

VIRTUAL LITERACY COACHING: CASE STUDY OF A RURAL INTERMEDIATE
SCHOOL DISTRICT'S SOLUTION TO TIME, SPACE, AND RESOURCES

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Submitted to the faculty of the School of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in the Department of Curriculum and Instruction,
Indiana University
December 2023

Accepted by the School of Education Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Education

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August 29, 2023

Acknowledgments

Many people deserve thanks for their support and guidance throughout the completion of this study. I want to take a moment to recognize those who have positively influenced my path and journey.

First and foremost, I would like to thank my husband, Josh. You have been my biggest supporter. The years have interwoven our purposes, and I continue to choose you as my forever partner and true love. Thank you for your unwavering support, grace, and care.

For my family: To my sons, Jordan, Jaden, Jason, and Joseph, you have inspired me to keep learning. I hope you will follow your dreams and continue to grow into your best self for all your life. To each of my parents, you embody what it means to love selflessly. I am tremendously thankful for your unconditional presence and encouragement.

Thank you to my dissertation chair, Karen Wohlwend, and my committee members, Sharon Daley and Jessica Lester. Dr. Wohlwend, I am incredibly grateful for your talented feedback and encouragement. You have made this experience so warm and wonderful. Dr. Daley and Dr. Lester, your gifted influence has been instrumental in shaping my experiences at IU and the design of this study. I am very fortunate to have worked with this remarkable group of educators.

To my employer and coworkers, thank you for supporting innovation and providing space for reflection. Rich and Kim, thank you for your mentorship. A culture of positivity fuels our work, and I am thankful to be partnered alongside both of you. For the teachers who graciously welcomed me into their classrooms, thank you for being a part of this study. Your time is so valuable, and I am honored that you chose to spend some of it with me.

Abstract

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Literacy coaching is an individualized, job-embedded form of professional development that can boost teacher knowledge and correlational student reading achievement (MDE, 2018). Substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman, Mansor & Hamzah, 2017; Wetzel, Maloch & Hoffman, 2020). Limited coaching resources in rural settings could directly impact access to a literacy coach. By modifying the coaching platform and introducing a virtual literacy coaching model, school districts can transcend issues of time, space, and resources. This qualitative case study examined the relational and reflective actions influencing literacy coaching in a virtual space. Through reflexive thematic analysis, themes were established to enhance the program's development. The following questions influenced the research: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?

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CHAPTER ONE: Introduction

Statement of the Problem

Teacher Professional Learning in the United States

Literacy coaching has long been considered a job-embedded professional learning model for building pedagogical capacity and improving teacher instruction (MDE, 2018). Teacher professional learning is a billion-dollar annual industry (Kraft et al., 2018) with little regard for a teacher's strengths, interests, or funds of knowledge (Banegas, 2020; Moll et al., 1992). All the while, professional learning models are at the forefront of school improvement plans, often focusing on the latest educational trends. Federal mandates requiring standardized testing to measure academic success have created a one-size-fits-all standard for learning. Although pervasive and hegemonic, teachers are expected to complete mass-produced professional learning series and directly improve student learning without individualized consideration of classroom needs or funds of knowledge (Moll et al., 1992).

Moreover, legislation has continued across the United States, suggesting schools retain students by grade three if they are not proficient in reading. School districts are under extensive pressure to produce results through high stakes testing and professional learning. Understanding the harmful effects of retention (Bonvin et al., 2008; Roderick & Nagaoka, 2005), educational stakeholders must consider why students struggle with reading proficiency and how to improve classroom teachers' pedagogical practices in reading. Legislation that has inspired student retention laws and high-stakes testing has, as a matter of course, placed immense constraints on our school districts to improve student testing performance. A careful look at the political, social, and hegemonic approach to professional learning models may redefine teacher practice and contribute to correlational student reading achievement. This case study will focus on one

northern, rural instructional service district's kindergarten through third grade virtual literacy coaching program. Through the literature, I will examine the efficacy of current professional learning and explore the potential for virtual literacy coaching as an equitable model for job-embedded, individualized professional development.

Research to Practice Gap

Before I examine how literacy coaching can support pedagogical growth and the components of a traditional literacy coaching model, it is essential to understand why classroom teachers need literacy coaches. Newspapers and articles often ask why students struggle to read after spending time in the classroom. One reason may align with practitioners' pedagogical capacity in reading. There is a well-documented gap between educational research and classroom practice (Crone et al., 2019; Cooper et al., 2017; Datnow & Hubbard, 2016; Gersten et al., 2000). The number of scholarly articles related to reading research is enormous. Kilpatrick (2020) states that educational reading research is printed in English journals with 600-800 scientific papers annually. When using a scholarly search engine and typing in reading comprehension, a list of over 2.5 million articles will appear, with links to over 24,000 articles associated with 2020 alone. Educational stakeholders know that reading research can improve the quality of student learning (National Reading Panel, 2000).

Nevertheless, students need help with reading (Truckenmiller et al., 2020). There is a concerning underutilization of research in the field of reading (McCardle & Chhabra, 2004). This research includes the foundational reading skills essential for learning to read and write. Kilpatrick (2020) mentions that this gap is documented among various education professionals, including general education teachers, remedial reading teachers, special education teachers, and even teacher trainers. He draws on this realization from several educational organizations,

including the Society for the Scientific Study of Reading and the American Federation of Teachers. Kilpatrick (2020) also states that the *Journal of Learning Disabilities* published an entire issue in 2009 related to dissecting the cause of this research to practice gap.

Why do educational stakeholders have all this reading research regarding print literacies, yet it is not making its way into the classrooms? Regarding practicing teachers, researcher Kilpatrick (2015) listed the following as reasons for the lack of knowledge regarding reading research:

- Lack of access to reading research journals
- Too large of a quantity of research is produced each year
- Reading wars, meaning differing views, leads to little agreement and progress
- Overall lack of research awareness (p. 6).

According to Davidson and Nowicki (2012), teachers affirmed that “they received minimal information about reading disabilities; they were consequently unaware of the available research,” and they agreed “that teachers prefer to be informed; but the greatest obstacle to seeking and using research was a shortage of time” (p. 339). This emphasis on a lack of teacher time will come up again when I explore this study’s rural context and their utilization of a virtual literacy coaching model for professional learning.

Educational stakeholders must explore ways to keep teachers up to date with reading research, using practical methods, and addressing their lack of time to meet face to face. There is potential to improve the receiving and delivering reading research process. Improving access to and the distribution of reading research could also provide opportunities for correlational growth in student reading achievement related to third grade retention laws. So, the question remains,

what professional learning models consider individual strengths, funds of knowledge, and classroom needs?

Literacy Coaching

When looking at instructional practices, it is no secret that research based pedagogical practices and teacher knowledge can bolster student reading achievement. Educational stakeholders have consequently invested significant funds in teacher professional learning models (Kraft et al., 2018). This responsibility calls for careful consideration of how teacher professional learning is being delivered and are all teachers are receiving it. When looking closely at current classroom based professional learning models, substantial research supports literacy coaching as an effective way to introduce research based learning into classrooms (Byington & Kim, 2020; Vikaraman et al., 2017; Wetzel et al., 2020). Literacy coaching is a job-embedded form of professional development that can boost teacher knowledge and student performance (MDE, 2018). Unfortunately, many small rural school districts have limited access to building personnel or coaching resources. Limited access has the potential to hinder rural classroom teachers' pedagogical growth and therefore restrict correlational student reading achievement for rural students. Coaching through a virtual model allows access to underserved areas, transcending issues of time and space. Virtual literacy coaching allows teachers to receive individualized professional learning to improve student achievement in print literacies. This study explored one intermediate school district's attempt to transcend time, space, and resources by working through a virtual literacy coaching model.

Purpose Statement

This qualitative case study examined the relational and reflective actions influencing literacy coaching in a virtual space. Additionally, this work explored teachers' experiences as

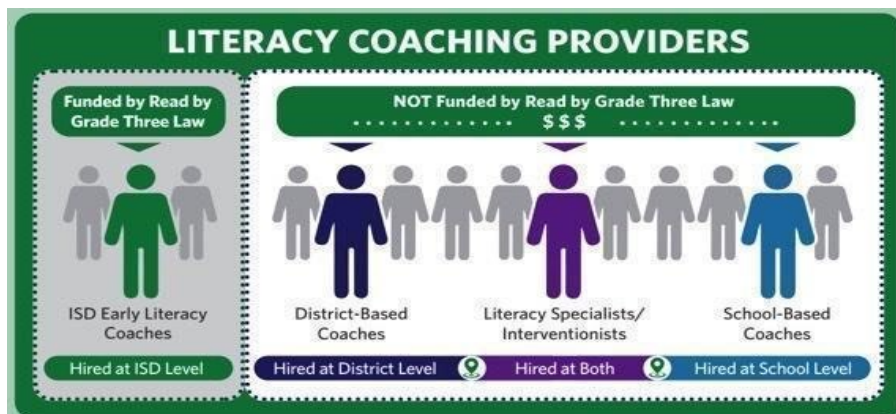
they partnered with a virtual literacy coach to improve pedagogical capacity and student academic performance.

Accounting for Time, Space, and Resources

School districts utilize professional learning models across the United States to improve pedagogical practice and increase student reading achievement. For professional learning models on a macro level, it is essential to evaluate systems for the relevance regarding teacher pedagogical approaches and correlational student growth. Are professional learning models accessing the individual's strengths and funds of knowledge (Moll et al., 1992)? As part of MCL.380.1280f, also referred to as Michigan's Read by Grade Three Law, Michigan has allocated significant funds for early literacy coaches at intermediate school district (ISD) levels (MDE, 2023; ISD see Figure 1.1). This literacy coaching initiative is designed to build teacher capacity and increase student reading achievement across Michigan (MDE, 2018). With a significant expenditure, stakeholders must take notice and ensure that funds support equitable professional learning practices for all classrooms and all students. Utilizing a virtual space to provide literacy coaching might support access to coaching resources. On a micro level, I wondered about the efficacy of a literacy coaching model in a virtual space. This case study explored literacy coaching that transcends time, space, and resources by providing job-embedded, individualized literacy coaching to rural schoolteachers through a virtual coaching model.

Figure 1.1

Types of Literacy Coaching Providers (ISD)



Note. From “Michigan’s Read by Grade Three Law: Year Two Report,” by Strunk KO, Zhu Q, Utter A, et al., EPIC, 2022 (<https://epicedpolicy.org/rbg3-year-two-report/>) Copyright 2022 by EPIC. Reprinted with permission.

The local context of this study suggested concerns about the equitable distribution of professional learning opportunities for smaller rural schools. Providing literacy coaching services through virtual modes can connect coaches to multiple teachers from various districts, accounting for time, space, and limited resources (Leighton et al., 2018). This case study examined one intermediate school district’s (ISD) virtual literacy coaching program. The ISD is rural and spans a large geographical region, over 2,000 square miles, servicing over 20 schools and more than 500 educators. The ISD developed a virtual literacy coaching program to accommodate factors such as time and geographic space just before the Covid-19 pandemic. Providing an asynchronous model for professional learning, such as virtual literacy coaching, opened the door for teachers to work around their schedules in rural districts with limited staff. This virtual model eliminated travel time and mileage reimbursement, required fewer personnel, fewer funds for additional coaches, and minimal synchronous teacher meetings. With many advantages associated with using a virtual space, stakeholders should explore the participants' perceptions of working within it.

An additional consideration when looking at rural environments is accessibility to resources that connect classroom teachers with a virtual literacy coach. Rural settings can lack the infrastructure to provide efficient technology resources. Recognizing that some rural areas have no internet connectivity, placing them at a significant disadvantage, is an important consideration when trying to improve accessibility to literacy coaching using a virtual model. While most rural schools have access to the Internet, it is also essential to consider that access to technology may be more complex than a yes or no answer. Researchers Rideout and Katz (2016) stated that “some rural areas lag behind in terms of having higher Internet speed” and “poorer quality cell service in remote areas” (p. 9). Stakeholders must also explore the capabilities of devices and types of connections that can have considerable consequences for rural areas and how these factors are likely to increase in areas of rural poverty (Rideout & Katz, 2016). Issues of connectivity and technology resources can potentially impact participants’ perceptions of working within a virtual literacy coaching model.

Research Questions

One aspect of coaching that influences the transformation of teacher practice is the tenet of relational trust. Relationships between coaches and teachers are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L’Allier et al., 2010). In addition to coaching being a relational process, it also requires opportunities for reflectivity (Garmston et al., 1993). Coaches can encourage the transformation of pedagogical practices through experiences that require reflection. Grounded in kindergarten through third-grade teachers’ experiences, I examined perceptions based on relational trust and reflection as participants worked through a virtual coaching space.

Many relational and professional factors influence K-3 teacher instruction as teachers utilize a virtual literacy coaching model. Three research questions were developed by analyzing the literature to explore these factors further. I sought to understand: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?

Local Context

The Covid-19 pandemic disrupted all sense of normalcy in March 2020. I accepted an early literacy coach position just weeks before the school closure announcements. As I began shifting my work identity from a kindergarten teacher to a literacy coach, I also understood that I would need to alter my perceptions of what literacy coaching might look like. Could I provide literacy support virtually? Could literacy coaching be effective in a virtual space? What happens to relationships between teachers and coaches in a virtual setting? Unbeknownst to me, this ISD was already exploring ways to accommodate travel time for a large, rural geographic region and maximize time spent with teachers. They had already begun researching video collaboration platforms and formats for asynchronous communication. This prior research helped offset the transition to a virtual space just before the fall of 2020.

Looking closely at this ISD's coaching process, some tenets support individual strengths, choices, and funds of knowledge (Moll et al., 1992). Teachers are offered coaching menus (see Figure 1.2) to identify personal interests in learning. Literacy coaching aims to be individualized with a 1:1 coach and teacher ratio or working within a small group model. The structure of this

coaching program allowed the coaches and teachers to maintain a collaborative, non-evaluative relationship. Administrative duties are not part of this coaching model.

Figure 1.2

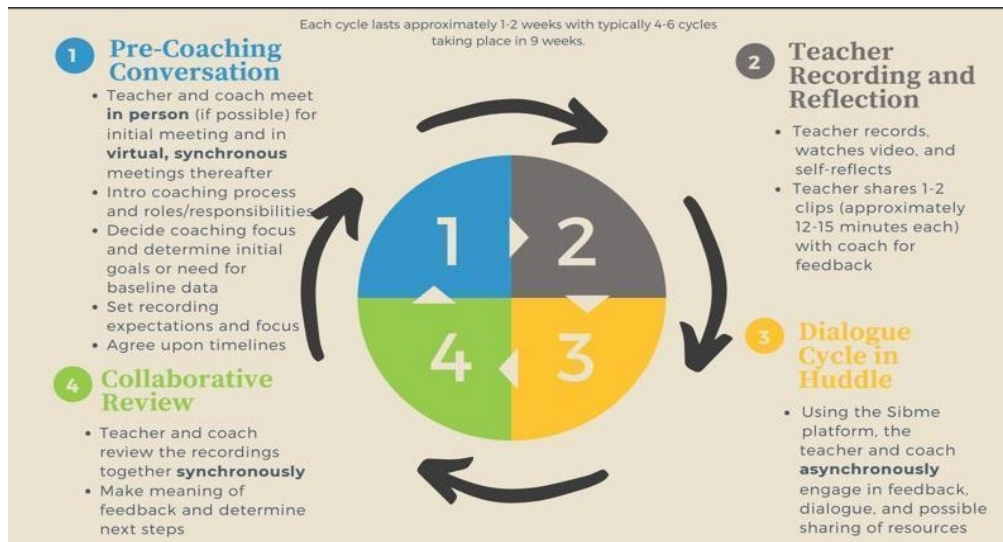
Coaching Menu		
Co-Planning	Modeling	Data Chats
Want support in planning a lesson or series of lessons?	Would you like to see another teacher in action?	How can you use your data to help your students?
Literacy Resources	Teacher Talks	Something Else
Are you interested in literacy resources on a specific topic?	Do you need a brainstorming partner?	What is on your mind that I can help with?

Using a collaborative online platform called Sibme¹, teachers recorded their lessons, reflected on their practice individually, and collaborated with a coach. Coaching cycles at this ISD follow a similar model to one suggested by Walpole and McKenna (2013, p. 210; see Figure 1.3). The collaboration began with a pre-observation discussion, a recorded lesson, an asynchronous discussion, and a final synchronous Zoom meeting to plan for the next cycle. Through this virtual professional learning format, teachers record, watch, and critically reflect on their teaching with a literacy coach. Cycles typically occurred within one to two weeks, and teachers voluntarily participated in four to six coaching cycles.

Figure 1.3

Coaching Cycle

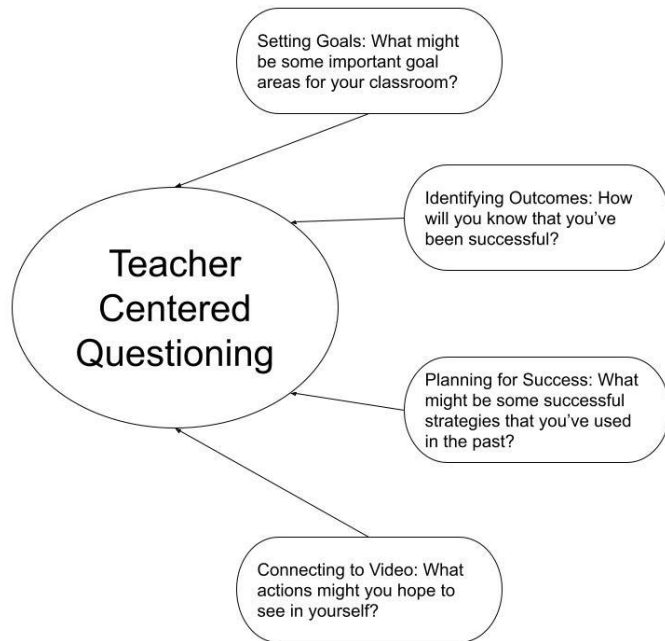
¹ Sibme.com will be discussed further in Chapter 4.



Both planning and reflective conversations are a big part of the coaching cycles. While much reflection occurred during the asynchronous video lesson analysis, synchronous Zoom sessions provided a space to reflect or brainstorm with a coach in live time. During coaching conversations, the coaches in this ISD used Cognitive Coaching discussion maps to mediate thought around pedagogical practices and student needs (Costa & Garmston, 2019; see Figure 1.4). There are different conversation maps to plan, reflect on, or problem-solve. These tools are used to meet individual classroom needs and boost teacher capacity for learning. As part of the reflective conversations, the coach may also move into a consulting role by offering research based resources or suggestions to improve teacher instruction.

Figure 1.4

Examples of Teacher Centered Questioning



Research is at the heart of all coaching conversations. Developed in partnership with MAISA, GELN, and Michigan’s Early Literacy Task Force (2016b), the *Essential Instructional Practices in Early Literacy: Grades K to 3* document guides Michigan early literacy coaches’ work for improving pedagogical practices (see Figure 1.5). This document contains ten research supported practices recommended to be used daily in every classroom. The research-based essential practices are not specific to a hegemonic curriculum or professional learning series but can be interwoven into any appropriate materials for individual classrooms. This job-embedded learning supports unique strengths and a classroom’s funds of knowledge (Moll et al., 1992).

Figure 1.5

Sample of K-3 Instructional Essentials

2. Read alouds of age-appropriate books and other materials, print or digital⁸

Read alouds involve:

- sets of texts, across read aloud sessions, that are thematically and conceptually related⁷ and that offer opportunities to learn that children could not yet experience independently
- modeling of appropriate fluency (accuracy, automaticity, and prosody) in reading
- child-friendly explanations of words within the text and revisiting of those words after reading using tools such as movement, props, video, photo, examples, and non-examples, and engaging children in saying the words aloud and using the words at other points in the day and over time
- higher-order discussion among children and teacher before, during, and after reading⁸
- instructional strategies, depending on the grade level and children's needs, that:
 - ▶ develop **print concepts**,⁹ such as developing children's directionality by running fingers under words and asking where to start, with texts being sufficiently visible to children that they can see specific features of print
 - ▶ model application of knowledge and strategies for **word recognition**¹⁰
 - ▶ build **knowledge of the structure and features of text**¹¹, including, with regard to structure, key story elements and common informational text structures (compare-contrast, cause-effect, problem-solution, description, and sequence), and such as, with regard to text features, tables of content, diagrams, captions, and index
 - ▶ describe and model **comprehension strategies**, including activating prior knowledge/predicting; questioning; visualizing; monitoring and fix-up; drawing inferences; and summarizing/retelling

4. Activities that build phonological awareness (grades K and 1 and as needed thereafter)¹⁶

Teachers promote phonological awareness development,¹⁷ particularly phonemic awareness development, through explicit explanation, demonstration, play with sounds in words, and engaged study of words, such as by:

- listening to and creating variations on books and songs with rhyming or alliteration
- sorting pictures, objects, and written words by a sound or sounds (e.g., words with a short e sound versus words with a long e sound)
- activities that involve segmenting sounds in words (e.g., Elkonin boxes, in which children move a token or letters into boxes, with one box for each sound in the word)
- activities that involve blending sounds in words (e.g., "robot talk" in which the teacher says the sounds "ffff" "iiii" "shhhh" and children say *fish*)
- daily opportunities to write meaningful texts in which they listen for the sounds in words to estimate their spellings

5. Explicit instruction¹⁸ in letter-sound relationships¹⁹

Earlier in children's development, such instruction will focus on letter names, the sound(s) associated with the letters, and how letters are shaped and formed. Later, the focus will be on more complex letter-sound relationships, including digraphs (two letters representing one sound, as in *sh, th, ch, oa, ee, ie*), blends (two or three letters representing each of their sounds pronounced in immediate succession within a syllable, as in *bl* in *blue, str* in *string*, or *fl* as in *left*), diphthongs (two letters representing a single glided phoneme as in *oi* in *oil* and *ou* in *out*), common spelling patterns

Note. From "Essential Instructional Practices in Early Literacy: K to 3," by Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016 (https://www.gomaisa.org/downloads/gelndocs/k-3_literacy_essentials.pdf) Copyright 2016 by MAISA. Reprinted with permission.

As a literacy coach and educational stakeholder, I must study the effects and perceptions of the work in my field. I also carry a personal interest in the focus area of literacy coaches working in a virtual space. This case study looked closely at one ISD's coaching model and reviewed participants' experiences to improve coaching practices for rural teachers. Reviewing my coaching methods and tools enhanced my social practices and increased the likelihood of meeting the state's desired outcome regarding student skills mastery. Through this case study, stakeholders will better understand how K-3 teachers perceive virtual literacy coaching to improve pedagogical practices and student reading achievement.

Conceptual Framework

Mediation and Zone of Proximal Development

Literacy coaching is a dynamic process that values the knowledge and shared understandings of others (Vygotsky, 1978). Understanding that the premise of sociocultural theory emphasized that knowledge and shared understandings are socially created (Vygotsky, 1978) frames the co-construction of knowledge between the teachers and coaches in a relational concept. One dimension of sociocultural theory relies on,

“on tools and labor activity, which allows us to change the world, and with it, the circumstances under which we live in the world, we also use symbolic tools, or signs, to mediate and regulate our relationships with others and with ourselves and thus change the nature of these relationships” (Lantolf, 2000, p.1).

For this study, the computer and virtual platform, Sibme, were the psychological tools used by the co-participants, literacy coaches, and teachers to mediate pedagogical practices and regulate relationships. Within sociocultural theory, the zone of proximal development is defined by Vygotsky (1978) as the act of what a person can achieve alone compared to what the same person can accomplish with the support of others or tools. This study focused on the interactions with the tools and co-participants and how those tools and relationships mediated the co-construction of knowledge and pedagogical practice.

School District Coaching Model: Cognitive Coaching

This research establishes the coach's interactions as a means for transformative learning, and the method used by this ISD to seek teacher growth is Cognitive Coaching. Cognitive Coaching was developed by Costa and Garmston (1992) as an approach to mentoring and encouraging reflective practices. Multiple theories formed the theoretical underpinnings of Cognitive Coaching, including (1.) Koestler's (1972) holonomy, (2.) Vygotsky's (1978) socio-constructivism, and (3.) Anderson and Snyder's (1993) clinical supervision theory (Göker, 2020,

pp. 3-4). Cognitive Coaching is founded on assumptions to produce “self-directed persons with the cognitive capacity for excellence both independently and as members of a community” (Costa & Garmston, 2019, p. 16). In this coaching model, like sociocultural theory, coaches must assume capacity with those they are working with. Costa and Garmston (1992) emphasize that all individuals “continue to grow cognitively throughout our lifetime and that we all possess a vast reservoir of untapped potential” (p. 91). This vast capacity allows teachers to navigate the many complexities of their instruction, and it is the coach’s responsibility to build upon their repertoire of skills and knowledge. Garmston et al. (1993) suggest that the behavior of teachers, including reflectivity, could be improved if they were coached in a democratic atmosphere, highlighting the significance of exploring relational factors and possible power dynamics in this virtual literacy coaching model. Cognitive Coaching emphasizes examining the coach and coachee relationship within virtual literacy coaching for power, judgment, discourse, and value.

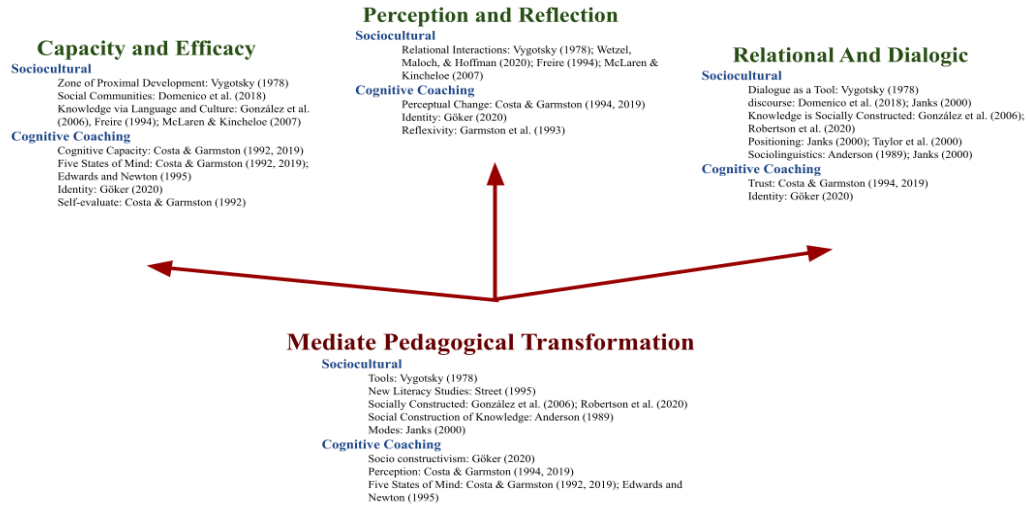
A Partnership of Theories

Reading is a field with competing frameworks, and I recognize that the terms cognitive and thinking are considered psychological terms. Cognitive Coaching often refers to the mediation of thought. This study does not focus on the mediation of cognition but explores the social learning constructs and pedagogical change in a virtual literacy coaching environment. The conceptual framework that I developed (see Figure 1.6) organizes the research for these concepts to show the relationships between how coaches mediate pedagogical transformation through three tenets:

1. Teacher capacity and efficacy influence learning
2. Ideology perception and reflection
3. Relational and dialogic interactions for learning.

