needed for this type of instruction. The university literacy clinic provided a way for students to fully focus on the academic and social-emotional needs of only one learner, which served as a model to these candidates for how they can implement a similar type of intervention in their future practice.

Delimitations

This study, as with all other research, contained delimitations. The bounds of this study included participant enrollment in one of two sections of the Literacy Assessment and Intervention course at one specific university during the Fall 2021 semester. Additionally, I served as the lecturer for one of these two sections and was responsible for the instruction of 14 out of the 23 participants. Beyond this, I served as the graduate assistant in the university literacy clinic and facilitated one of the two sections of Literacy Camp in which she oversaw the instruction of 8 of the 14 first through seventh grade students that submitted questionnaire data for this study. Data points, including efficacy pre-survey, efficacy post-survey, and daily debriefs, also presented as delimitations to this study. Should the results of the data have differed, different delimitations may have arisen.

Limitations

Data was collected in one university literacy clinic setting with one specific group of 23 university elementary pre-service teacher candidates completing a yearlong internship while also participating in the university literacy clinic program, Literacy Camp, as part of a practicum requirement for graduate coursework. Sample size presented a limitation. Additionally, this study is limited in terms of answering the research questions outside of this student group; however, because another study has not been conducted related to the efficacy pre-service teachers participating in a Literacy Camp program through virtual means, the consequence could not be determined.

Because all participants being surveyed reported their feelings about efficacy as it related to literacy on a specific day, it stood to reason that their responses may have been impacted by their life situation and any events that occurred unrelated to the literacy clinic. They may have brought personal biases, conscious or not, to their responses. Other limitations include outside factors that may have guided their answers on a survey or when filling out a daily debrief form.

Recommendations for Future Research

This study was completed with a sample of 23 pre-service teachers in one university-facilitated literacy clinic during the Fall 2021 academic semester. It filled a gap in the literature that was previously missing related to pre-service teachers' efficacy outcomes as a result of participation in a fully virtual university literacy clinic. The literature may be enriched by replication of this study during another semester of learning, perhaps in the future when exclusively virtual means of learning have been further explored and utilized within the university literacy clinic. This study included a small number of participants at one specific

university completing coursework in literacy instruction and assessment; thus, completing a similar study with additional participants at a different institution can add to the results found in this study. Pre-service teachers served a group of students who were in grades one through seven; it would be beneficial to recreate this study with student participants who are in intermediate grades and/or high school.

The methodology of this study was such that included the pre-service teachers only as participants. Future studies could explore the perspectives of the Camp students who were enrolled in the university Literacy Camp. Though their testimony was used as supplemental data, extensive documentation could be taken to better elevate their positions and experiences participating in Literacy Camp. Following in this vein, the link between tutors and students could be followed, with data presented through a causal analysis of the symbiotic nature of teacher and student efficacy. This could include the pre-assessment and post-assessment scores of the Camp students for additional supportive data.

The implications brought about in this study also present a unique opportunity for continued research. Exploring the link between teacher preparation programs and specific frameworks for teaching in relation to pre-service teacher self-efficacy may produce understandings for teacher educators about how the emphasis on these frameworks impacts pre-service teachers' understandings about strong teaching. Additionally, because this study was conducted a year and a half into a global pandemic, it may be worthwhile to conduct further research into online literacy tutoring programs with pre-service teacher candidates serving as tutors. There are few studies in the literature that consider this opportunity for student and teacher candidate development.

Summary

This qualitative case study collected data from 23 university pre-service teachers to explore the impacts of participation in a university literacy clinic on pre-service teacher self-efficacy. Because this study took place a year and a half into the COVID-19 global pandemic, the exploration of how virtual instructional delivery impacted pre-service teachers' experience was also conducted. Credible data across three sources of data was analyzed to reveal four main themes: *Building a Learning Culture, Tutor as the Learner, Student First Approach to Intervention,* and *The Virtual Environment*. Each of these themes worked to answer the central questions in this research study.

Despite the body of growing research related to virtual learning and efficacy outcomes, there was a gap in the literature related to pre-service teachers' participation in a fully virtual university literacy clinic and its impacts on their self-efficacy. This study was designed with a need to fill this hole in mind, with findings speaking to how teacher candidates' self-efficacy was impacted because of their participation in the virtual literacy clinic. Further, this study investigated how the method of instructional delivery impacted the pre-service teachers' experiences as instructors in the literacy clinic.