Figure 1.6

Diagram of Conceptual Framework



Note: References in the diagram support this theoretical framework

The first tenet of this framework relates to the teacher’s capacity and efficacy for learning. Drawing from Costa and Garmston (1992, 2019), I presume an unlimited learning capacity tied to previous cultural experiences (Gonzalez et al., 2006). It is also significantly important to recognize how discourse and identity (Göker, 2020) can influence a learner’s state of mind (Costa & Garmston 1992, 2019; Edwards & Newton, 1995) while working within their zone of proximal development (Vygotsky, 1978). I will examine how coaches approach this new relationship in a way that supports and connects to previous understandings.

The second tenet of this framework requires a change in perception (Costa & Garmston, 1994, 2019) through reflection. Based on the premise that adult learners must transform their thinking to establish new learning, coaches will construct opportunities for reflexivity (Garmston et al., 1993; Ramos et al., 2021). Through reflection, teachers will explore their identity (Göker, 2020) within their professional communities (Wetzell et al., 2020) and the potential to transform

instructional practices. With multimodal coaching (Leighton et al., 2018), coaches can support reflective thinking through video as teachers navigate their changes in perception.

The third tenet of this framework focuses on the relational and dialogic nature of coaching. Based on Vygotsky's (1978) principle that dialogue is a tool for learning within a professional community (Di Domenico et al., 2018; Janks, 2000), I will focus on the social construction of knowledge (Gonzalez et al., 2006; Robertson et al., 2020). As Costa and Garmston (1994, 2019) have foregrounded, coaching requires trust and rapport. Video collaboration (Ramos et al., 2021) will serve as a tool for reflection as they develop a coaching relationship (Cox, 2015; Knowles et al., 2014).

The upholding principle of this framework is the mediation of pedagogical practice. Mediation of practice is supported throughout the previous tenets of the framework: 1) the relational process of coaching, 2) determining teacher efficacy and capacity for new learning, and 3) through a change in perception using reflection. Informed by sociocultural theory (Vygotsky, 1978), I will be examining how coaches nurture the five states of mind (Costa & Garmston, 1992, 2019; Edwards & Newton, 1995) and perceptive thinking (Costa & Garmston, 1994, 2019) with the tools of video and reflection. Understanding that knowledge is socially constructed (Anderson, 1989; Göker, 2020; González et al., 2006; Robertson et al., 2020), with the use of tools (Vygotsky, 1978), coaches can begin to mediate a change in practice. While recognizing there are multiple modes available to mediate action (Kress, 2011; Wohlwend, 2011), technology (Bates, 2015; Gröschner, 2015) will play a substantial role in the ideological practices (Street, 1995) of a virtual literacy coach's work.

In conclusion, the theoretical framework for this study is based on the principle of being able to mediate pedagogical practice. Teacher capacity and efficacy directly influence the

abilities of the person being coached to secure new learning. The coach and coachee's dialogic and relational interactions will be the foundation for which a change in practice can potentially occur. This framework will help explore the relational and professional learning aspects of virtual literacy coaching.

Positionality

As a complete participant, I will fully engage in this study. Positioned as a female educator, researcher, and literacy coach, I will participate as one of two coaches in this ISD. Through reflexivity, I will establish my own bias, values, and experiences and try to present the data from an emic perspective. I must acknowledge that I work as a virtual literacy coach and am deeply invested in the coaching process. I have sought training and research to understand and refine my practice. As a coach, I bring a specific knowledge base and many years of teaching experience. Recognizing these experiences and the significance of maintaining a collaborative and non-evaluative relationship, I seek regular opportunities to have reflective conversations with my colleagues to address methods for improving my coaching conversations.

Growing up, I moved often and attended many different schools across the United States before graduating high school. This experience has broadened my understanding of how local communities and schools can differ across regions, reinforcing the importance of incorporating a community's funds of knowledge and local context into my work. As an adult educator, I have continued this pattern of moving districts and can see how these experiences have shaped my understanding of how culture and community influence classroom instruction. I value the perspectives of the other participants and understand how their views can shape classroom implementation of research and the academic growth of their students.

With eighteen years of experience in education, I have worn many hats. As a student teacher in a middle school science classroom, I have witnessed the change in academic discourse and how exposure and experience can significantly impact understanding. As a high school algebra teacher, I have watched students struggle to work through written problems, not because of their mathematical wisdom but due to the level of discourse used. As a high school special education teacher, I have worked with students getting ready to graduate but struggling to read beyond an elementary level. Working with older students in this capacity greatly influenced my desire to learn more about the processes and connections in early literacy learning. In the middle of my educational career, I shifted my focus toward early childhood and worked in a few K-3 settings. Most recently, I was a kindergarten and young 5s teacher. Working with beginning readers, I found my passion for early literacy. I have grown to understand that there are multiple literacies, all students possess various strengths, and many different journeys for learning to read.

Thinking about my own reading experiences, I was not always an avid reader. I have struggled with the concept of spelling all my childhood and well into my academic writing as an adult. Having experienced the disappointment of an intellectual struggle, I feel and relate to those struggling to meet proficiency in the classroom. These experiences have led me to explore various reading strategies through research. As a literacy coach, I have had multiple opportunities to attend workshops and lectures that have increased my understanding and capacity for early literacy pedagogy. I have also trained in adult learning through my work with Cognitive Coaching (Costa & Garmston, 1994). These experiences have helped guide my work with adult learners and continued to frame this study.

Organization of the Study

This case study focused on one northern, rural educational service district's K-3 virtual literacy coaching program. As a practitioner in this study, I examined my practice and the practice within my work community. Campano (2007) writes that as a component of teacher inquiry, educators are "envisioning and working toward more just social and educational arrangements by affirming the very experiences that brought us to inquiry... those of our students" (pp. 117-118). While I examined the experiences of teachers, not students, I think this consideration carries over. This case study examined the professional and relational factors of one virtual literacy coaching model. Merriam (1998) expands upon the defining features of a case study as being within a bounded system, stating "the case as a thing, a single entity, a unit around which there are boundaries" (p. 27). Here that boundary is within the context of a single ISD. They also define a case study as having unique or distinctive attributes (Merriam, 1998). I would posit that this virtual literacy coaching model is unique as it is being used as a tool to transcend issues of time, space, and resources. ²

Relevant Terms, Defined

Case Study: A holistic description and analysis of a specific case (persons, process, event, program, etc.) within real life, contemporary context, or setting (Merriam, 1998)

Capacity: The teacher's knowledge, skills, and dispositions (McDiarmid & Clevenger-Bright, 2008; NCATE, 2003)

Intermediate School District: A group of school districts that share resources. In this study, the ISD shares literacy coaches across independent school districts.

² Chapter 3 explains further how this case study utilizes multiple forms of data and will focus on themes throughout the layers of reflexive thematic analysis.

Efficacy: Teacher efficacy will be defined as the teacher’s belief in their ability to change the educational outcome (Fives, 2003; Tschannen-Moran et al., 1998).

Literacy Coaching: “Literacy coaching is a form of high quality, job-embedded, professional learning” (MDE, 2018). A literacy coach collaborates with teachers to improve literacy knowledge and teacher instruction.

Pedagogy, Pedagogical Practice, Mediated Pedagogy: The methods a teacher uses to share conceptual knowledge while teaching. The mediation of pedagogy refers to the intervention that takes place to transform teaching practices.

Virtual Literacy Coaching: A form of literacy coaching that utilizes a digital space or tools, such as video lesson recording or video conferencing

CHAPTER TWO: Review of the Literature

Literacy coaching is an individualized, job-embedded form of professional development that can boost teacher knowledge and correlational student reading achievement (MDE, 2018). Literacy coaches work as change agents by modeling classroom lessons, providing instructional feedback, analyzing student data, and partnering with schools to build a more robust reading program. Substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman et al., 2017; Wetzel et al., 2020).

Moreover, one could suggest that schools with access to an early literacy coach are better positioned to improve students' early reading skills. Consequently, educational stakeholders must recognize how inequitable situations in small, rural school districts (e.g., funding, limited personnel, etc.) may hinder access to literacy coaching resources. Limiting coaching resources could directly impact teachers' pedagogical growth and restrict correlational student reading achievement for rural students. By modifying the literacy coaching platform and introducing a virtual literacy coaching model, school districts may be able to transcend issues of time, space, and resources.

Through the literature, I examined hegemonically designed professional learning models and explored the potential for virtual literacy coaching as an equitable model that provides job-embedded, individualized professional development. While examining the literature, I had the following questions in mind: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? It

is important to note that this chapter is not an exhaustive list of the literature but rather a brief synopsis that will allow the reader to understand the basis of my research.

This literature review is based on peer-reviewed scholarly articles published from 2017-2022, except seminal work or sources that renew a theoretical concept. Resources were primarily accessed using Google Scholar, ERIC, and ProQuest. Search terms included: *virtual coaching*, *literacy coaching*, *early literacy*, *multimodal coaching*, *relational learning*, *teacher efficacy*, *professional learning*, *teacher perceptions of coaching*, *funds of knowledge*, *coaching effectiveness*, *cognitive coaching*, *rural school districts*, *rural teachers*, and *Michigan early literacy*.

This chapter will highlight existing literature on literacy coaching, virtual literacy coaching, and the connections to my theoretical framework. It begins by exploring the literature on professional learning and the significance of utilizing virtual tools for learning. This chapter will outline how coaching can mediate pedagogical transformation through three tenets: using reflective practices, building teacher efficacy, and examining relational interactions between a coach and teacher (see Figure 1.6). While virtual literacy coaching is a relatively new venture, there is literature to consider regarding facets of teacher learning (i.e., efficacy, capacity, and transferability of knowledge) and student outcomes (i.e., academic tasks and student data). Additionally necessary is an examination of virtual literacy coaching for equitable delivery and access to learning. Finally, this chapter will discuss the need for further research on the relational and professional factors influencing K-3 teacher instruction as teachers utilize a virtual literacy coaching model.

Individualized Professional Learning: Literacy Coaching

Professional learning models are primarily hegemonic, standardized practices that rarely consider teachers' existing strengths or funds of knowledge (Banegas, 2020; Moll et al., 1992). As the education pendulum swings and legislation reinforces one-size-fits-all practices, professional learning has become mass-produced and less connected to cultures and school communities. It is paramount to recognize that classrooms, teachers, and students have many different strengths and funds of knowledge (Moll et al., 1992), which can be enhanced through personalized learning models. Literacy coaching is an individualized, job-embedded form of professional development that can help boost teacher knowledge and performance. Substantial research supports literacy coaching as an effective way to introduce research-based teaching strategies into classrooms (Byington & Kim, 2020; Johnston, 2022; Vikaraman et al., 2017; Wetzel et al., 2020).

During individualized coaching, literacy coaches can partner with a teacher and focus on a specific area of need, considering the teacher's strengths and funds of knowledge (Moll et al., 1992). Through individual, goal-centered coaching cycles (Walpole & McKenna, 2013, p. 210; see Figure 1.3), teachers can collaborate on current research and reflect on a pedagogical performance that will support their students' learning. Coaching cycles allow teachers to choose an area of focus that interests them. Hudson and Pletcher (2020) stated that having conversations "based around the teacher's areas of concern are the most impactful on classroom literacy practices because they demonstrate that the teacher's voice matters" (p. 62). This individualized learning approach considers strengths, interests, and funds of knowledge, situating the learner at the center of the professional learning model.

When looking at the effectiveness of literacy coaching, one large-scale meta-analysis (Kraft et al., 2018) suggests that coaching can have a significant impact on teacher instruction.

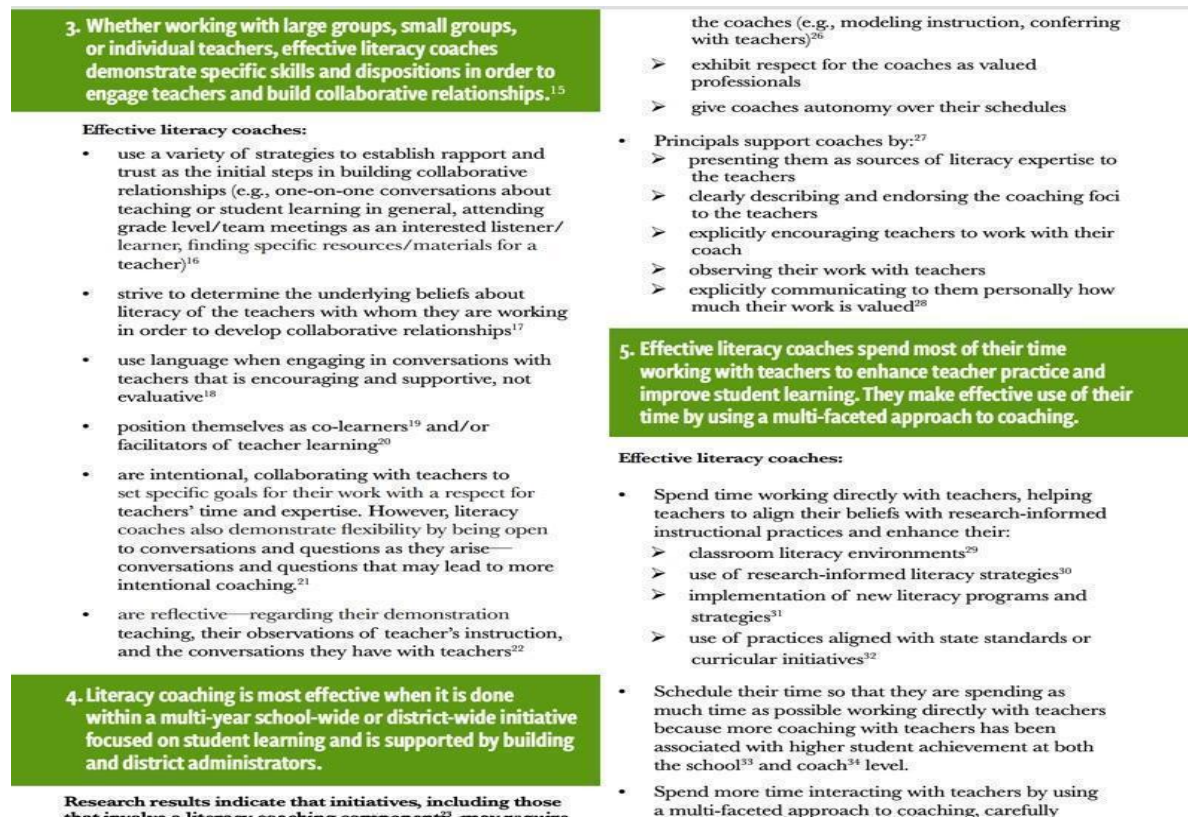
This study found great variability in effects across different coaching programs, specifically when considering factors such as size. The results suggest that coaching seemed most effective when implemented on a smaller scale (Kraft et al., 2018, p. 561). Consequently, by increasing the amount of teacher-coach collaboration and individualized support, coaching has the potential to be more effective. Time spent with a coach is essential when looking at how coaches in rural areas accommodate issues of time, space, and resources to ensure maximum individualized support.

Literacy coaches across the United States wear many educational hats and have different roles or expectations depending on systemic models (see Figure 1.1). Some coaching models allow coaches to work directly with students and, as a result, have less time to spend with teachers. One qualitative study examined literacy coaches' varying roles and expectations (Woodward & Thoma, 2021). Using survey and interview data, the researchers explored how teachers and principals expected literacy coaches to engage in their coaching. In addition, they compared these expectations to the various levels of training the coaches received. To improve coaching effectiveness, the results indicate the need to establish defined roles and expectations at the systemic level (Woodward & Thoma, 2021). Developed in partnership with MAISA, GELN, and Michigan's Early Literacy Task Force (2016a), the *Essential Coaching Practices for Elementary Literacy* (Essentials) document guides the current roles and expectations of Michigan's ISD early literacy coaches (see Figure 2.1). This document is a compilation of research highlighting seven research-supported literacy coaching practices to enhance literacy instruction and student reading achievement (MAISA, 2016a). This research has defined roles and expectations for ISD coaches throughout Michigan. In partnership with the theoretical

framework (see Figure 1.6), MAISA’s (2016a) research document supports using reflective practices, building teacher capacity, and coaching through relational interactions.³

Figure 2.1

Sample of Elementary Coaching Essentials



Note. From “Essential Coaching Practices for Elementary Literacy,” by Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016 (<https://www.gomaisa.org/downloads/geIndocs/essentialcoachingpractices.pdf>) Copyright 2016 by MAISA. Reprinted with permission.

For this research, it is crucial to define coaching expectations and the time Michigan ISD early literacy coaches spend with teachers. Literacy coaches have varying roles and responsibilities (e.g., large group professional development, teacher coaching, working with students, etc.). When outlining the roles and expectations of ISD literacy coaches (see Figure

³ This document will be explored further in 2.3 Virtual Literacy Coaching for Improved Pedagogical Performance.

1.1), time spent working with teachers is a crucial factor (MAISA, 2016a, p. 3). The Michigan Department of Education encourages a coaching model highlighting teacher and coach collaboration encompassing roughly 75% of the coach’s workday (see Figure 2.2). The remaining time would be spent in areas of literacy leadership (e.g., committee member, presenter, etc.).

Figure 2.2

MDE Literacy Coaching Model



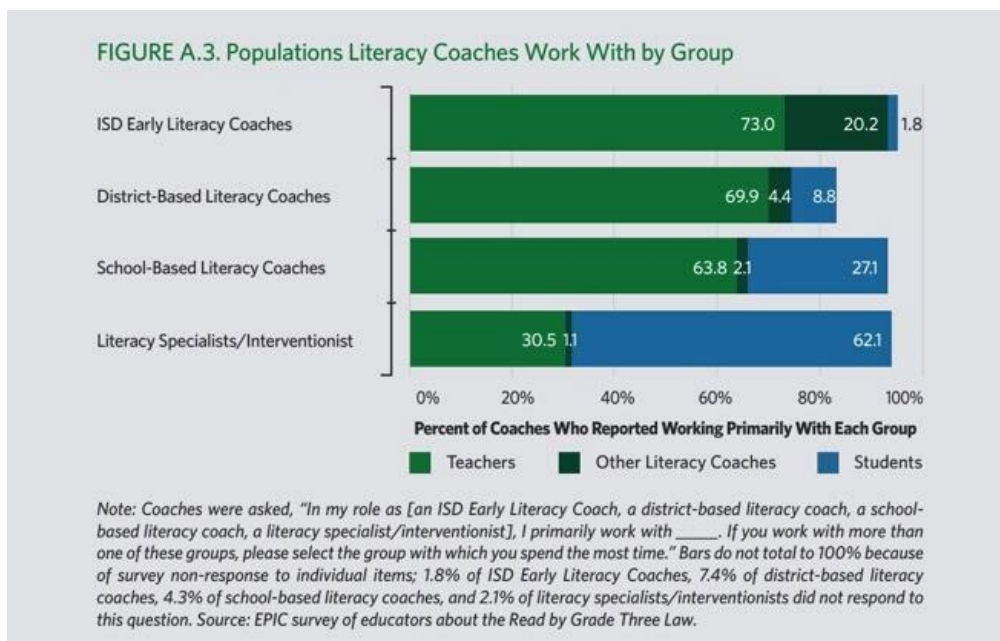
Note. From “Michigan Department of Education Early, Literacy Coaching Model,” by MDE, 2018 (https://www.michigan.gov/-/media/Project/Websites/mde/Literacy/Read-by-Grade-3-Law/MDE_Early_Lit_Coaching_Model.pdf?rev=8a3114e57e76420280e6bcde2294e18f) In the public domain.

One large-scale study looked closely at the literacy achievement of students living in Michigan related to the Read by Grade Three Law and Michigan ISD literacy coaches (Strunk et al., 2022). The researchers examined interviews, surveys, and administrative data through a

mixed methods design. The results suggest that Michigan ISD early literacy coaches spend most of their time directly coaching teachers (Strunk et al., 2022, p. 70; see Figure 2.3). These results and clearly defined roles guided by the coaching Essentials (MAISA, 2016a) document suggest Michigan ISD early literacy coaches are positioned to be most effective. Time spent directly with teachers allows coaches to narrow in on individual strengths and needs through the coaching process.

Figure 2.3

Michigan ISD Literacy Coaches Time with Teachers



Note. From “Michigan’s Read by Grade Three Law: Year Two Report,” by Strunk KO, Zhu Q, Utter A, et al., EPIC, 2022 (<https://epicedpolicy.org/rbg3-year-two-report/>) Copyright 2022 by EPIC. Reprinted with permission.

Literacy coaching is a highly effective method of professional learning. When organizations set clear roles for coaches that maintain the fidelity of coaching, there are opportunities to improve teacher practice and correlational student reading achievement. Time spent directly with teachers allows coaches to narrow in on individual strengths and needs

through the coaching process. Nevertheless, the question for this virtual literacy coaching study remains, what happens when we move this well-defined personalized coaching method into a virtual space?

Virtual Tools for the Co-Construction of Knowledge: Virtual Literacy Coaching

Based on Vygotskian principles, sociocultural theory asserts that learning is inherently social and knowledge is socially constructed (Vygotsky, 1978). According to Vygotsky, the zone of proximal development establishes a boundary where learners can acquire knowledge independently. Then, it posits that the learner will need to collaborate with others or tools to move beyond that boundary and achieve their ultimate level of understanding. These tools are considered culturally and linguistically situated. When considering Vygotsky's reference to how tools mediate thinking and the construction of new knowledge, coaching researcher Bates (2015) examined the various systems used for communication and highlighted the use of technology as a tool. While identifying psychological tools used for learning in a virtual coaching space, Bates (2015) identified a computer and a platform as tools to mediate thought. Researchers Thompson and Kosiorek (2017) expand upon virtual tools and suggest that many technologies will support learning through virtual coaching. These different methods and technologies can mediate pedagogical practices through a virtual literacy coaching model.

Considering the increased use of technology, virtual literacy coaching has become increasingly popular (Ippolito et al., 2021). Virtual coaching has become a new normal as districts seek to save money and time on professional learning (Gentry et al., 2008; Hur & Brush, 2009) or respond to the Covid-19 pandemic. Emerging research suggests that virtual coaching is as effective as in-person coaching (Bates, 2015; Johnston, 2022; Kraft et al., 2018; Vernon-Feagans et al., 2015). One potential concern about utilizing a virtual space is its overall

effectiveness for coaching. Researchers Vernon-Feagans et al. (2015) studied two randomized control groups, one providing face-to-face coaching and the second using a webcam. This study was in a rural setting, where coaching took place in kindergarten and first-grade classrooms. At the end of the study, struggling readers in both coaching models made similar literacy gains. While these gains cannot be deemed correlational to coaching, they suggest that face-to-face and virtual coaching provide similar outcomes. Kraft et al. (2018) completed a meta-analysis of coaching interventions, examining both in-person and virtual coaching models. They found no statistical difference in the effect size of both groups. More recently, Johnston (2022) narrowed in on the application of virtual coaching in an early literacy setting. Utilizing technology like Zoom during the Covid-19 pandemic, Johnston (2022) studied the effects on early reading skills as coaches connected virtually with preschool classroom teachers. The coaches' goal was to deliver the same strengths-based early literacy coaching previously delivered face-to-face while also accounting for the lack of classroom access. Johnston's (2022) study indicated that students made gains across their early literacy targets. While again, it is not proven that these gains resulted from virtual coaching technologies, it provides a sufficient example of quality literacy coaching in a virtual space. Recognizing virtual tools for the co-construction of knowledge offers opportunities to explore virtual literacy coaching for improved pedagogical performance.

Virtual Literacy Coaching for Improved Pedagogical Performance

The following research will be examined using a sociocultural lens, where literacy coaching is viewed as a dynamic social process that values knowledge and shared understandings (Vygotsky, 1978). The premise of sociocultural theory emphasizes that knowledge and shared understandings are socially created (Vygotsky, 1978). This social and cultural understanding frames the co-construction of knowledge between teachers and coaches as

a relational concept. Within sociocultural theory, the zone of proximal development is defined by Vygotsky (1978) as the act of what a person can achieve alone compared to what the same person can accomplish with the support of others or tools. Along with virtual tools, this study will also examine how cultural and relational interactions mediate the co-construction of knowledge. The coaching research has been organized into three facets that connect to this study's theoretical framework and research questions: (1.) Perception and Reflection- How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic- What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity- What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? These tenets come together as coaches collaborate with teachers to mediate pedagogical transformation (see Figure 1.6). The following sections will explore each facet independently and connect the theoretical framework to a virtual literacy coaching model.

Perception and Reflection

While this study will not examine the cognitive transformation that may occur within other psychological theoretical models, it will explore the concept of reflectivity related to social and cultural interactions between a teacher and a virtual literacy coach. For this study, reflectivity is how a participant reflects on their practice (Malthouse, 2014). The coaching Essentials (MAISA, 2016a) document states that effective literacy coaches are flexible and reflective (p 3). Therefore, reflectivity is connected to both the coach and the teacher. Mezirow (1981) suggests that an adult's habitual ways require reflectivity as part of the transformation process. While Mezirow's ideals are founded in transformative learning theory, I view these reflective partnerships as socially constructed (Vygotsky, 1978).

One way to encourage reflectivity is through interactive conversations (Costa & Garmston, 2019) that create a space for mediating pedagogical transformation. By reflecting with a coach, teachers examine current pedagogical practices as they build on their professional identity. Coaching expert Cox (2015) suggests adult learners have a preconstructed set of knowledge based on frames of reference that were developed by their lived reality (p. 6). These socially constructed frames of reference are how perspectives transpose into individual meaning-making. Once these frames have been established, Cox (2015) suggests that adults will filter through information and reject ideas that do not match their preconceived notions (p. 6). When adult learners hesitate to make a change, coaches can use conversation maps (Costa & Garmston, 2019; see Figure 1.4) and relational interactions (Vygotsky, 1978) to build on moments of reflection.

Looking closer at using a virtual online platform for reflection, the use of video can assist in building reflective practitioners (Leighton et al., 2018). It is often said that video is where reality and perception meet. Athletes use video to record and carefully watch their physical performance. They select areas to improve based on video footage. Watching the video beside a coach, athletes can navigate the difference between perception and reality while highlighting goal areas. Teachers can also utilize this practice to improve their reflectivity as they view their literacy instruction. Virtual literacy coaching allows teachers to improve instruction by using video to reflect on points of inquiry (Leighton et al., 2018). These strategies can create awareness of pedagogical practices that may otherwise go unseen. Cox (2015) mentions that highly influential individuals examine their understandings in collaboration. By coaching through video, teachers are building on their reflective practices.

Recent research supports the use of video for reflecting on teaching and coaching. One qualitative study examined a collaborative web-based platform used for virtual literacy coaching and its implications for reflective practices. The findings suggest that using a virtual space allows for opportunities to build on new engaging practices due to deep reflection (Bates, 2015). More recently, Blumke (2021) utilized a collaborative virtual coaching model to meet with teachers around video-recorded lessons and noted that the asynchronous format of a virtual platform allowed for more profound reflection time. This encourages a closer look. Does virtual literacy coaching provide a space to increase reflectivity by encouraging reflective practices for pedagogical transformation? In addition to recording a teacher's lesson, video can also record coaching conversations. One study used video to record coaching conversations. Through video, the coach could study the art of their conversations and reflect on their practice (Hudson & Pletcher, 2020). Here, video reflection was encouraged for the classroom teacher and the coach, creating a coaching system of reflective practices.

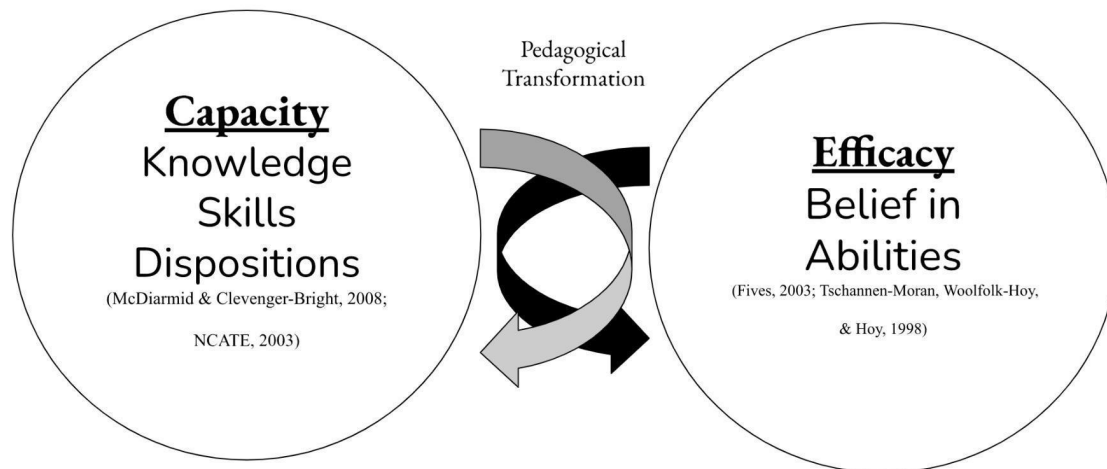
Building Efficacy and Capacity

Coaches often work to build teacher efficacy and nurture capacity when considering the transformation of teaching practices. The purpose statement of the coaching Essentials (MAISA, 2016a) document states, "Effective literacy coaching supports teachers to navigate the daily challenges they face in their classrooms successfully. As a result, instructional capacity and sustainability within the schools increases" (p. 1). Teacher efficacy and capacity go hand in hand throughout the literature (see Figure 2.4). This research defines teacher capacity as knowledge, skills, and dispositions (McDiarmid & Clevenger-Bright, 2008; NCATE, 2003). It is also important to note that teacher capacity is assumed to be unlimited. Teacher efficacy is defined as the teacher's belief in their ability to change the educational outcome (Fives, 2003; Tschannen-

Moran et al., 1998). While leading efficacy researchers Tschannen-Moran et al. (1998) initially modeled teacher efficacy as a cognitive task, more recently, the work of researcher Fives (2003) has situated teacher efficacy in partnership with a social context. Fives (2003) states that teacher efficacy directly results from teachers' pedagogical knowledge and beliefs (pp. 96-97). Through social interactions, coaches can build pedagogical knowledge and nurture teacher efficacy.

Figure 2.4

Capacity and Efficacy Model



Teachers have a vast capacity for knowledge. González et al. (2006) established a participatory ethnography based on the Vygotskian premise that knowledge is created through language and culture. In doing so, they posit that their goal was not to transmit knowledge but to discover what knowledge already exists. This perspective values the individual's funds of knowledge, stating, "People are competent, they have the knowledge, and their life experiences have given them that knowledge" (González et al., 2006, pp. ix-x). While this ethnography focused on students' funds of knowledge, one could assimilate this concept to adult learners.

This holistic view of knowledge relates to teacher capacity as well. Cognitive Coaching (1992) utilizes conversational tools to facilitate growth in efficacy. Founded on a set of assumptions, Cognitive Coaching aims to produce “self-directed persons with the cognitive capacity for excellence both independently and as members of a community” (Costa & Garmston, 2019, p. 16). Costa and Garmston (1992) emphasize that all individuals “continue to grow cognitively throughout our lifetime and that we all possess a vast reservoir of untapped potential” (p. 91). This vast capacity allows teachers to navigate the many complexities of their instruction, and it is the coach’s responsibility to build upon the participant’s repertoire of skills and knowledge.

As mentioned, coaching conversation maps are one tool for recognizing teacher capacity and improving efficacy. Using a mixed method quasi-experimental design, Göker (2020) studied the effects of coaching on the efficacy and identity of primary-level student teachers. This study utilized Cognitive Coaching conversation maps (see Figure 1.4) as part of the treatment. The results indicated that participants developed greater efficacy through reflective and planning conversations. Additionally, the participants learned how pedagogical practices could influence student learning (Göker, 2020, p. 19). Göker (2020) describes Cognitive Coaching as facilitating one’s potential or capacity. As a result of Cognitive Coaching, Costa and Garmston (1992) indicate, the intent is to build on the individual’s ability to self-evaluate and begin to modify themselves. This is important to explore as coaches work to increase teacher knowledge and mediate pedagogical practice.

Identity also plays a part in teacher efficacy. Göker (2020) delves into the professional identity of a student teacher, stating that social experiences shape identity. The social aspect of learning is essential to consider as teachers grow in their professional identities through

coaching. Linking the shift in teacher identity back to a teacher's increased pedagogical knowledge can potentially facilitate a teacher's growth within professional communities. Functioning within multiple professional communities may, in turn, build upon teacher efficacy. Professional communities will be explored further below in the relational and dialogic section.

Efficacy and capacity continue to surface in the literature as coaching moves into a virtual space. As mentioned previously, in two randomized control trials, Vernon-Feagans et al. (2015) examined the use of virtual coaching in a rural kindergarten and first-grade setting. Literacy coaches provided services in both face-to-face and web-based formats. While both groups made learning gains, Vernon-Feagans et al. (2015) state that "results suggested greater benefits with webcam literacy coaching for teacher fidelity and efficacy" (p. 135). This suggests that video conferencing and reflective practices may allow for increased teacher efficacy. In a recent case study, "telecoaching" addressed local obstacles such as travel distance and time (McDaniel & Bloomfield, 2020). This study provided web-based coaching to teachers over one year. The results suggest that telecoaching was an effective alternative to in-person coaching. This study also highlighted an increase in teacher efficacy. Synthesizing these results, it appears that a virtual coaching environment can also support growth in teacher efficacy.

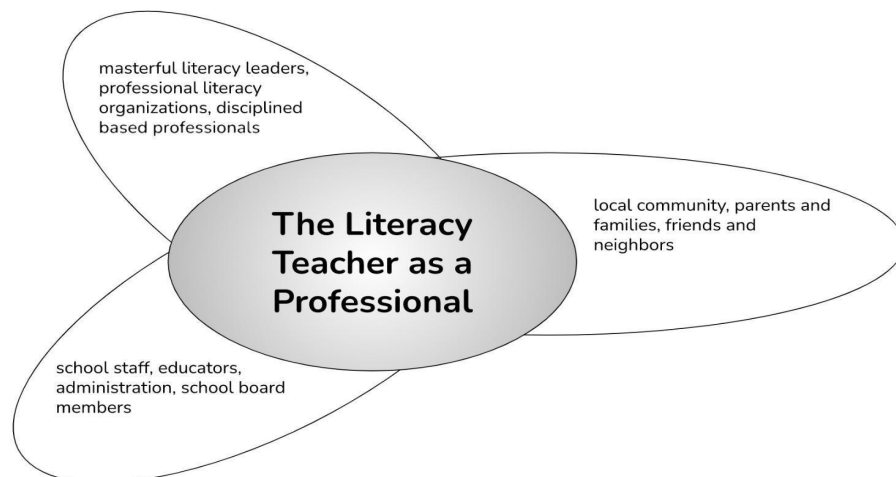
Relational and Dialogic Learning

Relationships are at the center of effective coaching models. The coaching Essentials (MAISA, 2016a) document states that effective coaches establish rapport and trust while engaging in non-evaluative conversations (p. 3). Robertson et al. (2020) cite expert coaching researcher L'Allier et al. (2010) to emphasize that relationships between a coach and coachee are paramount for effective literacy coaching. The concept of relational learning relies on discourse. Vygotsky (1978) considers dialoguing a tool for constructing new knowledge. While coaching is

regarded as a dialogic and relational process, it is crucial to highlight that groups of people within communities often have shared values and understandings. This is an important consideration when thinking about the use of discourse, as it can situate you in different professional communities. These professional communities use language in a socially constructed way to include and build on shared ways of thinking (see Figure 2.5). Di Domenico et al. (2018) expanded upon how a single teacher could have memberships in several communities, “For example, a biology teacher may be a member of a Discourse community of science teachers, a Discourse community of biologists, or a Discourse community of educators” (p. 82). They emphasize that regardless of the communities to which they belong, the teacher’s values and histories can impact the knowledge and processes that ultimately facilitate learning. This is significant when gaining insight into how the coach and coachee’s memberships may or may not influence the construction of new knowledge and shared ways of thinking.

Figure 2.5

Example of Literacy Teacher’s Professional Communities



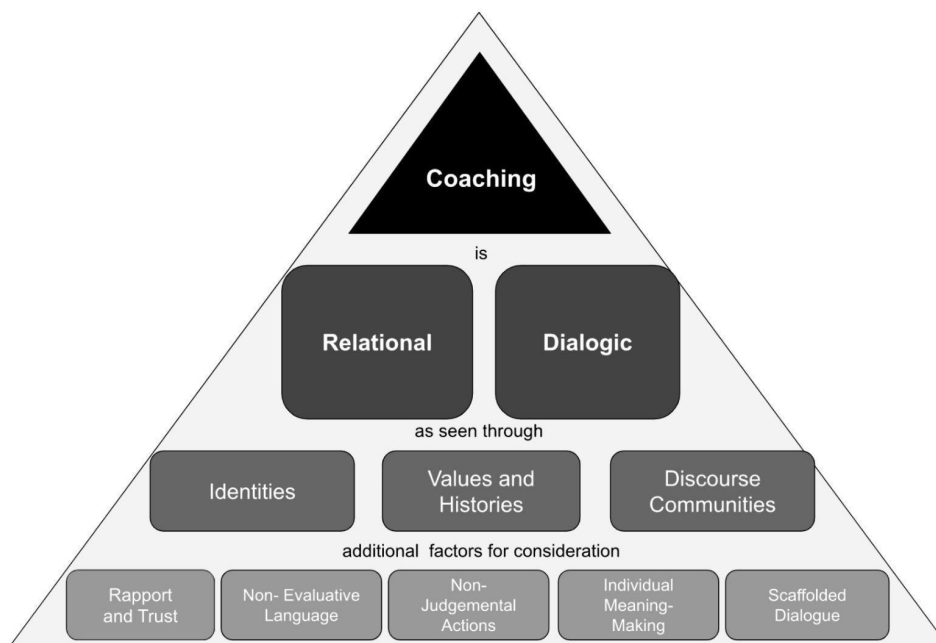
A literacy coach's multiple roles and responsibilities are also meaningful when considering professional communities. Woodward & Thoma (2021) state that “Literacy coaches are required to take on many roles as they work to build relationships to draw out the best in teachers” (p. 73). This relational learning plays a crucial role in the work of educators and literacy coaches when trying to build capacity for change. Literacy coaches must also know how values and histories influence a teacher’s identity as they try to share new strategies. These dialogic and relational interactions can potentially support teachers as they grow in their knowledge and gain access to unique professional communities.

Recognizing that literacy coaching is grounded in relational interactions allows for the exploration of positioning. Robertson et al. (2020) state, “A relational perspective in coaching is one in which meaning-making is negotiated in a dialogic flow between coach and teacher, with both participants positioned as integral” (p. 58). When considering the histories of others, Garmston et al. (1993) suggest that the behavior of teachers, including reflectivity, could be improved if they were coached in a trusted atmosphere. This highlights the necessity for a non-evaluative coaching model. Consequently, it is critical to recognize that coaching is different from the act of consulting. While consultants are often positioned in a place of power or higher knowledge, coaches and teachers negotiate equal positioning through dialogic interactions. Robertson et al. (2020) attribute coaching outcomes to a connection with the participant’s relational space, also defined by their sociocultural identities. They emphasize that these identities take place in positioning literacy knowledge between participants. While literacy coaches often have access to literacy-specific discourse, it may be necessary to scaffold dialogue to co-construct higher learning levels. Cognitive Coaching (Costa & Garmston, 2019) allows for opportunities to improve efficacy through dialogue, where new identities are nurtured in a non-

judgmental and non-evaluative way. Individuals can become reflective around their practice to promote pedagogical transformation. Emphasizing the importance of a non-judgmental structure allows for building a trusting relationship. Figure 2.6 maps some contributing factors influencing the relational and dialogic interactions needed for effective literacy coaching.

Figure 2.6

Relational and Dialogic Coaching Considerations



As members of different communities share specific values and learning is culturally and linguistically situated, it is necessary to recognize that coaching is a dialogic process that relies on relationships for learning. Robertson et al. (2020) built upon the premise that learning is inherently social and emphasized that there must be a relational factor within the coaching model to co-construct higher levels of learning. According to Vygotsky (1978), people can construct knowledge through social dialogue. Costa and Garmston (1994) take that one step further by highlighting the need for a trusting work culture, where norms and values influence teacher

performance. Specifically, between coaches and teachers, relationships are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L'Allier et al., 2010).

Teachers' perceptions of the coach and coachee's relationship can influence instructional implementation. Researchers Cutrer-Párraga et al. (2020) suggest the coaching process is multilayered and complex, requiring teachers to perceive the process positively and their coach to increase pedagogical capacity. It is essential to recognize that when teachers have a positive perception of coaching, there is an increased potential for transformation in pedagogy, including the use of research-based strategies and the probable impact on student performance (Holmes & Houston Independent School District, 2020). Therefore, coaching must be a relational action considering the participants' perceptions. This is important to examine as the discussion moves into a virtual literacy coaching model.

Recognizing that learning is inherently social and that highly effective teachers are relationship builders (Cornelius-White, 2007; Lysaker & Furness, 2011), stakeholders can take a closer look at the coach and coachee relationship in a virtual setting. One action research study used a mixed methods design to evaluate the use of technology for mentoring teachers (MacKinnon et al., 2019). While this study had unique circumstances, there were specific outlying concerns regarding the relational factors necessary for a coach and teacher. From the data responses, some coaches in this study suggested that before coaching virtually, the coach might want to designate in-person or face-to-face time to build relational trust in virtual coaching (MacKinnon et al., 2019). This is key as virtual literacy coaching may require a hybrid option for relationship building. Additionally, some teachers responded to the survey stating they were less intimidated by meeting with a coach virtually, making their position feel less authoritarian (MacKinnon et al., 2019). This virtual method may offer an advantage because coaching requires

equal positioning. With this information, it is essential to recognize that just as students in a classroom differ, teachers also have individual preferences and needs for professional learning. There are many layers to moving literacy coaching into a virtual coaching space, and the literature presents many relational considerations. There is a need to explore further participants' perceptions of relational and dialogic interactions in a virtual literacy coaching space.

Coaching Through Barriers

Recognizing that literacy coaching is an effective method for mediating pedagogical practice, the literature has also presented challenges for utilizing and accessing coaching. These challenges may present barriers to providing quality professional development and allow for opportunities to think carefully about the future of coaching research. This research is not practicing a critical framework; however, some elements of the literature call for careful consideration. The following sections will explore issues of power in coaching, simplifying access to coaching, and the multimodality of a virtual coaching model.

Positioning and Power Influence the Coaching Relationship

Within the coaching relationship, there are multiple opportunities for dialogic conversation with the desire to improve pedagogical instruction. As referenced above, coaching is a dialogic and relational practice. Trust and relational interactions are at the center of coaching partnerships. Creating a relational space is how the participants' experiences can intersect within social communities of power, vulnerabilities, tensions, and literacy learning. Coaching conversations can be a part of the transformation process. Researcher Anderson (1989) points out that in an educational space, there is a relationship between linguistic and nonlinguistic activity, language and perception, and how language is used in specific social contexts as a medium for power and control. By looking closely at the coach and teacher's dialogic interactions, there is

the potential to highlight the influence of power in the coaching relationship. Exploring the ties between knowledge, language, and power is essential when mapping a coach's and coachee's relational interactions. Critical researcher Janks (2000) expands upon this view of discourse by highlighting how language can position an individual in the interest of power, where power is seen as a negative due to the production of inequitable social relationships. While this study is situated in sociocultural theory and not critical theory, it is still crucial to recognize how power might influence the research questions, particularly regarding a teacher's perceptions of virtual coaching. Highlighting the significance of maintaining a non-evaluative, collaborative structure will help validate the experiences of the teacher participants in an equitable way.

Looking closely at the scaffolding of discourse and social communities of power, there are vulnerabilities and tensions within coaching. While trying to gain insight into the relational aspects of coaching, Robertson et al. (2020) suggest examining how “issues of positioning and competing logics for reading instruction (Woulfin, 2016) interface with, and sometimes confuse, the purpose, processes, and outcomes of coaching” (p. 59). Tools such as Cognitive Coaching position the coach as a collaborator (Costa & Garmston, 2019). However, not all coaching relationships are co-constructed. Wetzel, Maloch, and Hoffman (2020) emphasized that coaches could use tensions created by unequal power as a means for transformation. They persist that coaching looks at the relationships within sociocultural contexts and juxtaposes institutional demands regarding fidelity. This may position the literacy coach as an evaluator. They state that tensions can be reconceptualized and become spaces for individual and systemic transformation (Wetzel et al., 2020). This discussion leaves room to explore the positions and tensions within the relational process related to perceptions of virtual coaching. Future research could examine

the coach and coachee's relational interactions by illuminating the power structures within their coaching conversations.

Rural Schools Have Accessibility Problems

It is well understood that literacy coaching has supported teacher learning and growth for years. However, many districts struggle to allocate funds to support a full-time literacy coach. One cost analysis estimated that literacy coaching costs \$3,300 to \$5,200 per teacher (Knight, cited in Kraft et al., 2018). This leaves smaller or less funded districts in a situation where they need to be more innovative to achieve instructional gains. Small rural schools can lack the necessary funding and personnel for traditional professional learning, potentially resulting in fewer opportunities for these teachers to develop their instructional pedagogies. Large school districts have more opportunities to bring in curriculum trainers or utilize one or more building coaches, but small rural schools can lack funding for training and access to coaches. By continuing to offer professional learning in this traditional systemic model, there is the potential to under-serve teachers and students in smaller areas who do not have access to quality professional learning through onsite building coaches or trainers. This is an example of what researcher Mezirow (1981) calls a belief system or a false consciousness. Public schools have adhered to a professional learning system that does not account for the economic disparities between small rural schools and their larger counterparts. CohenMiller and Boivin (2022) call this social justice phenomenon a financial and social disbursement issue. Access to traditional professional learning, defined by a face-to-face learning format, may not be disbursed to rural educators. By continuing to offer professional learning traditionally, there is the potential to under-serve teachers who do not have access to quality professional learning. This access component could influence perceptions of professional learning in a virtual environment.

Johnston (2022) stated that virtual coaching made access to a coach more “accessible, convenient and timely for those teachers who had access to technology infrastructure” (p. 830). Johnston’s (2022) comments also highlight the necessity of access to technology.

As mentioned previously, an additional consideration when looking at rural environments is accessibility to resources that connect classroom teachers with a virtual literacy coach. Rural settings can lack the infrastructure to provide efficient technology resources. Recognizing that some rural areas have no internet connectivity, placing them at a significant disadvantage, is an important consideration when trying to improve accessibility to literacy coaching using a virtual model. While most rural schools have access to the Internet, it is also essential to consider that access to technology may be more complex than a yes or no answer. Researchers Rideout and Katz (2016) stated that “some rural areas lag behind in terms of having higher Internet speed” and “poorer quality cell service in remote areas” (p. 9). Stakeholders must also explore the capabilities of devices and types of connections that can have considerable consequences for rural areas and how these factors are likely to increase in areas of rural poverty (Rideout & Katz, 2016). Recognizing the importance of access to professional learning, utilizing technology could help increase pedagogical capacity.

When considering access, stakeholders must also consider personnel and time constraints. Teachers' time constraints have only increased during the pandemic, where communities see deficient substitute availability (Lambert, 2021). The teacher shortage has placed new teachers into classrooms without prior teaching experience or certifications, resulting in less knowledge of how to teach reading and an increased need for personalized training. The substitute shortage (Gonzales, 2017; Matthewson, 2017) has also placed additional time demands on our small schools. Teachers now cover absences during their planning periods, leaving little time for face-

to-face professional learning. Smaller rural districts need individualized professional learning that will meet teachers' current time demands. Virtual literacy coaching can serve multiple teachers from various communities, accounting for time, space, and limited resources (Leighton et al., 2018). Providing an asynchronous model for professional learning, such as virtual literacy coaching, opens the door for teachers to work around their schedules in understaffed districts.

Utilizing Technology Creates Additional Areas to Troubleshoot

While technologies allow for multiple modes of communication and learning, the multimodality of virtual literacy coaching presents opportunities for both access to coaching and technology barriers. Stakeholders need to juxtapose the virtual coaching models' desire to provide coaching to areas that might otherwise go without while also considering issues of access to digital resources. When considering the United States' communication standards, it is evident that they co-exist in a virtual space. Whether through social media platforms, a Google search for information, or working in a digitized environment, technology is no longer something to be wary of. With a new generation of digital natives entering the workforce, schools must adapt professional learning to meet unique learning styles. Many teacher colleges have already utilized reflective video practices to improve pedagogies during student teaching cycles (Juzwik et al., 2012; Körkkö, 2021). Virtual coaching could be an extension of reflective learning for practicing teachers. The Covid-19 pandemic has also transformed society's use of digital communication, including using platforms such as Zoom or Google Meets for social contact. This suggests that people are more equipped to utilize and access technology than ever. From teachers' use of virtual break-out rooms for small group instruction to teacher emojis for virtual classrooms, technology may no longer be a barrier to be wary of but an asset to be taken advantage of.

Additionally significant regarding the tools required for a virtual literacy environment is the connection to the theoretical underpinnings of the New Literacy Studies. Street (1995) describes the conceptualization of the New Literacy Studies as looking beyond the traditional reading and writing tasks and viewing literacy “as an ideological practice, implicated in power relations and embedded in specific cultural meanings and practices” (p. 1). Here it is crucial to lift the ideology of a virtual space for literacy pedagogical growth in connection to what Street (1995) refers to as the participants' communicative norms to gain authentic insight into the advantages or disadvantages of virtual coaching. While new modalities (e.g., video reflection, discussion boards, YouTube resources, Zoom conferencing, etc.) offer opportunities for further learning, exploring those modalities for access and understanding is also essential.

As mentioned above, additional considerations regarding the infrastructure and available technologies for participating in a virtual coaching model exist. Rural areas often lack high-speed internet and cellular service (Rideout & Katz, 2016). When looking closer at the technologies available for recording a lesson or placing a Zoom call, areas of rural poverty are less likely to have access to the much needed materials. This can directly influence a participating teacher's perceptions of their access to a coach and impact the relational learning environment.

Additionally important, technology opens the door to new professional communities. Access to a virtual community may not be not enough to function within it. Johnston (2022) states that one of the most significant challenges to virtual coaching is understanding and using the technologies themselves. This study suggests that literacy coaches provide professional development, training, and tech support as teachers utilize digital platforms for coaching. The time required for training or support might be challenging for some teachers or coaches. While

examining teachers' perceptions of virtual literacy coaching, stakeholders should also investigate the teachers' access to resources.

The Call for a Deeper Knowing

Literacy coaching is an individualized, job-embedded form of professional learning. Harnessing the funds of knowledge and interests of the teacher, a literacy coach can use relational interactions to develop teacher efficacy and increase reflective practices. Literacy coaching aims to improve teacher pedagogical performance and correlational student reading achievement. While access to literacy coaching is not always available, virtual literacy coaching may provide an effective alternative. Robertson et al. (2020) state that “powerful literacy coaching is also grounded in relationships, dialogic interactions, and teacher agency” (p. 58). Using this relational understanding, educational stakeholders should explore the use of virtual literacy coaching as it relates to the experiences of their participants.

This qualitative case study will focus on one northern, rural ISD's kindergarten through third-grade virtual literacy coaching program. Further research is needed to examine teachers' perspectives as they partner with a virtual literacy coach to improve pedagogical capacity and student academic performance. By examining the participants' perspectives, stakeholders will gain insight into the relational and professional factors influencing K-3 teacher instruction as teachers utilize a virtual literacy coaching model.

CHAPTER THREE: Methods

Statement of Purpose and Research Questions

Purpose Statement

This qualitative case study examined the relational and professional factors influencing literacy coaching in a virtual space. This work explored teachers' experiences as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic performance.

Research Questions

One aspect of coaching that influences the transformation of teacher practice is the tenet of relational trust. Relationships between coaches and teachers are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L'Allier et al., 2010). In addition to coaching being a relational process, it also requires opportunities for reflexivity (Garmston et al., 1993). Coaches can encourage the transformation of pedagogical practices through experiences that require reflection. Grounded in kindergarten through third grade teachers' experiences, I examined perceptions based on relational trust and reflection as participants utilized a virtual coaching space.

Many relational and professional factors influence K-3 teacher instruction as teachers utilize a virtual literacy coaching model. Three research questions have been developed by analyzing the literature to explore these factors further. I sought to understand: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?

Qualitative Approach: Case Study

This study will focus on one northern, rural ISD's K-3 virtual literacy coaching program. When connecting back to the theoretical underpinnings of sociocultural theory, Merriam's (1998) approach to a case study aligns well with the research questions and the desire to understand participants' perspectives. Merriam (1998) states, "The key philosophical assumption upon which all types of qualitative research are based is the view that reality is constructed by individuals interacting with their social worlds" (Merriam, 1998, p. 6). This aligns with Vygotsky's premise that learning is inherently social, and knowledge is constructed through interactions with others or tools. Merriam (1998) states, "Reality is not an objective entity; rather, there are multiple interpretations of reality" (p. 22). This is an important consideration when examining the experiences of others as they utilize a virtual coaching model. Individual experiences and perceptions are open to interpretations, including the researcher's. Through a qualitative instrumental case study design, I examined the professional and relational factors of one virtual literacy coaching model. This case study's many distinctive features are explored further below. I began this research by defining the specific case and outlining the bounded system. I then examined the instrumental value and described this single case in depth. The data in this case study was explored for themes. Those themes were then discussed in relation to the research questions to support the work being done within this case.