Results from this study provide guidance to literacy clinics and teacher preparation programs about the importance of self-efficacy in teacher candidates and how it can be grown through participation in a virtual literacy clinic. Despite all challenges faced by the pre-service teachers, including technology faults, gaps in their own knowledge base, and uncertainty of how to fully plan and implement an individualized intervention for one student, they were able to demonstrate resilience and overcome any obstacles that emerged to engage their learner in meaningful instruction. Pre-service teachers were able to reflect critically on their own practices

to find purpose as educators within themselves. Because of this, literacy clinic personnel are urged to capitalize on the talents of pre-service teachers and include them as tutors within their literacy clinics. Additionally, pre-service teacher education programs are encouraged to provide practicum experiences in the literacy clinic for their teacher candidates so that they can grow their self-efficacy prior to being hired as a practicing teacher.

This study effectively demonstrated how 23 pre-service teacher candidates were able to overcome innumerable challenges within the literacy clinic setting to not only provide quality, top-tier instruction to a group of elementary and middle school students, but also reflect on their own teaching practices, to build self-efficacy. Each participant in this study did this despite the enormity of the COVID-19 pandemic and inexperience in teaching, proving the effectiveness of pre-service teacher education, in a face-to-face or virtual setting, for developing self-efficacy.

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Appendices

Appendix A: IRB Approval

UNIVERSITY OF ARKANSAS

To:	Caitlin M Spears
From:	Justin R Chimka, Chair IRB Expedited Review
Date:	11/29/2021
Action:	**Expedited Approval**
Action Date:	11/29/2021
Protocol #:	2110362032
Study Title:	The Effects of Participation in the Virtual University Literacy Clinic on Pre-Service Teacher and K-6 Student Self-Efficacy
Expiration Date:	10/29/2022
Last Approval Date:	

The above-referenced protocol has been approved following expedited review by the IRB Committee that oversees research with human subjects.

If the research involves collaboration with another institution then the research cannot commence until the Committee receives written notification of approval from the collaborating institution's IRB.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date.

Protocols are approved for a maximum period of one year. You may not continue any research activity beyond the expiration date without Committee approval. Please submit continuation requests early enough to allow sufficient time for review. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study closure.