As presented previously, virtual literacy coaching is becoming increasingly popular, and there are varying systemic models of literacy coaching (Ippolito et al., 2021; see Figure 1.1). This study looked closely at one specific case, a northern, rural ISD's kindergarten through the third grade virtual literacy coaching program. This program exists within a bounded system. Merriam (1998) defines a bounded case as a study that can be described within specific parameters, such as location, participants, and timeframe (p. 27). Here the location is within the

context of a single ISD, encompassing ten different rural school districts. Three districts (four elementary schools) had participants selected for data analysis. The timeframe was situated within the 2020-2023 school years. The time, location, and participants of this virtual coaching program determined the boundaries of this study.⁴ An instrumental case study generates insight into a more significant issue by exploring a single case. Looking closely at this single case, which examines the perspectives of teachers participating within this bounded system, stakeholders may be able to connect to the unique assets of utilizing a virtual literacy coaching model. When stakeholders are accounting for issues of time, space, or resources related to literacy coaching, this instrumental case study may provide insight into the professional or relational aspects of a virtual literacy coaching model.

This case study utilizes multiple forms of data, including various artifacts and interview data. Examples of artifact data include classroom video recordings with time-stamped reflective dialogue between the coach and teacher, teacher reflection Google Forms, discussion board dialogue, goals, and reflective comments, shared educational learning resources, student instructional data for lesson planning or reflection, and video-recorded coaching conversations between the teacher and coach. In addition to artifact data, a 1-hour semi-structured interview was offered voluntarily for any teacher who had completed 4-6 cycles of coaching. Two classroom teachers elected to participate. The data was examined using reflexive thematic analysis (Braun & Clarke, 2021).⁵ When considering the entire case, a holistic approach to analysis was used. Merriam (1998) states, “One of the assumptions underlying qualitative research is that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed,

⁴ The setting and participants are defined further in section 3.4 Study Context.

⁵ Data collection and analysis are explored further in 3.5 Data Collection Procedures and 3.6 Data Analysis Procedures.

objective phenomenon waiting to be discovered, observed, and measured as in quantitative research” (p. 202). Each part of the data was analyzed in connection to the entire case. This approach to analysis allows stakeholders to explore themes in partnership with the relational and professional factors influencing K-3 teacher instruction as teachers utilize a virtual literacy coaching model.

This qualitative, instrumental case study examined the relational and professional factors influencing literacy coaching in a virtual space. The role of a literacy coach is to increase student reading achievement through the mediation of literacy pedagogy. When navigating a virtual literacy coaching model, stakeholders should carefully consider teachers’ perceptions. Relational factors can be examined through possible themes of support or disengagement. By analyzing participants' experiences, stakeholders can better provide recommendations to adjust virtual literacy coaching methods or modify the delivery of virtual coaching resources. This study explores teachers’ perceptions as they partner with a virtual literacy coach to improve pedagogical capacity and student academic performance. From examining the instrumental use of this case to exploring themes and possible assertions, this study provides a case-specific understanding of a bounded virtual literacy coaching model.

Role of Researcher

As a complete participant, I fully engaged in this study. Positioned as a female educator, researcher, and literacy coach, I participated as one of the two literacy coaches in this ISD. I have attempted to establish my own bias, values, and experiences through reflexivity and present the data from an emic perspective. As a practitioner in this study, I examined my practice and the practice within my work community. Campano (2007) writes that as a component of teacher inquiry, educators are "envisioning and working toward more just social and educational

arrangements by affirming the very experiences that brought us to inquiry... those of our students" (pp. 117-118). While I examined the perceptions of teachers, not students, there is a relationship between teachers' perceptions of coaching and improved teacher pedagogical performance. Literacy coaching aims to improve student reading achievement and relies heavily on the relational aspects of coaching to receive new knowledge. In my case, this study sought to understand the perceptions of those I work with to improve my coaching and enhance the virtual coaching model used within this ISD. These efforts are to improve the individualized, job-embedded professional learning opportunities provided to the districts in this case.

Study Context

The research context is aligned with the previously mentioned purpose and research questions. The following setting and participant descriptions consider the relational and professional factors influencing literacy coaching in a virtual space. This work explored teachers' perspectives as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic achievement. The research questions sought insight into (1.) How does classroom video reflection influence a professional learning model? (2.) What relational practices exist within a virtual coaching model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?

Setting

While this research examined the relational and professional factors that may influence virtual literacy coaching, the context explored a single case that utilized a virtual literacy coaching model. This qualitative case study closely examined one ISD's virtual literacy coaching program. The ISD is in a northern, rural area that expands over a large geographical region. The local context of this study suggested concerns about the equitable distribution of professional

learning opportunities for smaller rural schools (see previous chapters). Providing literacy coaching services through virtual modes connected coaches to multiple teachers from various districts, accounting for time, space, and limited resources (Leighton et al., 2018). As a method of transcending issues of time, space, and resources, this ISD instituted a virtual literacy coaching model.

This case study examined an ISD's virtual literacy coaching program as the literacy coaches provided resources and opportunities for reflection via a virtual platform. This ISD provides instructional resources to thirteen elementary schools across ten school districts. All school districts participating provided site permission and FERPA exemption via a Google Form (see Appendix II for Site Permission and FERPA Exemption forms). Three districts, four elementary schools, had participants selected for data analysis. This research also took place on a collaborative online platform called Sibme. In this virtual space, the teachers recorded their lessons, reflected on their practice individually, and collaborated alongside a literacy coach. Additional virtual tools included Zoom for video conferencing, video recordings for lesson reflection, and varying virtual instructional resources (e.g., YouTube instructional models, virtual articles, etc.). The virtual coaching setting and virtual tools are essential to consider alongside the research questions: (1.) How does classroom video reflection influence a professional learning model? (2.) What relational practices exist within a virtual coaching model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? All research questions are centered within a virtual coaching context.

Participants

This study considered teachers' perspectives as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic performance. This qualitative case study examined the interactions of two virtual literacy coaches and nine participating teachers. Participants were selected based on their participation and completion of four to six coaching cycles. Merriam (1998) refers to this selection criteria as purposive sampling, establishing information-rich data. All teachers participated in virtual literacy coaching between August 2020 and June 2023. Participants consisted of kindergarten through third grade teachers with varying experience levels and certifications. Of the nine participating teachers, three were new teachers with less than three years of experience. One teacher was new to her building but had previous experience teaching. Four teachers were considered veteran teachers, with multiple years in their current position. Three participants were considered literacy leaders in their buildings and had attended previous professional development days with the coaches. Three participants left the classroom the following year, with two becoming principals within their buildings and one becoming a title one coordinator. The coaches and teachers attempted to establish and maintain a collaborative, non-evaluative relationship. This positioning is an essential consideration in relation to the research questions (2.) What relational practices exist within a virtual coaching model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? These relational questions seek to understand a virtual coaching environment.

Additionally, teachers that participated in virtual literacy coaching were encouraged to reflect on their instructional practices and collaborate around individualized professional goals. Reflectivity is a crucial consideration for questions (1.) How does classroom video reflection influence a professional learning model? and (3.) What do teachers perceive to be the impact of

virtual coaching on student learning or teacher learning? The teachers' perceptions were key for examining the relational and professional factors influencing K-3 teacher instruction as teachers utilized a virtual literacy coaching model.

Teacher participants followed a specific coaching model introduced by the ISD (see Figure 1.3). Participants were solicited via email (see Appendix III Participant Consent). All coaching was voluntary. The teacher selected the coaching goals according to their needs and areas of strength. Teachers were asked to complete a pre-coaching Google form, which provided the coach with additional background and interest information. Voluntary participation and individualized goals were crucial concerning research questions (2.) What relational practices exist within a virtual coaching model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? The cycles used for coaching in this study followed a similar model to one suggested by Walpole and McKenna (2013, p. 210; see Figure 1.3). The cycle began with a pre-observation discussion, followed by a recorded lesson, an asynchronous discussion, and a final synchronous Zoom meeting to plan for the next cycle. During coaching conversations, the coaches used Cognitive Coaching discussion maps (Costa & Garmston, 2019; see Figure 1.4) to mediate thinking and reflection. Reflection was an essential consideration in relation to research questions (1.) How does classroom video reflection influence a professional learning model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? Through this virtual professional learning format, teachers recorded, watched, and critically reflected on their practice with a literacy coach. The coach may have offered research-based resources or suggestions to mediate pedagogical practices. Resources shared during coaching cycles were essential when reflecting on research question (3.) What do teachers perceive to be the impact of virtual coaching on

student learning or teacher learning? Cycles typically occurred within one to two weeks, and teachers voluntarily participated in four to six coaching cycles. This model was purposeful in establishing opportunities for relational and reflective practices.

Coaching practices were guided by the Essential Instructional Practices in Early Literacy developed in partnership with MAISA, GELN, and Michigan’s Early Literacy Task Force (2016: see Figure 1.5), centered on foundational print literacy skills. While providing current reading research, coaches mediated pedagogy through increased teacher knowledge and reflective coaching. As the researcher in this study, I participated as one of two literacy coaches. My primary role as a coach was to improve literacy instruction through teacher learning. I was not involved in any capacity with teacher evaluations. As a coach and researcher, I did not share information from our coaching collaborations with supervisors without the teacher's permission. Both ISD literacy coaches worked directly with teachers and did not spend time working individually with students (see Figure 2.3). These clear coaching expectations, along with the teacher roles mentioned previously, outlined the boundaries of this case.

Data Collection Procedures

As mentioned previously, this case study utilized reflexive thematic analysis to provide an in-depth understanding of the case. The study used multiple forms of data, including artifacts and interview data. It is important to note that artifact data was collected due to typical teacher and coach collaboration. In addition to artifact data, a 1-hour semi-structured interview was offered voluntarily for teacher participants. These multiple forms of data were collected and stored in a password-protected, encrypted virtual environment. Once data had been transcribed,

all identifiable markers were removed, and pseudonyms were used. Additionally, I removed all identifiers through video and screenshot data before disseminating this study's results.⁶

Artifact Data

When reviewing the varying artifact data, there were opportunities to examine the relational and professional factors influencing literacy coaching in a virtual space. This work explored teachers' perspectives as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic performance. The artifact data were obtained from a password protected virtual environment once, in December 2022. This data included what the teacher and coach voluntarily submitted into their virtual "huddle" for collaboration. A huddle is defined as a password protected virtual environment that houses video, discussion, and resources for learning. Examples of artifact data included classroom video recordings with time-stamped reflective dialogue between the coach and teacher, screenshots of discussion board dialogue, pre and post coaching Google Forms, goals and reflective comments, educational learning resources that were shared, student instructional data for lesson planning or reflection, and video-recorded coaching conversations between the teacher and coach. Videos were auto transcribed using Otter.ai software and reviewed multiple times for accuracy. All personal identifiers were removed, and pseudo titles were inserted into the transcripts. In addition to the video, all artifact data had personal identifiers removed and were stored in a password-protected space.

Semi-Structured Interview Data

In addition to artifact data, a semi-structured interview provided further insight into the perceptions of virtual literacy coaching participants. A 1-hour semi-structured interview was

⁶ See Table 3.1 for a timeline of data collection.

offered voluntarily for teacher participants who engaged in at least four coaching cycles (1-2 months) during the 2020-2023 school years. Two teachers participated in the interview. The semi-structured interview took place after completing the coaching process. The interview protocol used for the semi-structured interview was informed through an exploration of the literature and the research questions (see Appendix IV). Existing literature on literacy coaching (Bates, 2015; Byington & Kim, 2020; Vikaraman et al., 2017; Wetzel et al., 2020), the dialogic relationship (Lysaker & Furness, 2012; Robertson et al., 2020) and the theoretical underpinnings (Vygotsky, 1978) informed the development of the protocol. The three lead-off questions addressed specific domains (1.) Teacher-Coach Relationship (2.) Research Informed Strategies and (3.) Virtual Professional Learning. During the interview, follow-up questions expanded upon the participants' responses. Each interview participant met with the researcher via Zoom for approximately 60 minutes to answer three lead-off questions. These (about 60 minutes) Zoom sessions took place after the participant completed coaching. With the participants' permission, the interviews were video and audio recorded for analysis. The interviews were auto transcribed using Otter.ai software and reviewed multiple times for accuracy. All personal identifiers were removed, and pseudo titles were inserted into the transcripts. All interview data were stored in a password-protected space, and personal identifiers were removed.

Table 3.1

Data Timeline

Time Frame	Notes
September 2020- May 2023	Provide virtual coaching services
August 2022- September 2022	Obtain district site and FERPA exemption consent via emailed Google Form (see appendix I)

August 2022- June 2022	Obtain new and previous participant (2020-2022) consent to access digital coaching materials via emailed Google Form (see appendix II)
September 2020- March 2023	Share virtual coaching information (video and flyer advertisement) and continue to enlist new teachers
September 2020, 2021, 2022	Meet with principals and establish teachers that are interested (virtual or in person)
September 2020- December 2022	When participants finish 4-6 cycles of coaching, send an email requesting a voluntary semi-structured interview (see appendix III)
December 2022	Collect artifact data and begin analysis
January 2023-June 2023	Continue Coaching
January 2023- March 2023	Member check analysis prior to establishing final themes

Data Analysis Procedures

To establish themes through layers of analysis, the data was examined using reflexive thematic analysis (Braun & Clarke, 2006). Reflexive thematic analysis follows six phases of analysis (see Table 3.2). When considering the entire case, a holistic approach to analysis was used (Merriam, 1998). Each part of the data was analyzed concerning the research questions (see Table 3.3) and then in connection to the whole data set. Through the data analysis procedures, themes were explored in relation to perceptions of virtual literacy coaching.

Table 3.2

Six Phases of Reflexive Analysis

Analytic Phase	Description	Steps
Data Familiarization	<ul style="list-style-type: none"> ● <i>Immersing yourself in the data.</i> 	<ul style="list-style-type: none"> ● Reviewing Sibme huddles, Google Forms, and interview data ● Selecting meaningful data

		<ul style="list-style-type: none"> ● Transcribing video data using Otter.ai ● Uploading data to Atlas.ti
Generating Codes	<ul style="list-style-type: none"> ● <i>Developing codes and organizing the data</i> 	<ul style="list-style-type: none"> ● Developing in vivo and descriptive codes ● Review codes for similarities ● Defining codes ● Review codes in relation to research questions and overall data set ● Revisiting data for additional codes
Constructing Themes	<ul style="list-style-type: none"> ● <i>Sorting codes into meaningful groups</i> ● <i>Identify relationships and meanings</i> 	<ul style="list-style-type: none"> ● Mapping codes relationships using network function in Atlas.ti ● Review concepts and quotations within data
Reviewing Themes	<ul style="list-style-type: none"> ● <i>Reviewing entire data set for patterns</i> 	<ul style="list-style-type: none"> ● Review themes for authenticity using supporting data ● Refine themes as they relate to research questions
Defining and Naming Themes	<ul style="list-style-type: none"> ● <i>Identify the story of each theme</i> ● <i>Review the broader story of the entire study</i> 	<ul style="list-style-type: none"> ● Pull together the data that matches the identified themes to organize into a story
Report Production	<ul style="list-style-type: none"> ● <i>Presenting the story</i> 	<ul style="list-style-type: none"> ● Write the story in a connected and meaningful way

Note. Phases of analysis adapted from Braun and Clarke, 2006

Table 3.3

Data and Analysis Chart

Relational and professional factors influence K-3 teacher instruction as teachers utilize a virtual literacy coaching model.			
Research Questions	Analysis Questions	Data Source	Approach to Analysis
(1.) Perception and	<i>-What additional</i>	Semi-structured	Reflexive Thematic

Reflection: How does classroom video reflection influence a professional learning model?	<i>noticings were provided via video?</i>	interview Artifact data -classroom video recordings with time-stamped reflective dialogue between the coach and teacher -discussion board dialogue goals and reflective comments -video recorded coaching conversations between the teacher and coach -reflection forms	Analysis (Braun & Clarke, 2021) using descriptive and invivo codes (Saldaña, 2009) Direct interpretation, drawing meaning from a single instance (Merriam, 1998)
	<i>-How does the use of video observation differ from in person perceptions?</i>		
	<i>-Did recording a lesson provide additional opportunities for reflection?</i>		
(2.) Relational and Dialogic: What relational practices exist within a virtual coaching model?	<i>-What does the teacher value through virtual collaboration?</i>	Semi-structured interview Artifact Data -video recorded coaching conversations -discussion board dialogue -reflection forms	Reflexive Thematic Analysis (Braun & Clarke, 2021) using descriptive and invivo codes (Saldaña, 2009) Naturalistic generalizations for the purpose of sharing to a similar context (Merriam, 1998)
	<i>-Are there barriers for establishing trust?</i>		
(3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?	<i>-What are the impacts on teacher instruction?</i>	Semi-structured interview Artifact data -educational learning resources that were shared -student instructional data for lesson planning or reflection -video recorded coaching conversations -reflection forms	Reflexive Thematic Analysis (Braun & Clarke, 2021) using descriptive and invivo codes (Saldaña, 2009) Direct interpretation, drawing meaning from a single instance (Merriam, 1998)
	<i>-What are the impacts on student learning?</i>		

This research is primarily using an inductive approach. To remain transparent, a deductive approach may also be presumed as I relied on “existing research and theory (to) provide the lens through which we analyze and interpret data” (Braun & Clarke, 2021). The literature review has emphasized three tenets that have informed my research questions: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? I acknowledge how exploring the literature has informed how I approached the data. However, I claim an inductive approach as the literature has not established a pre-set of codes or a codebook to analyze the data. Instead, I relied on a more “flexible” thematic analysis approach recognizing that the coding process is integral to theme development (Braun & Clarke, 2021).

Recalling the six phases of reflexive thematic analysis (see Table 3.3), the analysis began with a familiarization of the data. There was an abundance of data available, so the selection process was important. This process included listening to the coaching conversations and interviews and reviewing the data sources with the research questions multiple times. This process required total immersion in the data through reading, writing, and reflecting before selection or code development. Embracing the digital transcripts provided by Otter.ai and screenshots, I initially highlighted topics that seemed interesting or relevant to the research. At this macro level, I was able to identify significant areas of text or screenshots that would be relevant to the research questions. I initially identified 24 pieces of data, including 20 artifacts and 4 interview related data pieces. Using ATLAS.ti, a qualitative software, I uploaded the data

as documents. Initially, the documents included: 2 teacher interview video recordings, 2 transcripts of the interview recordings, 2 coaching conversations, 2 classroom video lessons comments, 4 pre-coaching Google Forms, 2 final coaching Google Forms, 2 mid-coaching Google Forms, 1 virtual coaching flyer, 1 teacher reflection testimony, 1 early exit Google Form, 1 huddle image, 1 Getting to Know Me video comments, 1 Getting to Know Me video transcript, and 2 discussion board comments.

Once the documents were uploaded into ATLAS.ti, the second step included generating initial codes. Here my insight and context informed the data selection and the codes through multiple cycles of working within the data. Utilizing the software, I selected both teacher interview transcripts and created a word cloud of common language (see Figure 3.1). When viewing word cloud, I chose words that might be related to the research questions (e.g., time, reflection, idea, resource, etc.). These selections brought forward quotations from the interviews.

Figure 3.1

Word Cloud of Common Language in Teacher Interviews



After reading the quotations within the context of the interview, if they were related to the research questions, I created a code or selected an existing code. In vivo coding was important in this study, as the research questions required a direct connection to the participants' perceptions. When the wording within the quotation was not concise, I used descriptive coding to

highlight the connection to the research questions. Braun and Clarke (2021) state that coding is ongoing and organic, with no use of a coding framework. I wanted the data to reflect the participants' words accurately. Therefore, I used the participants' language to code when I could (in vivo). When the discourse did not provide a concise code, I used a descriptive code that aligned with the overall discourse.

During this process with the teacher interviews, I focused on individual statements. Codes were described as just one facet or observation (Braun & Clarke, 2021). During the next coding round, I moved into the individual pieces of remaining data. I used previously developed codes as they fit and created new ones as needed. Once all the data had been coded, I reviewed the codes and returned to the research questions. I noted that there were not many instances of codes to provide enough information regarding relationships between the coach and teacher.

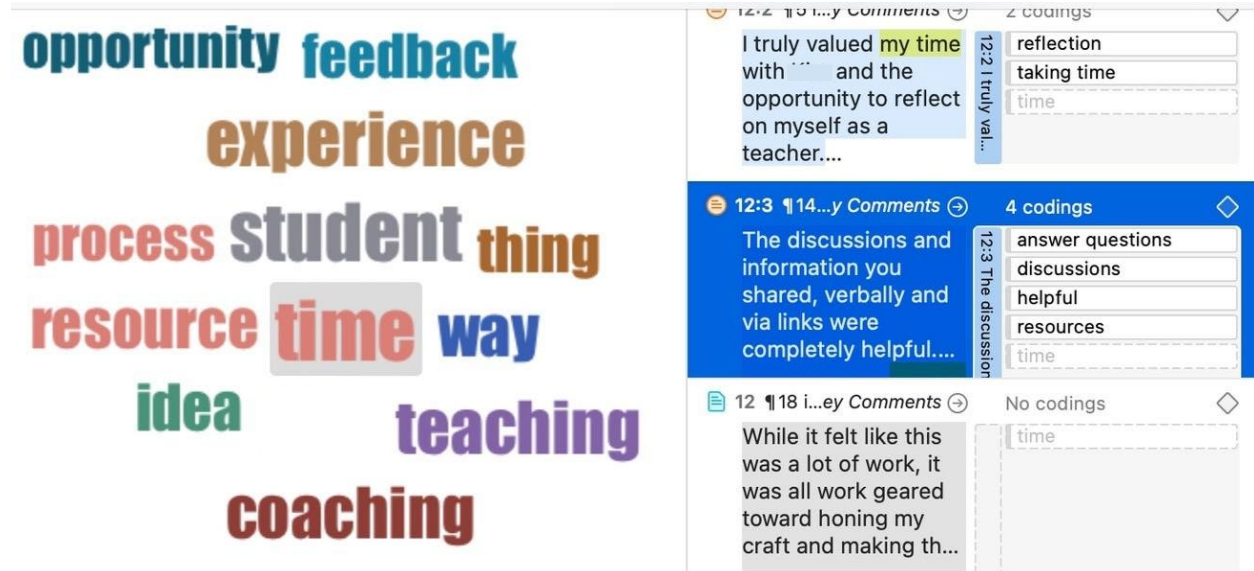
Thinking about research question (2) Relational and Dialogic: What relational practices exist within a virtual coaching model? I decided to go back into the data and look for examples of relational practices within Sibme. I added three additional documents, including 2 huddle screenshots, and 1 discussion board screenshot. I also removed the 2 teacher interview videos through the coding processes because the transcripts provided enough detail and did not require salient comments. After coding the data, I reviewed the codes and merged similar ones (e.g., writing and written work, resource and resources). There were a total of 54 codes once complete. Across the data set, the interview transcripts contained the most codes related to teacher perceptions. Some codes were used more often. For example, the code reflection was quoted 54 times, and the code resource was quoted 35 times. Some codes were meaningful yet not coded as often. For example, the code uncomfortable was only tagged twice, but it is significant to the

research. The frequency of coding was not a requirement for the next stage of theme development.

The third phase of reflexive thematic analysis is generating themes. From here, I looked at how the codes were interrelated and established themes that were apparent throughout the data. Using ATLAS.ti's concept map feature, I reviewed how codes were interrelated. The concept map allowed me to click on concepts and note the codes relationships. Some of the text did not apply to the research questions and was discarded. This process allowed me to review the quotations and codes with each other and select codes that were meaningfully linked to one another. One of the quotations in Figure 3.2 states that the teacher valued their time spent with the coach and the opportunity to reflect on their teaching. This sparked an idea to cluster the codes: reflection and time. This quotation allowed me to connect these codes (i.e., reflection and time) as having shared meaning. Exploring similarities and differences in the data helped locate patterns to arrange the data into themes. Braun and Clark (2021) state that themes should be the final 'outcome' of data coding and iterative theme development (pp. 333-334). The themes that were created extended upon a single facet and began to tell a story of the data, summarizing the participants' responses. I was able to establish five themes using the codes. These themes were then explored in relation to the research questions.

Figure 3.2

Concept Map Example



Phase four reviewed the potential themes for incongruity to the data set. Braun and Clarke (2021) suggest reviewing the data first by examining the coded data in relation to a transcript or a photo. Here I went back into the individual data and ensured that the quotations matched my working definition of each code. Next, they suggest reviewing the entire data set concerning the theme. To do this, I wrote a brief description of each theme and used existing quotes that support the themes.⁷ I ensured that the themes aligned with the holistic approach to my research questions by examining potential themes for multidimensionality, boundaries, and coherence. During this time, I looked closely at each theme that had been identified with each other and the research questions.

The themes were identified and organized through the final two phases to tell a story. Braun and Clarke (2006) recommend naming each theme. To do so, I relied on direct quotes and codes to develop an analytic take on the data. During the fifth phase, I cycled through the data and identified themes to map an organic story (see Chapter 5). I considered if the themes worked

⁷ Themes will be explored further in Chapter 5: The Findings

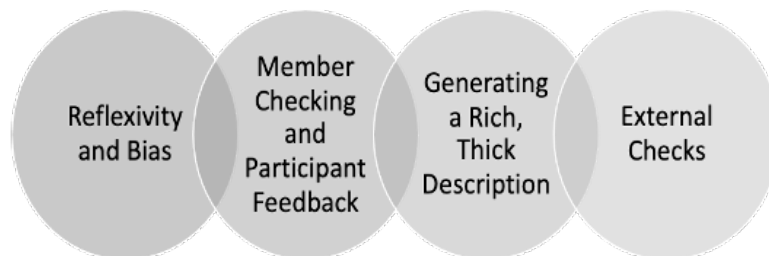
together to create a story of the data set. I reexamined the data and considered if the participants' experiences were clearly portrayed regarding the research questions. The final phase, producing a report, will be interwoven throughout the last chapters of this dissertation.

Validation Strategies

I pursued multiple avenues to validate the finding of this study (see Figure 3.3). I established my own bias, values, and experiences through reflexivity and tried to present the data from an emic perspective. This is an important consideration when accurately reflecting the participants' meanings. In doing so, readers can interpret how researcher bias led to the outcomes of this study. I solicited participants' views on the credibility of the findings and my interpretations, allowing the participants' voices to be authentically portrayed and limiting researcher interpretation errors. By providing readers with a thick, rich description, readers will be able to determine limitations on transferability (Merriam, 1998). This study “provides the reader with a depiction in enough detail to show that the author’s conclusion ‘makes sense’” (Merriam, 1998, p. 199). I have described the participants and setting under study in detail to give readers a clearer picture. I also sought out a colleague to provide external feedback through external checks after the assertion of my final themes. Additionally, with abundant data, there were opportunities to triangulate findings across multiple sources.

Figure 3.3

Validation Procedures



Ethical Considerations

Considering the limitations of this study, I need to think carefully about my role as a participant and researcher. As a researcher and coach, I understand that I hold power in my interpretations of data and my interactions with participants. As I work through this process, I will consistently reflect and ask myself how my interactions impact those I work with and the data I represent. CohenMiller and Boivin (2022) write about various online modalities and ways of sharing knowledge through online research (p. 157). They mention that information can be viewed ethically differently and lead to different forms of expression and identity in a virtual environment compared to a face-to-face setting (p. 159). Through this consideration, I will attempt to establish a community of learning that rightfully reflects the participants' culture and ways of knowing. By considering what technology is most easily accessible and considering how participants might adversely be affected by participating, I will attempt to minimize this limitation.