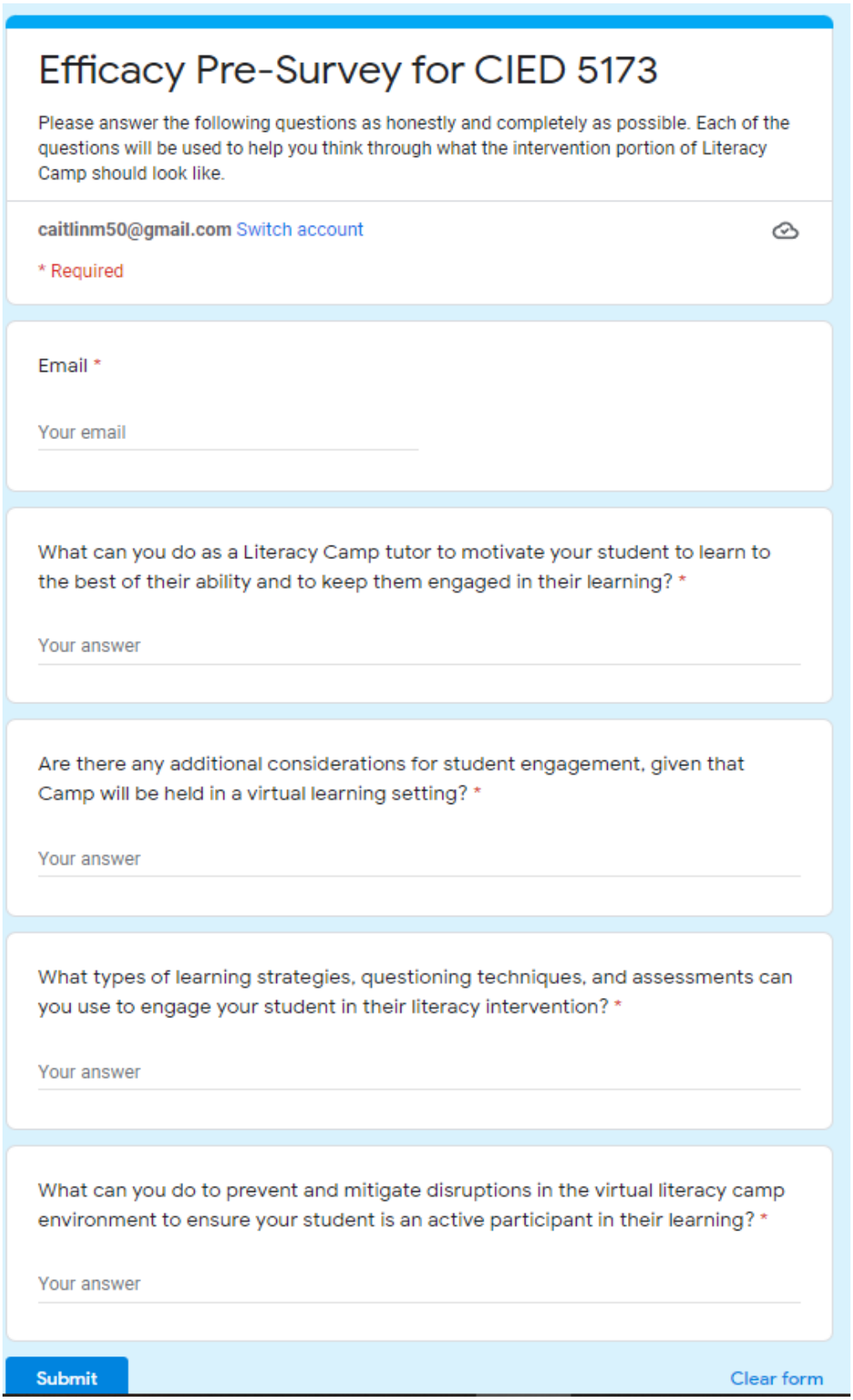
Adverse Events: Any serious or unexpected adverse event must be reported to the IRB Committee within 48 hours. All other adverse events should be reported within 10 working days.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, study personnel, or number of participants, please submit an amendment to the IRB. All changes must be approved by the IRB Committee before they can be initiated.

You must maintain a research file for at least 3 years after completion of the study. This file should include all correspondence with the IRB Committee, original signed consent forms, and study data.

cc: Heather D Young, Investigator

Appendix B: Efficacy Pre-Survey



Efficacy Pre-Survey for CIED 5173

Please answer the following questions as honestly and completely as possible. Each of the questions will be used to help you think through what the intervention portion of Literacy Camp should look like.

caitlinm50@gmail.com Switch account

* Required

Email *

Your email

What can you do as a Literacy Camp tutor to motivate your student to learn to the best of their ability and to keep them engaged in their learning? *

Your answer

Are there any additional considerations for student engagement, given that Camp will be held in a virtual learning setting? *

Your answer

What types of learning strategies, questioning techniques, and assessments can you use to engage your student in their literacy intervention? *

Your answer

What can you do to prevent and mitigate disruptions in the virtual literacy camp environment to ensure your student is an active participant in their learning? *

Your answer

Submit

Clear form

Appendix C: Efficacy Post-Survey

Efficacy Post-Survey for CIED 5173

Please answer the following questions as honestly and completely as possible. Each of the questions will be used to help you reflect on what the intervention portion of Literacy Camp looked like.

Email *

Valid email

This form is collecting emails. Change settings

What did you do as a Literacy Camp tutor to motivate your student to learn to the best of their ability and to keep them engaged in their learning? *

Long answer text

Were there any additional considerations for student engagement, given that Camp was held in a virtual learning setting? *

Long answer text

What types of learning strategies, questioning techniques, and assessments did you use to engage your student in their literacy intervention? *

Long answer text

What did you do to prevent and mitigate disruptions in the virtual literacy camp environment to ensure your student was an active participant in their learning? *

Long answer text

Appendix D: Literacy Camp Student Questionnaire

Literacy Camp Student Questionnaire

Form description

How were you able to stay focused during Literacy Camp in order to do your best learning? *

Long answer text

How were you able to make your thoughts or opinions heard in Literacy Camp sessions? *

Long answer text

How were you able to push through tough tasks in Literacy Camp? *

Long answer text

What have you done in Literacy Camp that makes you feel the most proud? *

Long answer text

Appendix E: Daily Debrief Form

Daily Debrief **Date:** **Name:**

What worked?