While this is not a participatory action research project, I found the ethical consideration by Fine and Torre (2021) to coexist well within my case study's frame. These were a few of the ethical considerations that I found to be most important:

Respect. How do we honor the stories people share with us?

Vulnerability. Can we protect information people have shared with us that may be used against them?

Language. How are we describing ourselves and the people and communities with whom we are collaborating?

Accountability. Who will review our findings?

The narrative afterlife. What happens to the narratives after the project is over? (pp. 38-39).

Structure of Findings

This qualitative case study examines the relational and professional factors influencing literacy coaching in a virtual space. Examining the artifacts and interview data through the six

phases of reflexive thematic analysis led to five themes. These themes are based on the teachers' experiences of virtual literacy coaching. The findings are presented through an extensive description of the case, followed by themes that rely on the data to tell a story. A direct interpretation was used alongside the research questions. Developing naturalistic generalizations from analyzing the data allows readers to learn directly from the case and apply learnings to a population of similar contexts.

Expected Outcomes and Significance

By exploring the literature, I anticipated multiple themes developing from the various data sources. The research questions were designed to elicit experiences connected to the successful or detrimental impacts of moving coaching into a virtual space. These themes can be used to generate information that might be useful for improving my work and those that work in this ISD's virtual literacy coaching model. While attempting to present the data from an authentic place, I make no presumptions about what the teacher participants might be experiencing. Considering the research questions, I explored the influence of a virtual literacy coaching model on the mediation of pedagogy for improved student achievement.

CHAPTER FOUR: The Case

Background of Virtual Literacy Coaching

Literacy coaching is an individualized, job-embedded form of professional development that can boost teacher knowledge and correlational student reading achievement (MDE, 2018). Literacy coaches work as change agents by modeling classroom lessons, providing instructional feedback, analyzing student data, and partnering with schools to build a more robust reading program. Substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman et al., 2017; Wetzel et al., 2020). Nevertheless, many schools need more personnel or funds to acquire a literacy coach. Recognizing how inequitable situations in small, rural school districts (e.g., funding, limited personnel, etc.) may hinder access to literacy coaching resources begs the question of how literacy coaching can be introduced in areas with limited access. School districts can transcend issues of time, space, and resources by modifying the access method to literacy coaching.

As mentioned in previous chapters, virtual literacy coaching has become increasingly popular (Ippolito et al., 2021). Virtual coaching has become a new tool as districts seek to save money and time on professional learning (Gentry et al., 2008; Hur & Brush, 2009) or respond to the Covid-19 pandemic. Emerging research suggests that virtual coaching is as effective as in-person coaching (Bates, 2015; Johnston, 2022; Kraft et al., 2018; Vernon-Feagans et al., 2015). Recognizing that virtual coaching is a viable alternative to in-person coaching brings forward many significant considerations about the components of a virtual coaching environment and how factors may differ within virtual coaching models. During the early use of videoconferencing, researcher Cochrane (1996) cautioned, “It is naïve to assume that merely

linking distant groups or individuals at different locations creates an effective learning environment” (p. 320). Considering the development of technologies over the past decade, people are arguably more adept at communicating at a distance, possibly even more so due to the Covid-19 pandemic. However, it may be naïve to assume that simply connecting a virtual coach with a teacher could replicate the same results as an in-person coaching experience. Homing in on the defining characteristics of a virtual literacy coaching program may offer more insight. Throughout the literature review, virtual literacy coaching research was limited, and programs differed (i.e., telecoaching, e-coaching, remote literacy coaching). Each study described different requirements, technologies, participant groups, and coaching responsibilities. Considering the variance throughout the published virtual literacy coaching research, it is essential to establish a detailed description of this particular case. The following chapter will serve as a detailed account of the case and data sources to provide readers with a contextual roadmap through the findings section.

Local Context

As mentioned previously, MCL.380.1280f, also referred to as Michigan’s Read by Grade Three Law allocated significant funds for early literacy coaches at intermediate school district (ISD) levels (MDE, 2023; ISD see Figure 1.1). This literacy coaching initiative is designed to build teacher capacity and increase student reading achievement across Michigan (MDE, 2018). An ISD is a group of school districts that share common resources. Two literacy coaches are shared across ten independent school districts in this study. Looking closely at each school district within this case, some are considered small, with shared grade-level classrooms, and others have more than one elementary school building. One of the larger school districts employs two additional literacy coaches, one at each elementary building. While they are

referred to as literacy coaches, their responsibilities differ from an ISD literacy coach. Many of these building-level coaches' responsibilities include direct student engagement (e.g., direct small group instruction, title services, administrative duties, etc.). As a literacy coach funded by the Read by Grade Three grant and employed at an ISD location, the primary job duties include teacher coaching (i.e., conferencing with teachers, observing lessons, reviewing assessments, modeling lessons, co-planning, and facilitating professional development; see Figure 2.2). This direct contact with the classroom teacher allows for the optimal time to build a relationship and identify individual teachers' funds of knowledge.

ISD Coaching Model

Before Coaching

Supporting resources and an engagement plan were established prior to beginning coaching. Each building's resources (i.e., personnel, technologies) were considered, and the staff was approached in a top-down model. Before introducing virtual coaching directly to the teachers, the ISD created supporting documents outlining expectations for the coaching process. Site administrators provided permissions before coaching. Below are a few of the resources and steps this ISD initiated before jumping into a virtual coaching model.

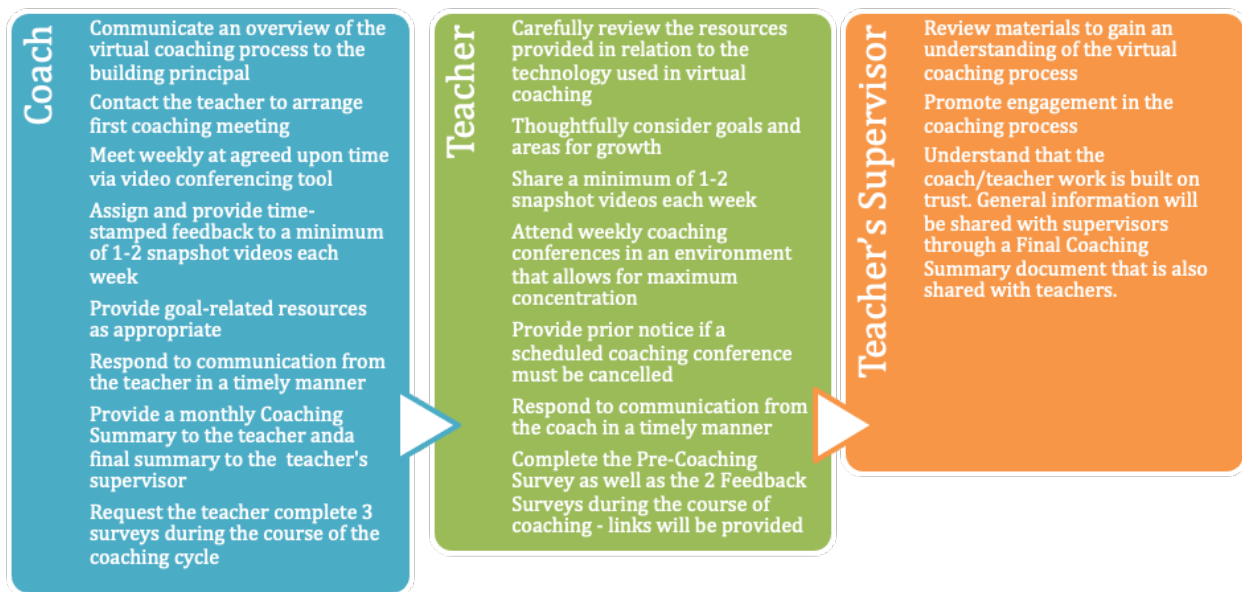
Coaching Expectations

Clear expectations are a vital part of a successful coaching program. A coaching document was created to outline the expectations of the coach, the teacher, and the building administrator (see Figure 4.1). The coaches' responsibilities included clear communication, resources, and timely responses to video comments. The teachers' responsibilities included reviewing resources, providing video clips of lessons, attending coaching conferences, and

thoughtful communication. Through this virtual coaching model, coaching was considered voluntary. While the coaching would often require a supervisor to encourage participation through choice, it was essential to clearly define the administrator’s roles. Recognizing that the coach and teacher were working to build trust, it was paramount to establish a boundary of communication between the coach and the administrator. It was determined that a summary document would be provided to the administrator following the completion of coaching. This document would outline the goals and level of participation. However, no further details that might breach teacher confidentiality were shared with the administrator. All documentation, including the coaching summary, was shared with the administrator after seeking teacher permission.

Figure 4.1

Coaching Responsibilities Reimagined



Another document supporting virtual coaching implementation was the Coaching Plan Overview (see Figure 4.2). Previous research suggested that coaching should follow a cycle format (Costa & Garmston, 2019; Walpole & McKenna, 2013; see Figure 4.2). Before the first

coaching cycle, setting up a pre-coaching meeting between the coach and the teacher was critical. This was used to get to know each other and set individualized goals for learning. The pre-coaching meeting also allowed the teacher to be introduced to the virtual coaching platform. Coaches and teachers often practiced uploading their first test video during this session. After the initial coaching meeting, participants would repeat steps 2-4, shown in Figure 4.2. This supporting document was shared with principals and teachers.

Figure 4.2

Coaching Plan Document

Coaching Plan Overview			
Each cycle lasts approximately 1-2 weeks with typically 4-6 cycles taking place in 9 weeks. *SCECHs Available Pending Approval			
<p>Step 1: Pre-Coaching Start Up (Week 1 Only- 45 minutes)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Coach (C) and teacher (T) meet to get to know each other, discuss what to expect during the coaching cycle and review coaching process <input type="checkbox"/> T&C: Decide on coaching focus, goals, recording expectations, and timelines <input type="checkbox"/> T: Get to know the Sibme platform and upload a Classroom 360 video or Getting to Know Me video to their huddle 			
Actions	<p>Step 2: Teacher Recording and Reflection</p> <ul style="list-style-type: none"> <input type="checkbox"/> T: Record and upload 1-2 video clips (approximately 10-15 minutes) focused on goal area to the huddle, within a 1-2 week timeframe <input type="checkbox"/> T: Self-reflect on video clips and leave timestamped comments throughout each clip 	<p>Step 3: Dialogue Cycle in Huddle</p> <ul style="list-style-type: none"> <input type="checkbox"/> C: Review video and T's comments and provide feedback and resources <input type="checkbox"/> T: Review and reply to C's comments 	<p>Step 4: Collaborative Review</p> <ul style="list-style-type: none"> <input type="checkbox"/> T&C: Meet for scheduled Zoom to view video clips together, discuss final reflections, review goal (with option to revise), resources, and next steps
Time Estimated	15 minutes	15 minutes	20-45 minutes
<p>Teacher Understandings: You and the coach will actively participate in reflections and conversations throughout the cycles. Recordings will be submitted within a 1-2 week timeframe, unless otherwise communicated. If you experience unforeseen circumstances which impact participation in the coaching process, please let the coach know as soon as possible to work together to adapt the program to meet your classroom's needs.</p>			
<p>Evaluating and Measuring Progress</p> <ul style="list-style-type: none"> ● Teacher will complete 3 surveys to help plan the direction of coaching, a pre-, a mid-, and a final survey ● A Final Coaching Summary will be uploaded to the coaching platform for the teacher and a copy will be sent to the teacher's supervisor at the conclusion of the 4-6 cycles of coaching 			

Marketing a New Process

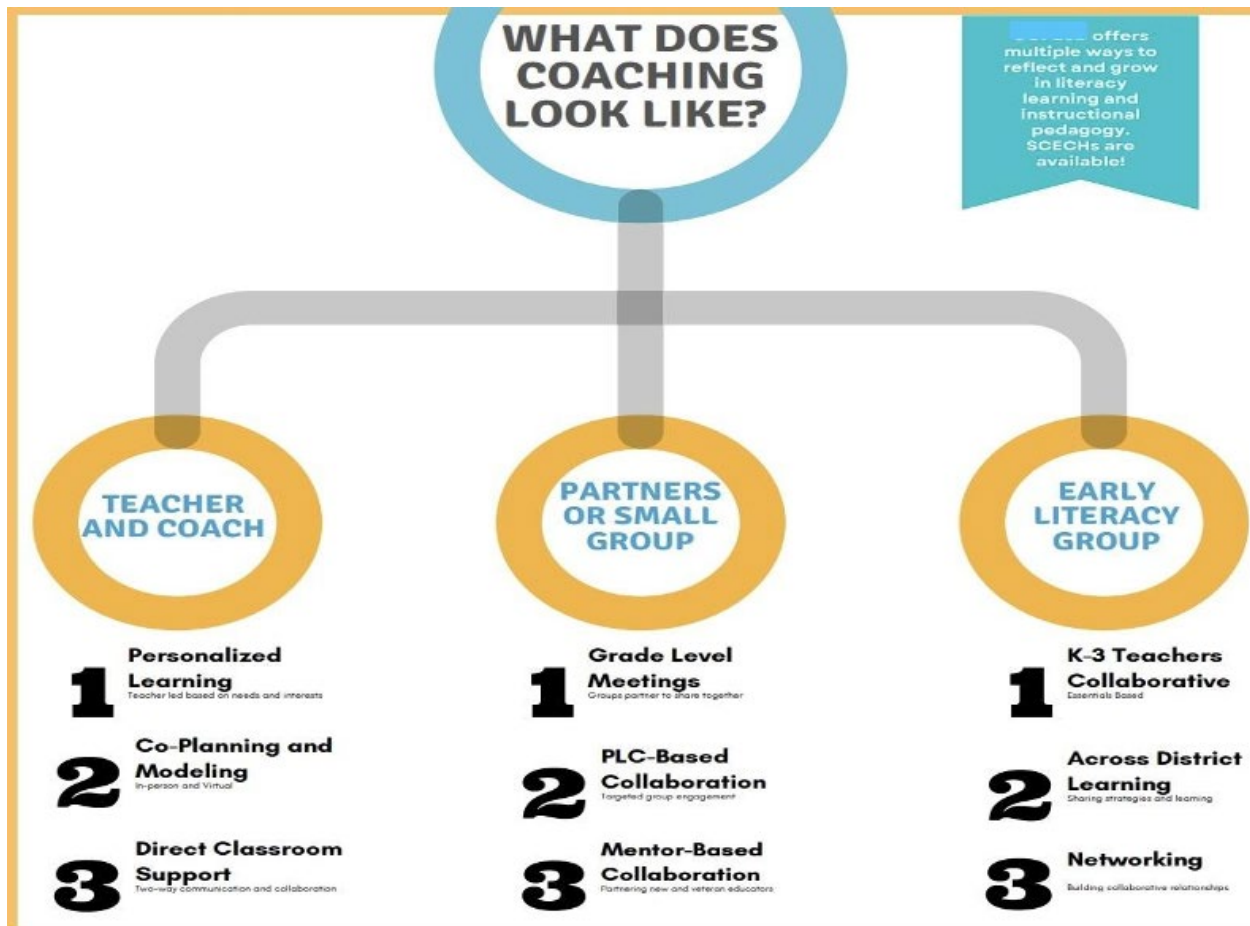
To create excitement around the coaching cycle, coaches shared the processes with

others that would support the work. Both literacy coaches met with building principals to ask for help sharing this unique opportunity and advocating for its use. It was in that initial principal meeting that the expectations were outlined and agreed upon. Administrators were asked to share a seven-minute coaching commercial created by one of the virtual coaches, either through staff email or during a staff meeting, to drum up excitement. This coaching flier provided a commercial view of the research around the effectiveness of virtual coaching and shared this ISD's unique coaching model. The literacy coaches also offered to speak to interested staff before or after school. Sharing the virtual coaching model with others provided opportunities to begin a discussion.

The ISD outlined this coaching model using multiple documentation forms and advertising (see Figure 4.3). One flyer was created to highlight what coaching might look like through this virtual model. While the primary focus of this case study is the 1:1 coaching model, there were additional avenues of coaching offered to schools (i.e., grade-level coaching and across-district group coaching). The teachers' goals guided the direction of all coaching and desire to participate.

Figure 4.3

Flyer What Does Coaching Look Like?



Reaching Out to Teachers

Once building permission had been received and principals had shared the process with their staff, the coaches began reaching out to teachers that might be interested. The ISD literacy coaches had previous connections to teachers within a professional literacy leader network. Recognizing that coaching is a relational process, some of the first teachers to pilot the virtual coaching program were chosen due to their familiarity with the coaches. Having a pre-established relationship made the transition into virtual coaching simpler.

Before the first meeting, the coach sought information about the teachers' abilities and interests. The coaches send out pre-coaching Google Forms to collect background information. The forms ask about the district's curriculum requirements, the teacher's involvement in previous

professional literacy development, the teacher's perceived strengths, areas of student achievement, and concerns about coaching. These initial questions provide talking points and individualized access to goal areas. Teachers were offered coaching menus to generate goal ideas (see Figures 1.2 and 4.4). These menus assisted coaches and teachers in identifying specific areas of personal interest. Teacher-directed learning was a crucial aspect of this coaching model, as it values the teachers' abilities and desire to learn.

Figure 4.4

Coaching Menu Version 2

Topics of Interest		
Co-Planning/Conferencing	Modeling	Assessment Review
Phonological Awareness	Explicit Letter Instruction	Writing Instruction
Vocabulary	Reading Opportunities	Formative Assessments
Small Group Instruction	Research Based Pedagogy	Motivation and Engagement

Getting Started with the Teacher

The teacher and coach participated in a pre-coaching start-up week. This pre-coaching week is an opportunity to introduce the teacher to the technology and build a coaching relationship. For the first meeting, the ISD utilized an in-person setting to build a face-to-face relationship and attempt to establish a personal connection. During the first meeting, the coach and teacher previewed the technology required to access the coaching platform, practiced recording, and set teacher-driven goals.

While teacher goals do not follow a specific format, they were teacher led and developed in partnership with the *Essential Instructional Practices in Early Literacy: Grades K*

to 3 documents (MAISAGELN, 2016b; see Figures 1.5 and 2.1).⁸ This document guides Michigan early literacy coaches' work for improving pedagogical practices. The Essentials contain ten research-supported practices that are recommended to be used daily in every classroom. The research-based practices are not specific to a hegemonic curriculum or professional learning series but can be interwoven into appropriate materials for individual classrooms. This job-embedded, teacher-focused learning supported unique strengths and a classroom's funds of knowledge (Moll et al., 1992) while choosing individualized goals.

After the first meeting, the teacher was given approximately one week to complete the asynchronous introductory tasks. Arguably one of the most valuable tasks for establishing a relational virtual community was creating a Classroom 360 or Getting to Know Me video (see Figures 4.5 and 4.6). Providing choice with the first task was deliberate and allowed teachers to navigate their comfort level with being in front of a camera. A Getting to Know Me video framed the individual and required the teacher to talk briefly about themselves. The Classroom 360 video allowed participants to move the frame away from themselves and record their classroom. After the initial Covid-19 pandemic, people were much more accustomed to recording themselves or seeing themselves on camera, but there is still a layer of vulnerability. Teachers were asked to choose between the two recording options and view the coaches' examples and previous participants' welcome videos to break the ice and create a relational environment. Then they were asked to record their own. Next, they uploaded their initial recording and shared it with the virtual coaching community in a whole group, collaborative huddle. A huddle is a space where resources are shared and collaboration occurs.⁹ Teachers were asked to say hello via virtual messages. The pre-coaching week was geared toward creating

⁸ The Essentials will be discussed further in 4.5 Coaching Content: K-3 Essentials

⁹ Huddles will be discussed further in 4.5 Virtual Platform Sibme

relationships. They implemented a face-to-face meeting with the coach and entered a virtual community to provide teachers with a safe space to begin reflection.

Figure 4.5

Classroom 360 Supplemental Directions

DIRECTIONS

1. In order to record a 360 video, find a starting point in your classroom. You're going to want to capture your entire room, so pick a spot, like the door, that will be both a good starting and stopping point.
2. **Record** your 360 video in the Sibme mobile app. Remember, you're not in a hurry. Take time to talk about the relevance of each section of your room as you get to it.
3. Upload and view your video in your **workspace**. Not a fan? No problem! Film it again! There is no limit to the number of takes you can try to get it just how you want it!
4. **Share your video** to the appropriate **Collaboration Huddle** (or **Coaching Huddle** if you are completing this activity with a coach) for this mission.

STRATEGIES

- Doing this after school or during your conference period? You might want to take a few minutes to tidy up the room in order to put your best foot forward.
- Take a minute to think what you'd like to say about each section of your room before you push record. Why is your room organized the way that it is? Is there a creative way you store materials or arrange your seating?

TAKE IT TO THE NEXT LEVEL

- If your grade level, content team, or entire campus is participating, you might consider creating a "Classroom Tour" section in the Sibme Video Library. Don't see a Library tab? Contact your account administrator to ask about this feature!
- Try Sibme Mission: Getting to Know Me
- Try Sibme Mission: I'm So Excited - I Just Can't Hide It!

MISSION: CLASSROOM 360

OBJECTIVE>> Have you ever wondered how other teachers organize their classroom libraries? Maybe you're interested to see how they store science laboratory supplies or math manipulatives. Seeing and hearing how others organize, structure, and arrange their classrooms can be helpful.

SIBME MISSIONS

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Figure 4.6

Getting to Know Me Supplemental Directions



DIRECTIONS

- Using the Sibme app (iOS or Android), **record** an introductory video about yourself (2-4 minutes in length) to your **Workspace**.
- Watch your video.** If you are happy with the result, move to step 3. If not, record again. The great thing about your private Workspace is that you can record and upload as many times as you want!
- Share your video** into the Collaboration **Huddle** prepared for this activity.
- Sit back and **enjoy the videos** shared by your colleagues! And don't be afraid to make comments on areas that interest you or that you relate to in others' introductions.

STRATEGIES

- Speak clearly and not too fast.
- If you're nervous, jot down a few notes or write out a script and practice beforehand.
- What led you to become a teacher? Why did you pick the grade level or content area you currently teach? Share a little about yourself, your passion for teaching, and/or something fun or unique that your colleagues do not know!
- Take your time. Remember, you can upload as many videos as it takes to get one you're ready to share!
- Think about your location. A noisy or messy background can be distracting to your viewers. Try to record in a neat and quiet location.

TAKE IT TO THE NEXT LEVEL

- Be creative! Think outside the box. This video doesn't have to be of you in your classroom speaking directly into the camera. Can you sing? Sing your introduction! Good at art? Show illustrations as you speak! Some of the best introductory videos are ones that showcase a talent your colleagues don't even know you have!
- Try Sibme Mission: Classroom 360
- Try Sibme Mission: Three, Two, One

MISSION: GETTING TO KNOW ME

OBJECTIVE>> Sometimes a great place to start with video is an introduction! Give those around you a glimpse into your world by sharing a video all about you and your love for teaching and learning.



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Coaching Cycle

Once participants completed the first week's tasks, they entered their first coaching cycle. Through this virtual coaching model, teachers participated in multiple cycles of coaching. Coaching cycles at this ISD followed a similar model to one suggested by Walpole and McKenna (2013, p. 210; see Figure 1.3). From the initial meeting, teachers have already established a goal focus.

Step 1: Teacher Recorded Lesson

The first teacher action required recording a short lesson related to their goal area. After recording a lesson, the teacher will rewatch it and self-reflect on areas related to their goal. This is all done in the teacher's workspace, without a coach. Coaches do not have access to individual workspaces. Coaches only see what the teacher shares with them in their collaborative huddle.

Once the teacher is confident and has selected a short portion of the recording to share (10-15 minutes), they upload it into their coaching huddle. A coaching huddle has only two participants, a coach, and a teacher.

Step 2: Teacher-Coach Asynchronous Dialogue

The second teacher action included asynchronous dialogue using time-stamped feedback. Once the video had been uploaded into the coaching huddle, the teacher made 5-8 comments using time-stamped feedback. These comments might have been reflections or questions. Generally, the coach waited for the teacher to initiate comments, giving the coach a directed lens to rewatch the video. Using the Sibme platform,¹⁰ teachers and coaches will engage in reflective and problem-solving conversations and share possible resources. This dialogue can continue across multiple days.

Step 3: Synchronous Zoom Meeting

The final step in the weekly coaching cycle was a virtual meeting for synchronous coaching. The ISD utilized a virtual Zoom platform to connect the teacher and the coach in live time. These meetings were scheduled during flexible times (i.e., during planning, before school, lunch, or after school). Zoom allows users to have live conversations, see each other, and share resources through screen sharing or a chat feature. During this cumulative meeting, coaches often used Cognitive Coaching discussion maps (see Figure 1.4) to problem-solve, improve teacher efficacy, or reflect on the lesson's success (Costa & Garmston, 2019). This synchronous conversation allowed teachers time to reflect with a coach, build teacher knowledge, and set new goal areas. Coaching cycles typically occurred within one to two weeks, and teachers voluntarily

¹⁰ The Sibme platform will be discussed further in section Virtual Platform Sibme

participated in four to six coaching cycles. After the mid and final coaching cycle, teachers were sent participation Google Forms. These surveys used a Likert scale to rate how practical their coaching experience had been. They also provide opportunities to leave thoughtful comments on their learning and experiences with a coach.

Approach to Coaching

This research established the coach's interactions as a means for transformative learning, and the method used by this ISD to improve teacher efficacy was Cognitive Coaching. Cognitive Coaching was developed by Costa and Garmston (1992) as an approach to mentoring and encouraging reflective practices. Both coaches participated in an extensive, six-day Cognitive Coaching training seminar. While at the workshop, coaches were given opportunities to practice and refine their coaching conversation abilities.

“The relationship presumed by Cognitive Coaching is that teaching is a professional act and that coaches support teachers in becoming more resourceful... Cognitive Coaching is a nonjudgmental process of mediation applied to those human life encounters, events, and circumstances that can be seized as opportunities to enhance one’s own and others’ resourcefulness” (Costa & Garmston, 2019, p. 6).

Cognitive Coaching is founded on assumptions to produce “self-directed persons with the cognitive capacity for excellence both independently and as members of a community” (Costa & Garmston, 2019, p. 16).

In this coaching model, like sociocultural theory, coaches must assume capacity with those they are working with. Costa and Garmston (1992) emphasize that all individuals “continue to grow cognitively throughout our lifetime and that we all possess a vast reservoir of untapped potential” (p. 91). This vast capacity allows teachers to navigate the many complexities of their instruction, and it is the coach’s responsibility to build upon their repertoire of skills and knowledge. Garmston et al. (1993) suggest that the behavior of teachers, including reflectivity,

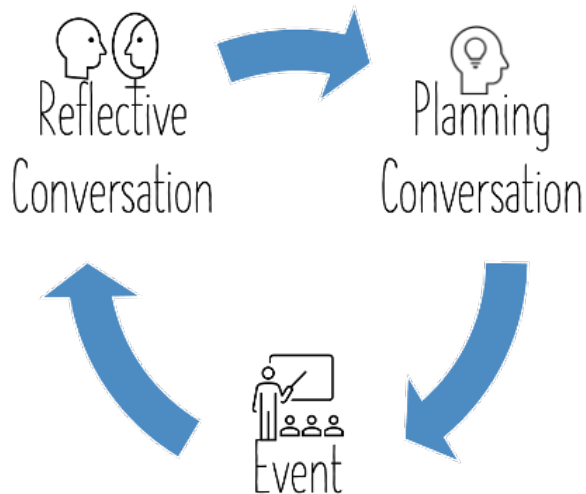
could be improved if they were coached in a democratic atmosphere, highlighting the significance of exploring relational factors and possible power dynamics in this virtual literacy coaching model. Cognitive Coaching emphasizes examining the coach and coachee relationship within virtual literacy coaching for power, judgment, discourse, and value.

Cognitive Coaching developed a coaching cycle that occurs in three main stages, the planning conversation, the event (observation), and the reflecting conversation (Costa & Garmston, 2019, p. 39; see Figure 4.7). Both planning and reflective conversations are a big part of this ISD's virtual literacy coaching model. While a good portion of reflection occurs during the asynchronous video lesson analysis, synchronous Zoom sessions provide a space to reflect or brainstorm with a coach in live time. Coaching conversations are often recorded and saved in the coaching huddle.¹¹ During coaching conversations, the coaches in this ISD used Cognitive Coaching discussion maps to mediate thought around pedagogical practices and student needs (Costa & Garmston, 2019; see Figure 1.4). Different conversation maps are used to plan, reflect on, or problem-solve. These tools are used to meet individual classroom needs and boost teacher capacity for learning. As part of the reflective conversations, the coach may also move into a consulting role by offering research-based resources or suggestions to improve a teacher's instruction.

Figure 4.7

Cognitive Coaching Cycle

¹¹ Huddles will be discussed further in section Virtual Platform Sibme



Note. Adapted from *Cognitive Coaching Seminars Foundation Training: Learning Guide* (p. 39), by Costa, A., and Garmston, R., Thinking Collaborative, LLC, 2019 Copyright 2019 by Thinking Collaborative, LLC. Reprinted with permission.

Coaching Content

Ten Research Supported Practices (Essentials)

As previously mentioned, teacher efficacy directly results from teachers' pedagogical knowledge and beliefs (Fives, 2003, pp. 96-97). Through social interactions, coaches can build pedagogical knowledge and nurture teacher efficacy. Michigan's literacy coaching initiative is designed to build teacher capacity and increase student reading achievement across Michigan (MDE, 2018). Developed in partnership with MAISA, GELN, and Michigan's Early Literacy Task Force (2016b), the *Essential Instructional Practices in Early Literacy: Grades K to 3* documents (Essentials) guides Michigan early literacy coaches' work for improving pedagogical practices (see Figures 1.5 and 2.1). This document contains ten research-supported practices that are recommended to be used daily in every classroom. The Essentials are not specific to a hegemonic curriculum or professional learning series but can be interwoven into appropriate

materials for individual classrooms. The Essentials are part of a suite of recommended documents that include school-wide practices, coaching practices, prekindergarten practices, and more.

The ten essential practices were developed to build teacher skills and knowledge to improve student outcomes. They include pedagogical skills like methods for read-aloud instruction, vocabulary knowledge, and phonological awareness. They also include instructional skills for effective small group instruction, explicit instruction, and using assessments to guide teaching. Additionally, the Essentials highlight the need to foster motivation and engagement for increased student success and collaborate with families to promote engagement in language and literacy.

Training for Coaches

Michigan ISD literacy coaches have received extensive training on the Essentials and educational equity issues. ISD literacy coaches must attend in-person and virtual quarterly training sessions each year with leading researchers. The first quarterly session is an in-person three-day symposium, and the remaining three are often held as seven-hour virtual sessions. In addition to the training sessions, small group learning is offered through the Early Literacy Coaching Network in Michigan. These sessions focus on the Essentials' academic content and the Essentials' coaching practices.

Virtual Coaching Platform: Sibme

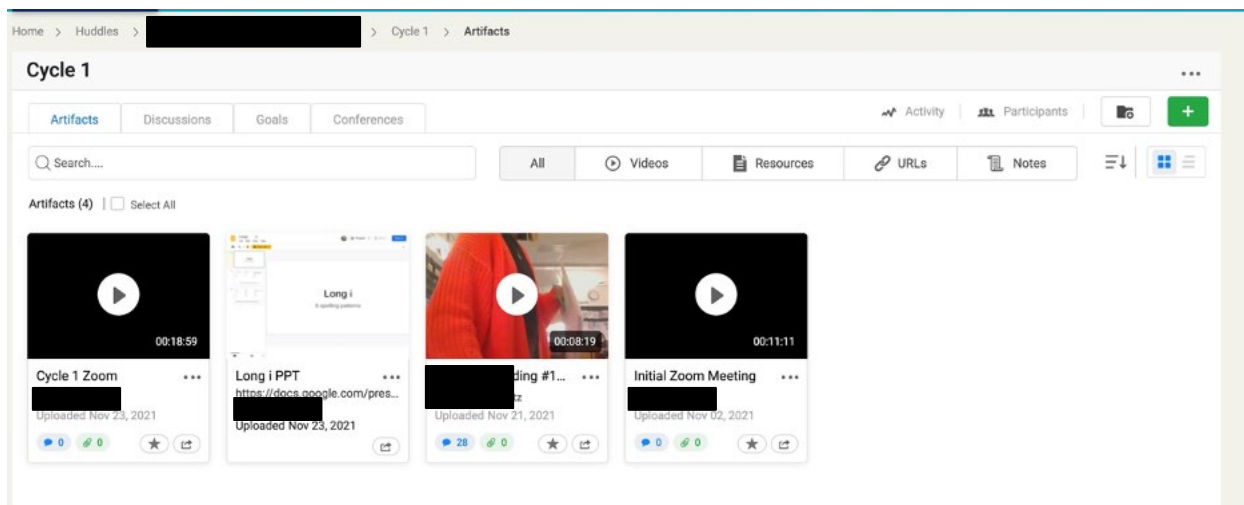
Video recording and video conferencing were significant considerations when planning a space for reflective teacher practices. This ISD chose to work with a virtual platform called Sibme. According to their website, Sibme offers a flexible platform to set goals and have meaningful conversations. Sibme software allows groups of people to connect in a virtual space,

share resources, have dialogue, and track progress. There are many unique features and valuable tools for virtual coaching through Sibme. Discussion boards, coaching huddles, video time-stamped feedback, a digital library, and goals can be used to build upon teacher capacity alongside a coach.

Within Sibme, some virtual spaces belonged directly to the teacher, and others were for collaboration. A teacher's workspace was used to record, clip, and rewatch lessons. The workspace is only available to the teacher. While the coach does have analytic access to the number of videos recorded and time spent viewing, they do not have direct access to view any work done in the teachers' workspace. Huddles are considered collaborative spaces where dialogue and resources are shared. There are two types of huddles within Sibme, a collaborative huddle and a coaching huddle. A collaborative huddle is open to multiple participants. This ISD uses collaborative huddles to network teachers across districts, across classrooms, or for more extensive professional development sessions. The huddle type pertinent to this research is the 1:1 coaching huddle. The coaching huddle consisted of one teacher and one coach. It was personalized to the individual teacher and classroom goals. Coaching huddles utilized digital folders to store artifacts for each coaching cycle. Each coaching cycle consisted of at least one Zoom meeting, one teacher-recorded lesson, and any additional resources needed for the lesson (see Figure 4.8).

Figure 4.8

Coaching Huddle Artifact Example



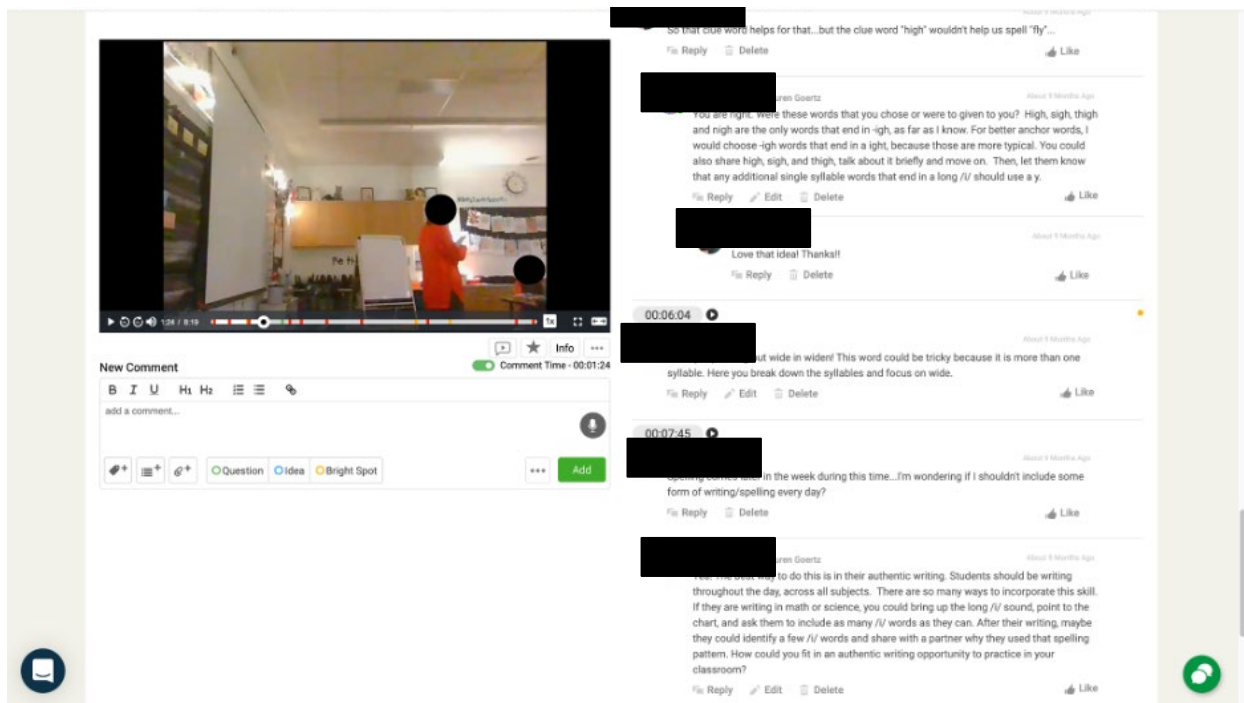
Looking closer at using a virtual online platform for reflection, the use of video can assist in building reflective practitioners (Leighton et al., 2018). It is often said that video is where reality and perception meet. Athletes use video to record and carefully watch their physical performance. They select areas to improve based on video footage. Watching the video beside a coach, athletes can navigate the difference between perception and reality while highlighting goal areas. Teachers can also utilize this practice to improve their reflectivity on their literacy instruction. Virtual literacy coaching allows teachers to improve instruction by using video to reflect on points of inquiry (Leighton et al., 2018).

Sibme supports reflection through video using time-stamped feedback (see Figure 4.9). Once a teacher has uploaded a video clip into their huddle, the coach and teacher can rewatch the video and identify points of inquiry. While watching, the video can be stopped, and a comment can be entered at the exact moment of reflection. Using this time-stamped feature, buttons highlight whether the comment is an idea, a bright spot, or a question. By organizing the comments, the coach has reminders to inquire and provide questioning to increase the amount of reflection from the teacher. These video-related tools have the potential to create an awareness of pedagogical practices that may otherwise go unseen. The comment feature also allows

hyperlinks for additional resources, direct comment replies, and framework tags. This ISD created a framework for the Essentials ten practices (see Figures 1.5 and 2.1; see Coaching Content: K-3 Essentials). When a teacher utilizes the Essentials, the video can be tagged. This helped identify which Essentials were being used and which might need additional practice. Cox (2015) mentioned that highly influential individuals examine their understandings in collaboration. Through video reflection, teachers were building their capacity for reflective practices.

Figure 4.9

Video Time-Stamped Feedback Data Example

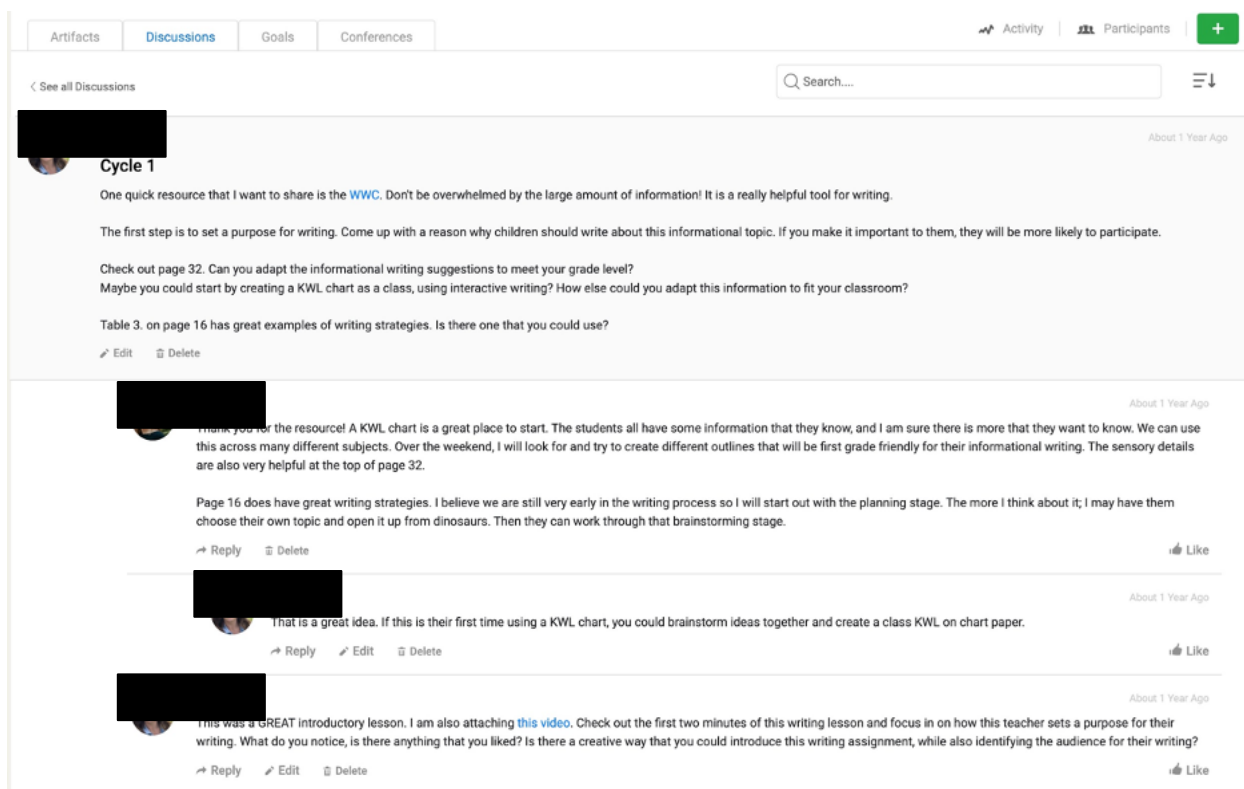


Collaborative discussions are a large part of the coaching process. Through this virtual coaching model, there are also opportunities to have asynchronous discussions using a discussion board. This provided opportunities to keep all discussions related to the coaching goals in one

place rather than relying on multiple modes (i.e., email and text; see Figure 4.10). The discussion board allowed for sharing resources, asking questions, and planning in an asynchronous format. There were thumbs-up buttons to indicate liking the comment. The discussion board also allowed for additional attachments and hyperlinks to share resources.

Figure 4.10

Discussion Board Data Example

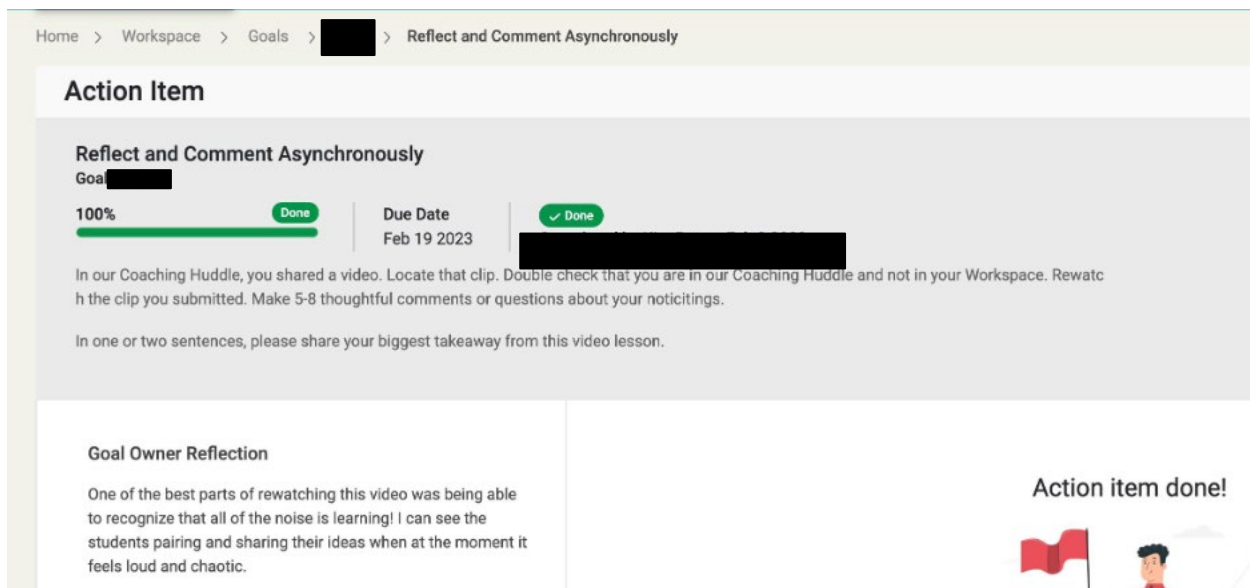


Sibme also provided a goal tab within the coaching huddle. Teachers utilized the goal tab throughout the coaching cycles to measure their progress and success. The goal tab could be attached to the group huddle or the individual workspace. When writing a goal, the coach could set due dates and request evidence of meeting the goal. Evidence might have included uploading student data, video footage, or a written reflection. The coach could also tag a framework, like in the time-stamped comment feature. This ISD used the Essentials ten practices as the framework

for goal setting. The goal tab also allowed for a reflective summary when completed (see Figure 4.11). Sibme offered many additional coaching resources that were not mentioned. However, the above resources were most pertinent to the research questions and artifact data, focusing on relational and professional considerations when working with a virtual literacy coach.

Figure 4.11

Goal Data Example



Steps Toward Analysis

Before beginning the analysis, I considered the entire case and used a holistic approach (Merriam, 1998). Each part of the data was analyzed around the research questions (see Table 3.2). With a multitude of artifact data available within the digital Sibme website, I began the analysis process by saturating myself in the artifact data and the words of the teacher participants. Reflexive thematic analysis relies on six phases (Braun & Clarke, 2006; see Table 3.2). The initial step to analysis is familiarization with the data. This included listening to coaching conversations, reviewing discussion boards, and additional data sources.

Familiarization took place through an exploration of the Sibme website and a review of the interview transcripts.

CHAPTER FIVE: Findings

Literacy coaching is an individualized, job-embedded form of professional development that can boost teacher knowledge and correlational student reading achievement (MDE, 2018). Substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman et al., 2017; Wetzel et al., 2020). Limited coaching resources in rural settings could directly impact teachers' pedagogical growth and restrict correlational student reading achievement for rural students. By modifying the literacy coaching platform and introducing a virtual literacy coaching model, school districts may be able to transcend issues of time, space, and resources. The following setting and participant descriptions consider the relational and professional factors influencing literacy coaching in a virtual space.

This qualitative case study examined the interactions of two virtual literacy coaches and the reflections of nine participating teachers. The data set emphasized the perceptions of those participating. Participants were selected based on the completion of four to six coaching cycles. Merriam (1998) refers to this selection criteria as purposive sampling, establishing information-rich data. All teachers participated in virtual literacy coaching between August 2020 and June 2023. Participants consisted of kindergarten through third-grade teachers with varying experience levels and certifications.

This study explored teachers' perspectives through reflexive thematic analysis as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic achievement. The research questions sought insight into (1.) How does classroom video reflection influence a professional learning model? (2.) What relational practices exist within a virtual coaching model? and (3.) What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? This chapter explores the findings of the reflexive

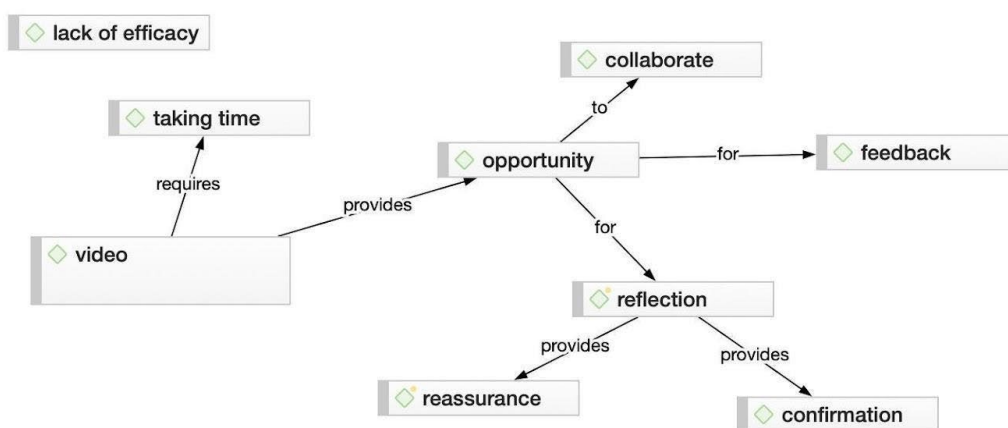
thematic analysis, including five identified themes through a network of codes.

Theme One: Balancing Teachers' Desire and Time for Feedback

One identified theme was linked to teacher time and a desire for feedback. Teachers sought feedback through coaching regardless of the extra time commitment. Figure 5.1 shows the network of codes and their relationships that support this theme. Recognizing the participants' perceptions of time is vital to developing a virtual coaching model. If coaching is perceived as too burdensome, its value will decline. The usefulness of virtual coaching stems from providing teachers with opportunities for asynchronous reflection and much-desired feedback. While some data mentions that teachers may initially lack confidence in their teaching practices, they ultimately desire feedback throughout their participation in the coaching cycles. Taking the time to record classroom videos and reflect alongside a coach benefited teacher confidence.

Figure 5.1

Goal-Related Feedback Worth Teacher Time



Feedback

Working alongside a coach provided many opportunities for feedback. Throughout the coaching process, coaches would send their teacher participants multiple surveys. One question in the pre-coaching Google form asked, “What would you like to get out of our coaching sessions?” Many responses to this question indicated a desire for feedback. One teacher stated, “I would like to gain suggestions, ideas, and feedback that will help increase both engagement and achievement.” Another teacher indicated they had not received feedback from their administration and worried they were getting comfortable in the wrong practices. Through the coaching cycles, feedback appeared in various ways (e.g., through video conferencing, dialogue on the discussion board, time-stamped video comments, etc.). For example, during a second coaching cycle, a coach responded to a video lesson the teacher had submitted. The coach provided the following feedback,

“Yes, I agree. This was a great lesson. You hit your instructional targets. Your goal was to increase motivation, and they were much more engaged. When we look at this lesson with time management as our focus, it boils down to the transitions between words and activities. By setting behavior expectations prior, that might minimize some of the trouble. You will want to streamline the word delivery portion, while allowing them time for a quick response. This response could be a single verbal word or a hand signal. I'm also thinking about the whiteboard portion, can the amount of words be condensed to just two or three? Could they already have the materials at their table?”

Here, the coach provided initial encouragement related to the teacher's goal area. The initial encouragement could also be interpreted as confirmation or reassurance (see Figure 5.1). The coach also followed up with an idea or question to elicit further reflection. A second example of feedback was found on the discussion board. Here, the coach and teacher reflected on a previous writing lesson that was video recorded. The coach provided the following feedback,

“Another great modeling lesson! Your brainstorming activity clearly set the stage for students to begin brainstorming on their own. Your list strategy was very effective and you gave them an opportunity to narrow down their list to the most important details. When you introduce a new stage in the writing process, it is also helpful to explicitly state the reason that we use each stage. With this activity you could also add into your introduction, ‘Brainstorming is a very helpful part of the writing process because...’ Or at the end when you are restating their task, you could again explicitly explain why brainstorming is a helpful prewriting tool. This planning stage is a stage that many writers will overlook, so it is important to emphasize the value.”

This response indicated positive encouragement, followed by questions that provided opportunities for deeper reflection.

The coaches distributed reflection Google Forms to their teacher participants throughout the coaching process. In two forms, the teachers were asked, “Please share some specifics about what you have gained from coaching.” When looking at the teachers' mid and final Google Form responses related to feedback, it was evident that feedback was perceived as helpful. One mid-coaching Google Form response stated, “I was able to learn the importance of having someone watch my teaching and helping offer advice to improve my methods.” A second mid-coaching Google Form stated, “I loved sharing my videos and getting the great feedback.

So, sharing my teaching with others is a great way to get helpful feedback.” The code feedback also appeared in the final Google Form, “I enjoyed having an extra set of eyes watching my lessons and providing feedback. Hearing what I was doing well or confirming that an idea I wanted to implement was helpful.” The participants’ perceptions of the coaches’ feedback consistently reassured positive teaching practices and used questioning to further reflection.

As some data indicated a need or desire for feedback, there was also a relationship between the need for feedback and the teachers' need to feel more confident in their practice. During one pre-coaching Google Form, a teacher stated they hoped for “A stronger sense of self-confidence when it comes to working with students in small groups and struggling students.” This teacher wanted to improve their confidence, which could be associated with a need for reassurance (see Figure 5.1). One of the teacher interviews dug deeper into the perceptions of teachers working with a coach and the connection to reassurance. This increase in confidence was directly related to teacher reflection. The teacher stated,

“Well, at first I thought, I'm like, I don't really even know what I'm supposed to be doing. You know, stop and comment. I'm like I thought this is what happened. Why do I go back and reflect on it? But then my comments on my reflection of the video spots led to your affirmation that yes, you're right. You're on the right track. There was something that I may have said or something that I questioned or oh, have you tried this? So it was really nice. That's why I said once I got past that first cycle of that reflection piece, I'm like, Okay, this is beneficial because she's giving me some information. She's giving me some resources based on some of the comments that I've made or the things that you've picked out that maybe I missed. ... So those kinds of things, and that reflection was very important. And after that first reflection piece, it was like, Okay, yeah, this is it, I get it. Now, I get it now.”

This teacher identified value in both the resources that were shared and the affirmation that was given. While feedback can look different across educational professional development models, this virtual literacy coaching model provided feedback aligned with reassurance and confirmation using reflection.

Time as Both Positive and Negative

Time was also connected directly to feedback and reflection throughout the data. While time was coded quite often, it was also broken down into two categories. One had a positive connotation, and the other was interpreted negatively. The positive association of time was defined as taking the time to reflect or invest in learning. The negative association was defined as something taking too much time or not having the time. The two contexts of time are key when linking time to reflection and feedback, specifically regarding a connection between a positive or negative assumption. These concepts were separated through the coding process. The code Taking Time was used with a positive connotation, whereas the code Time was used with a negative connotation.