What didn’t work?

What comes next?

Appendix F: Pre-Service Teacher Informed Consent Form

University Student Consent to Participate in a Research Study

Researcher: Caitlin Spears

This is a permission form for research participation. It contains important information about this study and what to expect if you choose to participate.

Your participation is voluntary. Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether to participate. If you agree to participate, you will be asked to sign this form and will receive a copy of the form upon request.

INVITATION TO PARTICIPATE

You are invited to participate in a research study about your experience gained in the University of Arkansas Clinic for Literacy during your enrollment in CIED 5173: Literacy Assessments and Intervention. Your learning will be explored through the information shared on your Parent Reports, Weekly Debriefs, Literacy Case Study, and pre-/post-efficacy survey. Your responses throughout the participation of this study will be included anonymously in the write-up of this study with your Informed Consent.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the researcher?
Mrs. Caitlin Spears
Graduate Assistant, UofA Clinic for Literacy
Department of Curriculum and Instruction
cmahoney@uark.edu
[redacted]

Who is the supervisor?
Dr. Heather D. Young
Associate Professor and Director, UofA Clinic for Literacy
Department of Curriculum and Instruction
hkindall@uark.edu
[redacted]

What is the purpose of this research study?

The purpose of this research is to explore how the university literacy clinic impacts K-6 students' overall efficacy and confidence as it relates to literacy, as well as how the university literacy clinic impacts pre-service teachers' overall efficacy and confidence as it relates to literacy instruction. Additionally, this study will aim to assess how the method of instructional delivery impacts K-6 students' learning experience in the clinic setting, as well as how instructional delivery impacts pre-service teachers' teaching experience in the clinic setting.

This purpose of this study is to attempt to answer the following questions:

Central Question: How does the university Literacy Camp impact K-6 student participants' overall efficacy as it relates to literacy?
Sub-question 1. How does the method of instructional delivery impact the learning experience of the K-6 student?
Central Question: How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?
Sub-question 1. How does the method of instructional delivery impact the teaching experience of the pre-service teacher?

Who will participate in this study?

Approximately 26 Teacher Candidates in M.A.T. Elementary Education programs at the University of Arkansas and 16 K-6 students participating in the University of Arkansas Clinic for Literacy Camp.

What will you be asked to do?

Your participation will require the following: You are being asked to release data from the following documents: Parent Reports, Weekly Debriefs, Literacy Case Study, and pre-/post-efficacy survey. Additionally, a follow-up interview may be requested via telephone or Zoom. This interview will last approximately 15-20 minutes. It will be recorded and transcribed.

What are the possible risks or discomforts?

There are no anticipated risks to participating in this study.

What are the possible benefits to you if you participate in this study?

There may be no direct benefits to the participants.

How long will the study last?
This study will be conducted during the Fall 2021 semester and results will be analyzed during the Spring 2022 semester. Your participation will take no longer than 10-15 minutes with the option for a 15–20-minute follow-up interview.

Will you receive compensation for time and inconvenience if you choose to participate in this study?
No.

Will you have to pay for anything?
No, there will be no cost associated with your participation.

What are the options if I do not want to participate in the study?
I would greatly appreciate your participation, but if you do not want to be a part of this study, you may refuse to participate. You may leave the study even if you initially give permission. You will not be punished or discriminated against in any way if you choose not to participate. Non-participation in the study will not penalize you in any way, nor affect the quality of your learning experience in the Childhood or Elementary Education program.

How will my confidentiality be protected?
All information will be kept confidential to the extent allowed by the law and University policy. Pseudonyms will be used on all paper documents and reports. Any interview recordings will be destroyed following its transcription.

Will I know the results of the study?
At the conclusion of the study you will have the right to request feedback about the results. You may contact the researchers if you wish to see any results or would like feedback about the study. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?
You have the right to contact the researcher for any concerns that you may have. Researcher information is listed above.

You may also contact the University of Arkansas Research Integrity & Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Integrity & Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigators. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with me. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

Print name: _____

Sign name: _____ Date: _____

Appendix G: Parent Informed Consent and Child Assent Form

Parent Informed Consent for Child Participation in a Research Study

Researcher: Caitlin Spears

This is a permission form for research participation for your child. It contains important information about this study and what to expect if you choose to allow your child to participate.