The concept of time concerning video reflection and improved pedagogical practice is linked to both positive and negative connotations. Time with a negative connotation was mentioned in the pre-coaching Google Forms, “I am nervous about the amount of time. Life is extra crazy at school and home, and I want to be able to give my best effort to all areas” and “I am concerned with how time consuming this will be having a brand new baby at home.” Time was also mentioned during the teacher interview. One teacher stated that they were a bit confused by the process of using video to record and reflect. As they thought about the beginning of their coaching journey, they stated, “Like, I don’t have time to do this reflection. What is she talking about, reflection?” They stated that their idea of coaching was much different than what video reflection ultimately entailed, “I think that it might have been my first cycle where I was totally caught off guard as to sitting down and reflecting on video, I thought, (the coach is) just gonna say, Okay, I noticed this, this is what we’re gonna work out.” This teacher went on to explain that it didn’t happen that way. This coaching model required participants to review their own practice as it related to their goals.

In a busy classroom, time can pass quickly, and moments for reflection are few and far between. Teachers are often performing multiple tasks and making multiple decisions at once. This type of high-intensity decision-making leaves little room for thoughtful reflection. In this case, video recording supported time. It offered opportunities to pause and thoughtfully reflect. A teacher stated, “Okay, I will do it. I will, you know, if you don't mind getting those things at 11 o'clock at night, because that's when I have the time to sit down and do reflections. So, it started out, honestly, where I thought I was just gonna have to walk away. And I'm so glad I didn't.” And soon, that turned into, “Okay, I feel like I can fit this in. I really do. I really want to try it.” Considering the positively correlated code Taking Time, investing time in coaching was beneficial. In a final coaching Google Form, one teacher stated, “Having the time to collaborate with (the coach) about what was going great and what could be improved was very valuable. Since we worked in a team, (the coach) and I were also able to see different approaches to the same concept.”

Summary

When examining the participants' experiences of virtual literacy coaching in this case, teachers considered the benefits of coaching to outweigh the time demands. While reflecting on the time required for recording and reflecting, the desire for feedback provided participants with a high enough value to maintain collaboration. There was also an initial lack of confidence in pedagogical practices among participants and reviewing those areas alongside a coach allowed for opportunities to improve capacity. Therefore, in this case, taking the time to reflect and receive feedback appeared to benefit teacher practice.

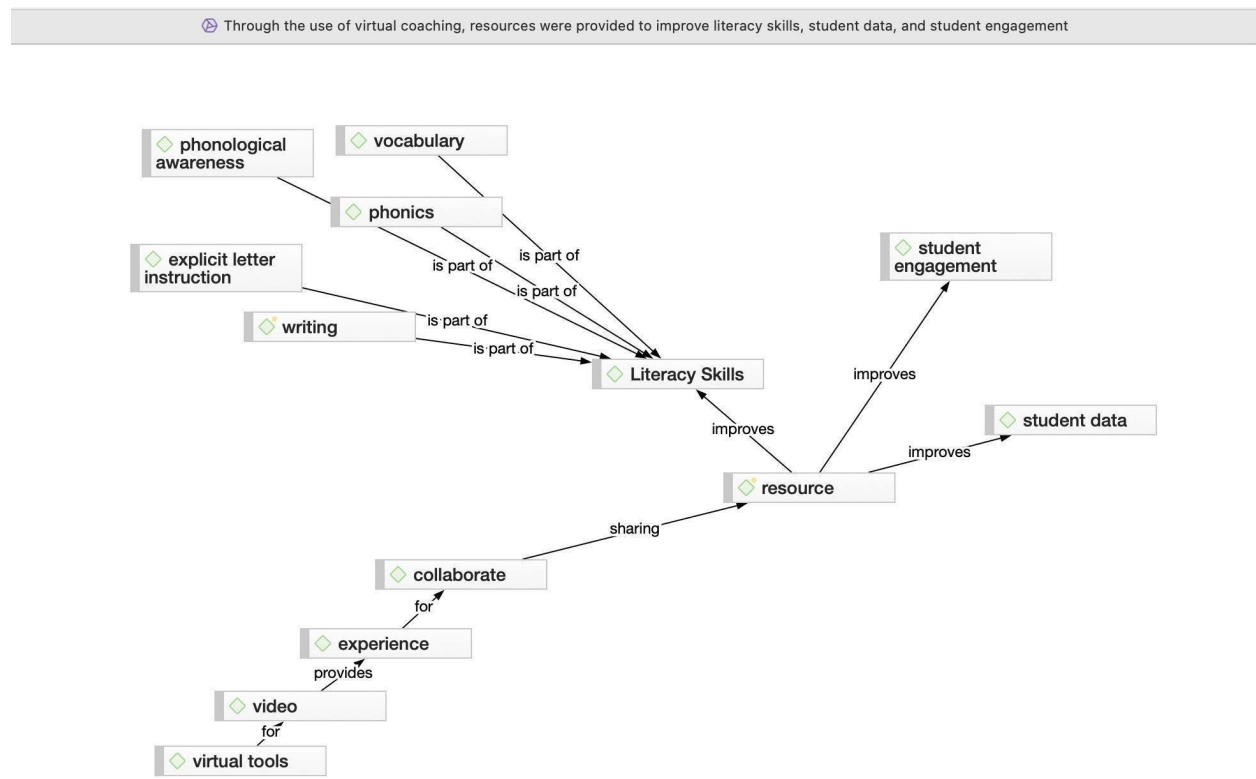
Theme Two: An Increase in Student Engagement, Teacher Knowledge, and Assessment

Through exploring the data, positive outcomes were noted in three areas related to the

educational resources shared through this virtual coaching model. Figure 5.2 shows the network of codes and their relationships that support this theme. Participants indicated an increase in student engagement because of participating in coaching. In addition, student data related to formative assessments showed improvement (see Appendix V). Moreover, pedagogical literacy knowledge also indicated a positive outcome.

Figure 5.2

Three Improved Outcomes of Virtual Coaching



Virtual Collaboration Partners

Collaboration is a large part of the coaching process. The participants frequently indicated they would like a collaborative partner to confirm pedagogical practices. One final coaching Google Form stated, “In my opinion, collaboration with other colleagues is the best

way to learn new strategies that are practical and can be easily integrated into my classroom. We all have different strengths and weaknesses which enables us to help one another.” As shared in previous chapters, this collaborative coaching model utilized individual goals, relying on the teacher’s interests to guide conversations and resources. During a teacher interview, the participant described what it was like to start a conversation with their coach. They asked, “Coach, what are your thoughts on this? So it was a huge piece, and then just sitting with the coach and going through that video. And you know, go through discussions, and she would give me a reflection, or I guess questions to be like, okay, self, what are your thoughts on this?” These final comments highlight the significance of questioning for deeper understanding and reflection. By asking themselves, what are your thoughts on this, the coach positioned the teacher in control of their own learning and built confidence in their reflective practices. Coaching conversations led to additional resources or thoughtful reflection with the help of video or virtual tools.

The data within this theme supported the use of video and virtual tools for collaboration. One participant recalled when their coach provided a video as a model for their writing instruction,

“My first vocabulary lesson was like my, what I call my vocab talk. So, it's the beginning of the week, we're introducing new words. (Coach is) like, you almost sound like Anita Archer. This is a tool I want you to log in and look at. And so, it was fun for her to take my, I guess, my teaching method and compare it to someone else's. And then see where those, I guess, could I gain positive things from her style and maybe include it in mine?”

The coach's use of a video as a virtual learning tool was uploaded to this teacher’s huddle. Here the coach complemented the teacher’s current instruction with an additional resource. The teacher went on to say,

“And then having that video where she was like, Okay, this is a teacher who, you know, does this successfully. Let's take a look and reflect on that. And to go back and forth on that, and I guess share my ideas. And that was good. It really was to actually see someone else. But I think I would not have gotten this far. Honestly, if we hadn't started that way.”

This particular teacher indicated that using a video model provided a mentor example. They were

able to collaborate, but it also became the foundation for an interest in continuing with virtual literacy coaching.

The video also served as a tool for identifying areas of instructional need for reflection. One interview stated, “So one of the suggestions based on the video that I had submitted was about manipulating sounds and words and blending their sounds together.” Here, video was an important part of the collaboration. It was used to identify an area that might need additional learning. The use of tools and video was also noted in the final coaching Google Form, “By watching videos, either my own or another educator's, I am able to focus on the important pieces of the lesson (in my case, vocabulary and DOK) and get rid of the fluff so students are able to have an interactive, meaningful learning experience.” This teacher relied on video recording their own work and watching mentor examples. Another response stated,

“I was also able to learn some new tools and made time to be able to access content through those tools. I have gained new ideas. For example, I had the opportunity to incorporate a TPS during virtual learning with 1st graders. I have also gained new resources and find myself looking back at WWC frequently.”

In these final reflections, the use of video or virtual resources were a benefit for the participants.

Virtual Educational Resources

Beyond the use of video, educational resources were mentioned frequently in the data. The types of resources shared differed but were linked to individual coaching goals. During a participant interview, the teacher stated,

“There were other times that during our lessons or our discussions on the discussion board, resources were given. And a lot of those were super helpful, especially the phonics ones when we had that discussion about phonics and phonemic awareness. To go back to read those, sometimes I just needed a refresher or, oh, that's new information or a different perspective on things. I found the resources very helpful.”

Some resources were shared via Zoom during coaching sessions (see Figure 5.3), and others on the discussion board or through video dialogue. One final coaching Google Form stated, “The

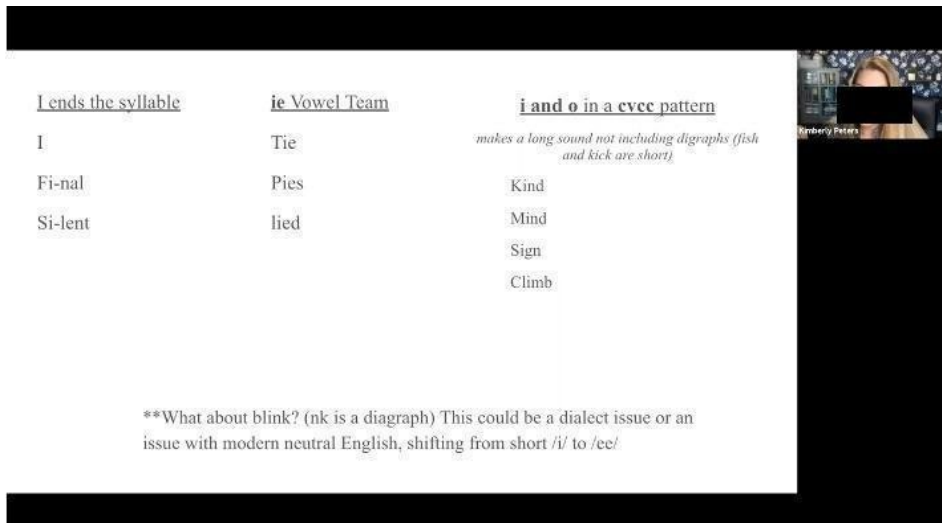
discussions and information you shared, verbally and via links, were completely helpful.” One important consideration is how relevant the resources were, and if there is a culture of collaboration around those resources. One teacher stated,

“The phonemic awareness one (resource) where actually I did a survey type thing, and then we talked about that.... And sometimes I'm not sure I was using the words correctly. The title teacher will come down, and I'll say something, and he's saying something different. So, we kind of made it (a conversation) me with colleagues get on the same page a little bit that I work with. Those resources led to discussions with my colleagues as well. I'd be like, hey, I just got this resource. Did you know? So, I was able to share that too.”

This also inspired thought around the greater impact of providing meaningful resources. Coaching could be transformative in a culture that is open to sharing and collaboration.

Figure 5.3

Example of Resource Shared During Virtual Coaching Synchronous Zoom



Improved Literacy Knowledge

Collaboration around the virtual resources suggested three benefits, including a perceived increase in literacy knowledge related to pedagogical practice. As teachers were asked to identify a goal area before collaboration, the data included many different desired literacy

skills (i.e., explicit letter instruction, vocabulary, writing, phonological awareness, and phonics) in relation to individual instructional abilities. For example, one participant mentioned that through collaboration with a coach, they were more equipped to adjust their instruction and meet the needs of their students,

“So, in my initial vocab discussion, I have the kids work through, you know, the morphology of the words, and, you know, we break them apart. We talk about the parts that we know, you know, and things tell us that it happened in the past, base words. We do a lot of that and then we don't say the words until the very end of the video. And coach was like, give them more opportunities to say the word. You know, kind of ground that word in their head to where anytime they see it in print, now they're going to be able to at least pronounce it. Even if they don't remember the meaning of it, they're going to at least be able to pronounce it. So that was huge.”

In working with a coach, this teacher identified a small but essential practice that will support their students' vocabulary development.

Working alongside a coach provided teachers with resources to improve instruction across literacy skills. One teacher described their coaching experience while working on letter sounds,

“I'm thinking specifically of the sounds and clipping the sounds one that was something that we had touched on. And I've had no formal teaching in that area when I went to school. So, tell me if I am doing it right because I really don't know. So, it was good to know that because I wasn't sure. Okay, this is what I'm noticing. And it was good to know that even though I've had no formal training in it, what I noticed is exactly what you commented on when we talked about it through that conversation. So it was good, good reflection.”

Collaboration and the additional use of video supported this teacher's needs. The teacher was more confident and capable of working with this literacy skill. Vocabulary was another literacy skill that was highlighted throughout the data. One final coaching Google Form stated,

“Through this experience, I have learned to put more planning time into my read-alouds. I need to be careful while selecting vocabulary making sure it's broad and can be used across many subjects. I've learned that a story can be read aloud several times, each for a different purpose. I've also incorporated more higher-level thinking questions into my daily read alouds.”

This statement indicates that the teacher is now more equipped to address vocabulary in their books read aloud due to working with a literacy coach. Throughout the data, the response continued to reflect increased understanding and teaching ability across multiple literacy skills.

Increased Student Engagement

An additional benefit of virtual literacy coaching included a perceived increase in student engagement. One teacher shared her experience using classroom video to monitor student engagement. They stated,

“But to then actually go back in and watch myself. I would go back in and I would watch the whole video first. And then, I would like slow it down and make those comments myself. And there were times where I was like, oh my goodness, my kids are so engaged in this conversation. Like I wasn't giving them the opportunity to have those little sidebar conversations. I'm like, right here, I need to slow down and really listen to what my kids are telling me. And I feel like time is such a hard thing for teachers because we never know like, are we going to get enough in? Then I feel like sometimes, am I going too slow? So, it was nice to see that, I guess, to help me with pacing for future lessons.”

Video reflection proved to be beneficial. It helped identify student engagement and areas of instructional improvement.

In addition to interview data, other participants indicated an interest in reflecting on student engagement throughout the coaching process. Using time-stamped feedback on a recorded classroom lesson, one teacher wrote, “I tried to switch up how we say the words...it seemed to wake the kids up and get them a bit more engaged!” Utilizing the power of recording, this teacher was able to revisit their lesson and identify strategies to increase engagement. Multiple final coaching Google Forms also indicated an increase in student engagement, “I have been able to see an increase in student engagement during Heggerty time which is awesome!!” and “With the help of virtual coaching I have been able to engage my students in the interactive writing process. I have also noticed that my classroom management has improved tremendously because all students are engaged with interactive writing.” While considering virtual literacy

coaching alongside student engagement, it is important to consider the previously mentioned perceived increase in pedagogical skills. Pedagogy may also have a direct impact on student engagement, along with the use of video reflection.

Improved Formative Assessments

At the heart of coaching is the desire to improve student data. The data indicated increased student literacy achievement (see Appendix V). While this increase cannot claim to be in direct correlation with virtual literacy coaching or the resources shared, it can be viewed in partnership with the previous claims. Along with increased teacher pedagogical skills and student engagement, there is also data to support student literacy growth. Student data was mentioned often in the pre-coaching Google Forms. Teachers responded that they were looking for “ways to efficiently increase student growth at all levels” and collect data efficiently using a “goal tracking/skill based tracking system that shows student proficiency for their reading skills.” With student data being a focus, reflection often highlighted student instructional gains.

Student data, in this case, is based on formative assessments monitored by the teacher (see Appendix V). In an educational setting, student data is often collected throughout the school year. Some school districts use student data as part of the teacher evaluation process or to identify at-risk students. Those types of data analysis typically use general outcome measures or can be referred to as screeners. This differs from the student data shared through this virtual coaching model. This case study utilized what is known as formative assessment. The teacher often uses formative assessments regularly to monitor skill-based progress, and they can include teacher observation. Throughout the coaching cycles, students progressed according to formative assessments in letter identification and sounds, phonics skills, and writing. A teacher noted, “My students' writing skills have improved dramatically since the beginning of my coaching cycle.

My students have successfully learned how to write independently about a given topic.”

Additionally important is how a teacher perceived the experience of using student data throughout the coaching cycles,

“I was able to choose a specific focus and collect data as well as discuss details with another professional. Our meetings were open and positive. I did not experience the anxiety that I often get during administrative evaluations. I felt like the artifacts collected were insightful and that the resources and ideas shared by the coach were useful appropriate and dynamic.”

This suggests that using student data throughout the coaching process was comfortable and helped them achieve their classroom goals.

Summary

Through exploring the data, positive outcomes were noted in three areas related to the educational resources shared through this virtual coaching model. The video was often recognized as a valuable tool for identifying skills to improve. Teachers recognized how resources supported their literacy knowledge, noted improved student engagement, and saw increased student achievement. While many additional factors might contribute to these outcomes, the teachers' experiences link the outcomes to virtual literacy coaching.

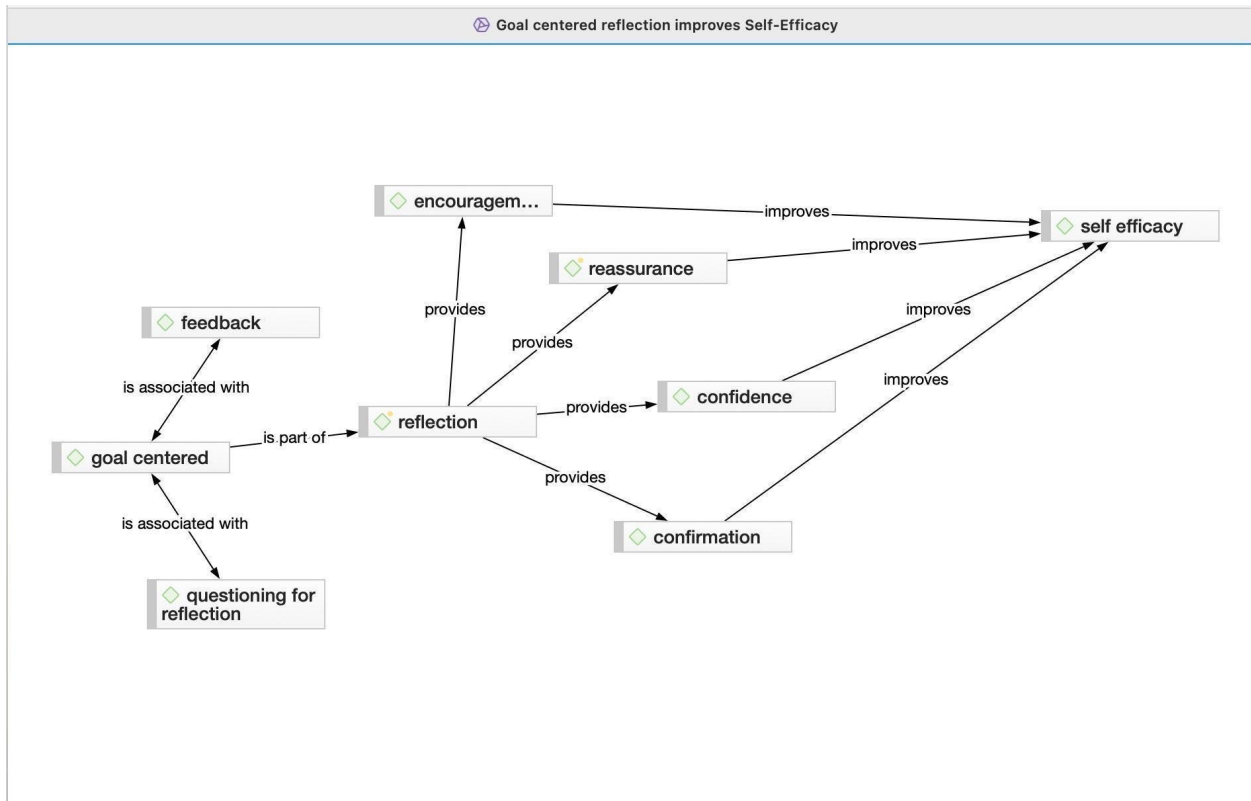
Theme Three: Improved Teacher Efficacy

When considering the data, teacher efficacy was a priority. Teachers' efficacy was improved in response to taking the time to record and reflect on classroom lessons. Figure 5.2 establishes the network of codes and their relationships that support this theme. In reviewing the literature, there was also a significant link between teacher efficacy and teacher capacity which can impact pedagogical transformation (see Figure 2.4). It is also important to align this theme with the previous claim made in theme one, regarding teachers requesting feedback and assurance to boost confidence. The concept of confidence and efficacy will be explored further

below.

Figure 5.4

Goal-Centered Reflection Improves Teacher Efficacy



Coaching Through Individualized Goals

Using an individualized approach to coaching, teachers were given multiple opportunities to identify and create a goal related to an area of interest. One method of identifying individual goals was through a pre-coaching Google Form (see Figure 5.5). This Google Form asked several questions to help the coach understand the teachers' strengths and areas of interest. An individualized method of goal setting provided the teachers with a deeper connection to the professional learning opportunities, shown through personal classroom reflections. The video recordings and discussions were intentionally planned around the teacher's goal areas. Once goal setting began, the coach also started a conversation on the discussion

board,

“Tell me a little bit about a literacy-related goal that you are interested in working toward. It could be a topic that you are already working on or something new. Maybe your grade level is already focusing on a research based literacy strategy or you have a school related goal that you would like to focus on. If you are unsure, think about an area below that you would like to talk more about.”

This provided an additional opportunity for the participant to choose an area that was important to them. Teachers enjoyed being able to select their learning goals. One participant stated, “I was able to choose a specific focus” and “it was very helpful that I was allowed to come up with the goal of how I wanted to improve my teaching. My coach was also very willing to adapt the goal I had chosen, so I knew this was going to be valuable to me.” Providing autonomy in their learning also created a culture that encouraged the teacher to oversee their growth, increasing the likelihood of efficacious behavior. One teacher stated, “So just seeing, I guess, first and foremost, deciding on that essential that we're gonna work on, essential seven. Like, this is really where I feel like I do an okay job, but I wanted to grow more in that area.” This efficacious behavior transferred into the process of video reflection.

Figure 5.5

Example of Pre-Coaching Google Form

Do you have other literacy-related professional learning opportunities that you are * involved with (PLC, Literacy Team, Curriculum Committee, etc)? If so, what are they?

Your answer



What would you like me to know about you as a teacher and learner? *

Your answer



What concerns do you have about coaching? *

Your answer



What are your areas of strength? What areas would you like to improve? *

Your answer



What key parts of your practice can be improved to increase student achievement? *

Your answer



What would you like to get out of our coaching sessions? *

Video Helps Build Reflection

Video reflection was a large part of this virtual coaching model. The coach frequently encouraged teacher reflection using asynchronous time-stamped feedback and synchronous virtual coaching conversations. Much of the data coded for reflection stemmed from the coaches' time-stamped comments on the teachers' classroom video lessons. For example, the coach responded to a teacher who stated they met their most recent goal,

“Yes, I agree. This was a great lesson. You hit your instructional targets. Your goal was to increase motivation, and they were much more engaged. When we look at this lesson with time management as our focus, it boils down to the transitions between words and

activities. By setting behavior expectations prior, might minimize some of the trouble. You will want to streamline the word delivery portion while allowing them time for a quick response. This response could be a single verbal word or a hand signal. I'm also thinking about the whiteboard portion, can the amount of words be condensed to just two or three? Could they already have the materials at their table?"

The coach, in this situation, highlighted the connection to the goal and then provided questions for deeper reflection. This deeper reflection led to a greater response from the participant and aligned with their intended learning target. By keeping the reflection questions connected to their learning goals and using classroom video, the coach was able to support their individualized classroom needs and keep the teacher engaged in the desired learning.

Virtual Coaching Improves Efficacy

The issue of low efficacy was highlighted throughout the data as well. This pre-coaching Google Form response shows an example of low efficacy,

“I would like comfort that I am spending equal and appropriate time in all areas of literacy. I feel unbalanced at times. I also want to feel I am getting the most teaching and the students are receiving their best learning out of the time we spend together.”

This teacher noted they needed to feel more efficacious in their application and time regarding all literacy skills. Another teacher noted they wanted more access to, “writing resources and to feel confident when teaching writing.” This is closely related to the concept of requesting feedback mentioned in theme one. In this study, wanting feedback is defined differently than having low efficacy. If a teacher asked for feedback, that would be described as already understanding the skills necessary to perform a task but lacking confidence. In juxtaposition, when a teacher has low efficacy, they lack a specific skill required to complete a task and may or may not also lack confidence. One teacher stated, “I would like to gain suggestions, ideas, and feedback that will help increase both engagement and achievement.” This teacher indicated a goal area and requested resources to improve their skills, thus exemplifies not feeling

efficacious.

As a coach responded to the lack of efficacy with resources and encouragement, there was often an improvement. One teacher noted they had a “stronger sense of self confidence when working with students in small groups, and struggling students.” They also reported an increase in understanding of available resources. In a final coaching Google Form, one teacher stated,

“I have greatly appreciated the amount of suggestions I have been given. Reflecting on my teaching has made me take the time to stop and think about what I feel good about and also things to improve upon. I found that I was doing things that I didn't even know I was doing! This experience has been very positive from beginning to end!”

Teachers increased their pedagogical skills and efficacy by providing resources and video reflection.

A critical consideration concerning the usefulness of coaching is whether the teacher can efficiently transfer the newly learned skill and perform it independently without continued coaching support. By modeling the reflection process using recorded classroom lessons, teachers might be better equipped to independently continue the video reflection process. Classroom video recording provided an opportunity for a critical eye, even when the coach was unavailable. One example of efficacious behavior was noted in a teacher interview. They indicated that they would like to continue using video for reflection beyond the typical coaching cycles,

“But I think the videos were very helpful. And I even verbally reflected to a co-worker that I might want just to do that, occasionally anyways. When I'm unsure of what it is I'm teaching, not necessarily related to reading like I'm struggling a little bit with a new format we're doing for math, and I'm just not sure if it's working or if it's the year of the pandemic that is causing the issue that I would want to just go back. I said it was helpful to go back and reflect on some of those things. By having the video to do it without being a part of this program. What you're doing for your coaching, you know, to do it outside of that, I think would be helpful.”