Your child's participation is voluntary. Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether to participate. If you agree to allow your child to participate, you will be asked to sign this form and will receive a copy of the form.

INVITATION FOR CHILD TO PARTICIPATE

Your child is invited to participate in a research study about their self-efficacy outcomes after their participation in the UARK Literacy Clinic. Your child's responses to the reflection and anecdotal data (as provided by Camp tutors) will only be included anonymously in the study with your Informed Consent and their Child Assent.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the researcher?
Mrs. Caitlin Spears
Graduate Assistant, UofA Clinic for Literacy
Department of Curriculum and Instruction
cmahoney@uark.edu
[redacted]

Who is the supervisor?
Dr. Heather D. Young
Associate Professor and Director, UofA
Clinic for Literacy
Department of Curriculum and Instruction
hkindall@uark.edu
[redacted]

What is the purpose of this research study?

The purpose of this research is to explore how the university literacy clinic impacts K-6 students' overall efficacy and confidence as it relates to literacy, as well as how the university literacy clinic impacts pre-service teachers' overall efficacy and confidence as it relates to literacy instruction. Additionally, this study will aim to assess how the method of instructional delivery impacts K-6 students' learning experience in the clinic setting, as well as how instructional delivery impacts pre-service teachers' teaching experience in the clinic setting.

This purpose of this study is to attempt to answer the following questions:
Central Question: How does the university Literacy Camp impact K-6 student participants' overall efficacy as it relates to literacy?
Sub-question 1. How does the method of instructional delivery impact the learning experience of the K-6 student?
Central Question: How does the university literacy camp impact pre-service teachers' overall efficacy as it relates to literacy instruction?
Sub-question 1. How does the method of instructional delivery impact the teaching experience of the pre-service teacher?

Who will participate in this study?

Approximately 26 Teacher Candidates in M.A.T. Elementary Education programs at the University of Arkansas and 16 K-6 students participating in the University of Arkansas Clinic for Literacy Camp.

What will your child be asked to do?

Your child's participation will require the following: Completion of a reflection interview about their experience in Literacy Camp. The reflection will take no longer than 5-10 minutes and will be conducted during regularly scheduled Camp time on November 29. The interview will require your child to provide an answer to four open-ended questions about the experience they had being enrolled in the University of Arkansas Literacy Camp. Their interviews will be voice recorded and transcribed. After transcription, the recordings will be destroyed. The survey is available for you to see before; it is attached to the same email that contains this Informed Consent document. There is also an option for a brief follow-up interview which would last no longer than 15-20 minutes. Lastly, you are being asked to allow your child's university tutor to submit their coursework as it relates to your child's performance, including weekly parent reports. Your child's real name will never be used. All participants' involvement will be kept confidential to the extent allowed by law and University policy.

What are the possible risks or discomforts?

There are no anticipated risks to participating in this study.

What are the possible benefits to you if you participate in this study?
There may be no direct benefits to the participants.

How long will the study last?
This study will be conducted during the Fall 2021 semester and results will be analyzed during the Spring 2022 semester Your child's participation will take no longer than 5-10 minutes during Camp time with the option for a 15–20-minute follow-up interview.

Will you receive compensation for time and inconvenience if you choose to participate in this study?
No.

Will you have to pay for anything?
No, there will be no cost associated with your participation.

What are the options if I do not want to participate in the study?
I would greatly appreciate your participation, but if you do not want to be a part of this study, you may refuse to participate. You may leave the study even if you initially give permission. You will not be punished or discriminated against in any way if you choose not to participate.

How will my confidentiality be protected?
All information will be kept confidential to the extent allowed by the law and University policy. Pseudonyms will be used on all paper documents and reports.

Will I know the results of the study?
At the conclusion of the study you will have the right to request feedback about the results. You may contact the researchers if you wish to see any results or would like feedback about the study. You will receive a copy of this form for your files if requested.

What do I do if I have questions about the research study?
You have the right to contact the researchers for any concerns that you may have. Researcher information is listed above. You may also contact the University of Arkansas Research Integrity & Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Integrity & Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

INFORMED CONSENT:
I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigators. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with me. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

Print name: _____

Sign name:_____Date:_____

CHILD ASSENT:
I have talked about this study with my parent/guardian, and I agree to answer the questions. I understand that even if they agree, it is okay if I decide not to answer or change my mind about answering later.

Print name: _____ Date: _____