This is an ultimate example of increasing capacity and efficacy in educators. In this scenario, coaching provided an opportunity to grow and learn in a way that produced self-sufficiency.

Summary

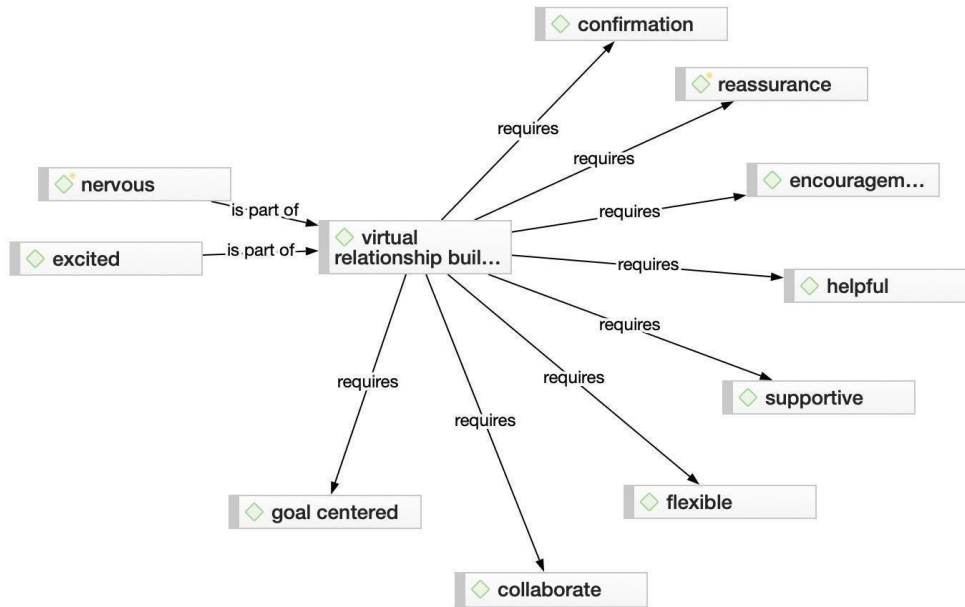
When considering the data, teachers' efficacy was improved in response to taking the time to record and reflect on classroom lessons. The increase in efficacy may be linked to teachers prioritizing their learning and selecting individualized learning goals. It may also be related to recording their lessons and reflecting on small moments that can improve their instruction. The perceived increase in ability and confidence was noted throughout the data.

Theme Four: Factors in Virtual Relationship Building

Relationships are vital for any successful coaching model. Relationships can be established in a virtual literacy coaching model. However, many contributing factors can influence relational development. Figure 5.6 expands upon the many codes that network to develop this theme. Focusing on the participants' perceptions, virtual relationships are established through positive actions, flexibility, and a focus on individual goals.

Figure 5.6

Virtual Coaching Relationships are Multifaceted



Anxious Feelings Prior to Coaching

Teachers’ initial perceptions of virtual literacy coaching indicate nervousness and excitement. While some participants had interacted with the coaches in prior professional settings, the pre-coaching Google Form and teacher interviews revealed adverse feelings. One primary concern highlighted throughout the data was the discomfort of using video to record classroom lessons. The use of video triggered two primary concerns. First, there was an issue with seeing oneself on video. The second concern was the possibility of the video recording being used negatively. These concerns have the potential to dissuade participants and should be given careful consideration.

Feelings Related to Video Recording

Concerns with recording classroom instruction were mentioned throughout the data. One teacher stated, “I am not super excited about videoing myself while teaching, but I do see

the value and opportunity to improve by watching my own teaching.” Another teacher expanded on their reasoning for being nervous, explicitly mentioning how this experience may influence their evaluation process. They stated,

“I get super nervous when it's observation time, you know, from a supervisor or principal that's always around. I think I was nervous (to record) at first. Partly because I had a really difficult class this year, and I didn't know what might pop up during the recording of my video that I would have to attend to. And (I'm) not sure that I really wanted to post all that. But that is my life. And I'm probably not the only teacher that is experiencing those disruptions as they're trying to teach. So, I just finally went for it.”

This demonstrates the level of trust that must be acquired before coaching. This participant described the process of realization and vulnerabilities associated with using video in the classroom. When considering the evaluative process, this case persisted in defining coaching as a collaborative and non-evaluative model. The coaches emphasized the teachers' control over the recordings by ensuring their privacy during the recording process. As mentioned in previous chapters, all recordings were privately recorded in the teacher's workspace of Sibme. The coaches do not have access to the participant's workspace. When the teacher was ready, they would share a clip of the recording with the coach in their huddle. One teacher reflected on this process by stating, “I'm glad you said that only I could, like, see it. Because before that, it was kind of, like, intimidating.” The coaches could remove the fear of initial judgment by putting the teacher in control of what they share and insisting on privacy for video reflection.

Feelings Related to the Coach

There were also trust concerns. One teacher mentioned they were most nervous about the coach's feedback, “I am nervous to hear all your ideas, as I feel as if I am in the spotlight and not sure what to expect as feedback. It is hard to be heading downhill in my career and jump on board with new learning and step out of the box, but I am still here learning new things.” This teacher expressed a commonly mentioned feeling, nervousness, and was unsure of how the coach

would respond. Another teacher expanded upon similar feelings by sharing, “I am excited and nervous simultaneously. I've always been confident in my teaching and what I'm doing, but since I've moved to first grade, I don't feel very confident.” Again, this captures low efficacy and a need for feedback, connecting well with themes one and three mentioned previously. The quote above is also a great example of how the literature mentioned a need for a trusting relationship for coaching to be successful. While the teachers feel uneasy and distrustful during the initial interactions, through supportive actions, the coaches can begin to facilitate trust.

Positive Relationship-Building Throughout Coaching

Establishing a virtual relationship is multifaceted. The data suggested a shift in relational understandings once the coaches began to express positive encouragement, acknowledge flexibility in the process, and provide support regarding individualized goals. After completing a few coaching cycles, one teacher noted,

“It wasn't as intimidating as I went through. I knew that it was only you and I watching the video. But then I had to stop and think, I know I'm not the only teacher that's dealing with these behaviors in their classrooms. So yeah. less intimidating as I came to realize that I know. This isn't the only classroom these things are happening in.”

By the end of the coaching cycles, a teacher expressed how the coach was just as invested in their goals as they were, “So, she was, I mean, I think she's just as excited as we are at that point.” This mutual investment in the video reflection aligned with providing positive encouragement. Another teacher described this experience as an engaging and exciting process,

“In all honesty, I think if we hadn't been on this, this like fast moving train, like we were both so excited and so engaged in this process. I think it was something in all honesty that I could have pushed off and taught in the fall. But that opportunity was right there. And I really wanted to try it. In the end, results were so incredible.”

They refer to their coach as we with the teacher and coach moving forward, which was interpreted as a collaborative relationship. Moving from nervousness to the comfort of “we” was

tied to positive relational actions, maintaining flexibility, and valuing individual goals.

Positive Relational Actions

Moving from a state of anxiety to comfort in a virtual environment requires positive relational action. During a teacher interview, the teacher described how they would begin each synchronous Zoom session,

“Just kind of like, how was your day going? How's your week been? Just, we didn't jump right into it. It was kind of like, how are you going? I know you've been busy. What's going on type thing? And we would just tend to debrief a little bit about that before we would start with the lesson. Which reminds me of what's big and new in education right now. We call it mindfulness.”

Spending time in a relational conversation before coaching was an opportunity to build a trusting connection. This teacher went on to share, “And from that, just that little bit of back-and-forth conversation, I was like, I want to record myself. Like it was such a good conversation, it was funny.” Taking a few minutes to understand and check in with the teacher before coaching successfully built trust.

There were also a few asynchronous opportunities for relationship-building in this virtual space. The Sibme platform allowed for time-stamped comments to be linked with color codes. These colors are related to specific topics like asking a question, giving an idea, or providing supportive feedback called “bright spot” (see Figure 5.7). A like button could also be used in response to reading someone’s comment (see Figure 5.8). These features are very similar to what other social networking sites have used for communicating a relational enjoyment related to a comment or photo. Throughout the data, they are coded with positive relational interactions.

Figure 5.7

Comment Box Featuring Bright Spot

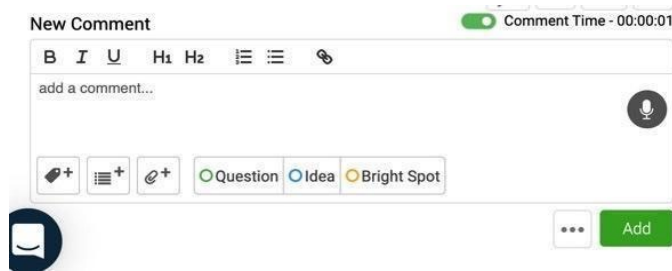


Figure 5.8

Like Button



Coaching Flexibility

In addition to the conversation and digital features involved in creating a relational environment, the coaches' flexibility was also linked to relationship-building in the data. One teacher stated that the coach's willingness to be flexible around schedule changes helped facilitate the process, "She was so willing to be flexible around my crazy schedule that it worked." Flexibility was often tied to relationship building because it supported the teachers' comfort related to participating. Another teacher stated that the coach "made this process very flexible and comfortable and worthwhile. Everything we learned can be integrated into our daily teaching/curriculum." While highlighting the relevance of coaching to their daily practice, this teacher also links flexibility to comfort, which has a positive relational correlation.

Teacher Autonomous Goal-Setting

When considering the value of relationship building during coaching, there was a connection to the coaches' investment in the teacher-created goals. The teacher and coach worked together to improve the desired outcome by supporting a common goal. This collaboration was infused with positive relational support. One teacher reflected on choosing a

goal and their feelings related to the process of working with a coach,

“I was able to choose a specific focus and collect data as well as discuss details with another professional. Our meetings were open and positive. I did not experience the anxiety that I often get during administrative evaluations. I felt like the artifacts collected were insightful and that the resources and ideas shared by the coach were useful appropriate, and dynamic.”

This quote positions the coach in a collaborative model. The reduced anxiety indicates a significant level of trust. By aligning the coach's direction toward the teacher's desired outcome, there was a link to positive relational interaction.

Summary

While relationships are vital for all coaching models, establishing a relationship in a virtual setting is possible. While relational learning has many facets, they are all important when realizing the initial participants' likelihood of feeling nervous. Whether the anxious feelings stem from experiences with previous evaluative relationships or the discomfort of recording oneself, the data suggests these feelings are prevalent and require trust before using video for coaching. Emphasizing positive communication, flexibility, and goal-related feedback can create a relational environment in a virtual coaching setting.

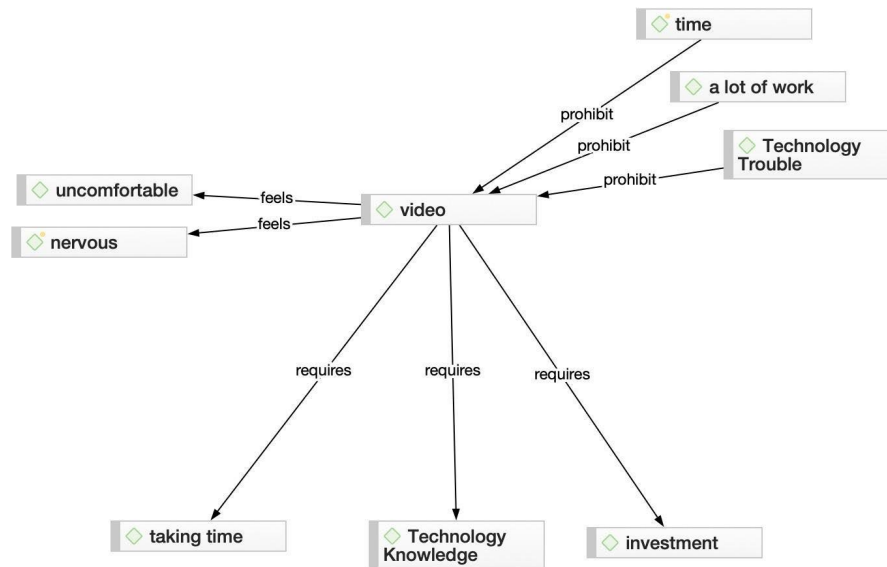
Theme Five: Trust, Time, and Technology as Barriers for Successful Coaching

While exploring the perceptions of teachers participating in this case, the data mentioned multiple barriers to establishing a successful experience. While a few of these codes (time and trust) were explored previously, their associations within the different networks allowed for separate claims. Through this network's association, three codes will be explored as barriers to attainment. Time and a cumbersome work environment were relayed as a concern, along with trust and technical difficulties. Figure 5.7 shares the coding relationship of this theme.

Figure 5.7

The Discomforts of a Virtual Coaching Model

Virtual coaching has barriers and requires time for technology skills to be effective



Trust Constraints

As established in an earlier theme, virtual coaching can present uncomfortable feelings (see Theme Four). Many teachers shared their nervousness about beginning the recording process. Teachers noted, “It can be uncomfortable to watch yourself teach,” “I am not super excited about videoing myself while teaching,” and “It’s kind of intimidating at first.” The uncomfortable feelings were not only associated with the concept of videoing but also related to the coaches’ feedback. One teacher stated, “I am nervous to hear all your ideas.” Prior to developing a level of trust, there was a noticeable decline in the quality of reflective conversation between the teacher and the coach. The first cycles of reflective video collaboration contained minimal teacher reflection. Some of the first teacher-led, time-stamped comments often summarized an action without reflecting on the meaning behind the action. The coach regularly

encouraged participation by making positive comments and posing questions for deeper reflection. While previous themes also explored how trust can be acquired through relationship building, trust is a clear barrier to teacher participation.

Time Constraints

The data also presented time with two different associations (see Theme One). As stated, one view of time had a positive connotation, and the other was interpreted negatively. The positive association of time was defined as taking the time to reflect or invest in learning. The negative association of time was defined as something taking too much time or not having the time. The two contexts of time are essential when considering the perceptions of teachers' experiences. Many teachers established concerns about their time before beginning the coaching cycles. One teacher noted, "I am nervous about the amount of time," which will take "more time out of my prep." This teacher was most concerned about how much time they would need to participate and how much time they would have left to prepare for classroom lessons. If teachers were to participate in coaching voluntarily, it would need to prove valuable. One teacher shared their experience of the time commitment,

"Sorry, I'm, as you said, very busy. So, my reflecting time, I really didn't take the time at school to do it. Because I would run off to a second job. So, I had to get my stuff done. I would reflect more in the evenings. Which may have been a good thing because I've had that disconnect from school and that fresh perspective of going back and looking at my videos. I think maybe I spent more time in it, watching and reviewing it. I don't know, I would go back and watch it again. Make my comments, go back and watch your comments, listen to your comments, and maybe read it, and watch a clip again. ...it did take some time for you to set aside to watch that video, to make your comments. You know, you've done the lesson. Now you have to upload the lesson, which is all fast and easy. But the time to then sit and watch that. And I know, your guidelines were a four to five-minute video. But the parts that we chose to focus on, I didn't feel I could narrow down to four or five minutes sometimes. So, mine was much longer, mostly about 10 minutes long, eight to 10 minutes. So that's another additional, you know, eight to 10 minute video and adding another couple of minutes to do some typing reflection on it."

This teacher also describes the process of using asynchronous communication for reflection. The

video time-stamped feature allowed them to reflect around their busy schedule. Understanding that time is a concern and teachers often have limited time suggests that virtual literacy coaching must provide value for participants to buy in.

There were positive associations of time. As theme one notes, the time invested might be worth the gain. Many final coaching Google Forms stated that the time was well spent. One teacher shared,

“While it felt like this was a lot of work, it was all work geared toward honing my craft and making the educational experiences of the students meaningful. Every minute was worth it (and it really didn't take that much time at all). Being reflective allows me to see my own teaching and practices through a new, and better, lens.”

This data was taken from teachers who completed four to six coaching cycles and did not contain the perspectives of teachers who could not complete the coaching process. Time will continue to be a barrier for educators.

Technology Constraints

There were also two aspects of technology presented in the data. One filtered into a positive experience where technology made the coaching system more convenient. The other filtered into a negative experience that limited access to coaching. These two competing positions are relative to individual needs and experiences.

Technology Difficulties

The use of a virtual platform for coaching requires additional learning to operate it successfully. One teacher expanded upon navigating the new virtual features (e.g., time-stamped comments, goal setting, uploading a video). They stated,

“At first, to maneuver through that and figure out where things were, something things I didn't get done on time. And it tells you that you didn't do it on time, it's not the right color. I think it's because everything wasn't in the same spot, you had to go to a different spot to respond to the questions. The feedback, the video feedback comments, was

interesting to get the hang of. I wasn't quite sure how that worked. I finally figured that out in the end. Now I know I just need to start typing, and it stops immediately like I was trying to stop it, and then start my typing is my response. Sometimes I would remember you made a comment or shared a resource. And I'd have to remember which cycle that was in to go back to look at it when I wanted to refer to it.”

This teacher was describing a complex system that might be difficult to operate. With practice, they stated they could get the hang of it. Another teacher referenced the platform and where the digital resources were located. They stated,

“It was a little bit confusing, Sibme, trying to go back and remember, okay, where was that at? Because it's not all in one spot, you have to go back to discussions for another spot, and you have to click through several links to get to the new coaching cycle. I mean, that's the platform, that's not anything that you can change.”

The complexities of the virtual tools being used might need additional coaching support. One participant stated that the process could be simplified by not using other features like goals or the discussion board. The complexity of the platform does create a barrier.

There were also concerns regarding the complicated use of iPads and mics for recording. One teacher stated,

“And I also want to mention on the video, that was tricky to figure out how that all worked. Because if you didn't, if you forgot to turn on one piece of equipment. Or that did record, but you had no sound. So, I had to be certain. And that was a good lesson that I wanted to reflect on too, that I missed. So, I had to, I had to be certain that I had both pieces on. And sometimes I know a couple of other teachers had that problem. You had to click on the microphone, or oh, you can't try to play back your video with the (microphone) piece still attached to the iPad. That was one thing that it took me a while to figure out. That's why I'm like, both pieces are on, but it's not playing the recording. Why?”

This type of experience was coded a few times throughout the data. Using the devices to record may also be a barrier.

Technology Knowledge

The data reflected ease and access on the other side of these technical barriers. Many participants indicated that they were comfortable using technology. One teacher stated, “ Um,

but like I said, I'm not scared of technology. So I was kind of like it was, but it is pretty user friendly,” and “I guess that I'm not afraid of technology. So I wasn't worried about that piece of it.” Regarding the platform Sibme being complex, additional participants indicated it was very user-friendly. One teacher mentioned,

“But it was, it was so simple to record a video on Sibme. That alone, but just that step, it was literally, you know, turn on the iPad, log into Sibme. And that recorded video was right at the bottom of the screen. You know, make sure the iPad is positioned in the right way. And I literally had a stack of chairs, and I just leaned it on the chairs in the middle of my classroom. And then you can see obviously yourself being recorded,”

This sentiment was echoed by various teachers as well. One teacher shared, “Sibme was a really easy tool to use. So, recording that video was so simple.” These statements present contrasting perceptions and emphasize the need to focus on the individual learner. One area that did not come up was limited rural internet access. The data did not suggest perceived limited access as suggested in the literature review.

Summary

Through an exploration of the literature, it was suggested that barriers might be presented through a virtual coaching environment. While exploring teachers' experiences participating in this case, the data suggest three obstacles to establishing a successful venture. Time and a cumbersome work environment were relayed as a concern, along with trusting the coach, and technical difficulties. These barriers will be discussed further in the following chapter.

Summary of Findings

The data was examined with the following research questions: (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.)

Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? Using reflexive thematic analysis, five themes were identified.

Theme one established a connection between teacher time and a desire for feedback. Teachers sought feedback through coaching regardless of the extra time commitment. Recognizing the participants' perceptions of time is essential when developing a virtual coaching model. The value of a virtual coaching model ties to the opportunities for asynchronous reflection and much-desired feedback. Some data highlighted that teachers might initially lack confidence in their teaching practices and seek feedback throughout their participation in the coaching cycles. Taking the time to record classroom videos and reflect alongside a coach benefited teacher confidence.

Theme two highlighted positive outcomes in three areas. These positive outcomes were related to the educational resources shared through this virtual coaching model. Participants indicated an increase in student engagement because of participating in coaching. In addition, student data related to formative assessments showed perceived improvement. Pedagogical literacy knowledge, measured by teacher perception, also suggested a positive outcome.

Theme three established a connection between teacher efficacy and virtual coaching. Teachers' efficacy was improved in response to taking the time to record and reflect on classroom lessons. The increase in efficacy may be linked to teachers prioritizing their learning and selecting individualized learning goals. It may also be related to recording lessons and reflecting on small moments that can improve instruction alongside a coach. The perceived increase in ability and confidence was noted throughout the data.

Theme four supports relationships in a virtual literacy coaching model. Relationships are vital for any successful coaching model. However, many contributing factors can influence

relational development. Focusing on the participants' perceptions, virtual relationships are established through positive actions, flexibility, and a focus on individual goals.

Theme five mentioned multiple barriers to establishing a successful experience. While a few of the codes (time and trust) were linked to prior themes, their associations within the different networks allowed for separate claims. Through this network's association, three codes become barriers to attainment. Time and a cumbersome work environment were relayed as a concern, along with trusting the coach, and technical difficulties.

These themes were based on teachers' perceptions of participating in virtual literacy coaching. It is essential to consider the experiences of those participating to develop an effective program. Considering the attributes and barriers will ensure a successful and equitable program. The following chapter will discuss these themes in relation to the research questions and the literature.

CHAPTER SIX: Discussion

Literacy coaching is an individualized, job-embedded form of professional development that can boost teacher knowledge and correlational student reading achievement (MDE, 2018). Literacy coaches work as change agents by modeling classroom lessons, providing instructional feedback, analyzing student data, and partnering with schools to build a more robust reading program. Substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman, Mansor & Hamzah, 2017; Wetzel, Maloch & Hoffman, 2020).

The Problem: Limited Resources and Need for Relationship-Building

Moreover, schools with access to an early literacy coach are better positioned to improve students' early reading skills. Consequently, educational stakeholders must recognize how inequitable situations in small, rural school districts (e.g., funding, limited personnel, etc.) may hinder access to literacy coaching resources. Limiting coaching resources could directly impact teachers' pedagogical growth and restrict correlational student reading achievement for rural students. By modifying the literacy coaching platform and introducing a virtual literacy coaching model, school districts may be able to transcend issues of time, space, and resources.

One aspect of coaching that influences the transformation of teacher practice is the tenet of relational trust. Relationships between coaches and teachers are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L'Allier et al., 2010). In addition to coaching being a relational process, it also requires opportunities for reflectivity (Garmston et al., 1993). Coaches can encourage the transformation of pedagogical practices through experiences that require reflection. Therefore, moving the coaching environment into a virtual literacy coaching model requires careful consideration of relational and professional factors.

Research Questions

This qualitative case study examined the relational and reflective actions influencing literacy coaching in a virtual space. Additionally, this work explored teachers' perspectives as they partnered with a virtual literacy coach to improve pedagogical capacity and student academic performance. Through reflexive thematic analysis, themes were established to enhance the development of this virtual literacy coaching model. The following questions influenced the research:

- (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model?
- (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model?
and
- (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning?

Summary of Key Findings

Using reflexive thematic analysis, five themes were identified. Each theme was developed alongside the research questions and through thoughtful consideration of participating teachers' perceptions.

- (1.) The first theme connected teacher time and a desire for feedback. Time was influential throughout the coaching model, and recognizing the participants' perceptions of time was essential. The data supported teachers taking the time to record classroom videos and reflect alongside a coach. The investment of time was stated as a benefit to teacher confidence.
- (2.) The second theme modeled three positive outcomes related to literacy coaches sharing

virtual educational resources. One positive outcome included an increase in student engagement. Teacher formative assessments also indicated improvement, along with teacher pedagogical knowledge.

(3.) The third theme connected teacher efficacy and a virtual literacy coaching model.

Teachers' efficacy was improved in response to the use of video reflection. When teachers chose to record a lesson and reflect alongside a coach, they reported feeling more efficacious.

(4.) Theme four supported relational growth in a virtual literacy coaching model. While many

contributing factors can influence relational development, the data highlights positive interactions, flexibility, and a focus on individual goals as supportive relationship standards.

(5.) The fifth theme identified three barriers influencing participation in a virtual literacy coaching model. Time and a cumbersome work environment were relayed as a concern, along with trusting the coach, and technology difficulties.

These themes were based on teachers' experiences and described in greater detail throughout Chapter 5. It is essential to consider the experiences of those participating when developing an effective coaching program. Considering the attributes and barriers of a coaching model will ensure a successful and equitable program. The following sections will discuss these themes in relation to the research questions and the literature review.

Interpretation of Results

Connecting back to the theoretical framework, the relational interactions that coaches use to mediate pedagogical transformation are organized into three tenets (see Figure 1.6).

(1.) Teacher capacity and efficacy influence learning

(2.)The ideology of perception and reflection

(3.)Relational and dialogic interactions for learning

This framework is based on the mediation of pedagogical practice through relational experiences. Through this process, coaches must recognize that teacher capacity and efficacy directly influence the abilities of the person being coached to secure new learning. The coach and coachee's dialogic and relational interactions are the foundation for which a change in practice can potentially occur. Additionally, perception and reflection allow for the thoughtful integration of new ideas. The theoretical framework will organize the interpretation of this study's results.

Video Assists in Building Reflective Behaviors

While this study did not examine the cognitive transformation that may occur within other psychological theoretical models, it did explore the concept of reflectivity as it related to social and cultural interactions between a teacher and a virtual literacy coach. Specifically, reflectivity is how a participant reflects on their practice (Malthouse, 2014). The coaches encouraged reflectivity through interactive virtual coaching conversations (Costa & Garmston, 2019). By reflecting with a coach, the teachers examined current pedagogical practices. When the teachers were unsure how to use reflectivity, the coaches could rely on reflective questioning strategies, like those presented in the Cognitive Coaching reflective conversation maps (Costa & Garmston, 2019; see Figure 1.4).

Looking closer at using a virtual online platform for reflection, the literature suggested that using video could assist in building reflective practitioners (Leighton et al., 2018). It is often said that video is where reality and perception meet. Virtual literacy coaching allows teachers to improve instruction by using video to reflect on points of inquiry (Leighton et al., 2018). These strategies created an awareness of pedagogical practices that may otherwise go unseen. Teachers

build on their reflective practices alongside a coach by coaching through video.

Research question one was created to take a closer look at how the use of video might influence an individual's perception through video reflection. Question one stated (1.) Perception and Reflection: How does classroom video reflection influence a professional learning model? Two themes are connected when thinking about literacy coaching as a professional learning model in tandem with the use of video. Both themes one and three highlight the use of video for reflection and link video reflection to positive outcomes through a virtual literacy coaching model.

Teachers' Desire for Feedback

Theme one identified the desire for teacher feedback. While some data indicated that teachers might initially lack confidence when beginning coaching, they appeared to desire feedback throughout their participation in the coaching cycles. It could be suggested that video provided more opportunities for teachers to reflect deeply on their practices, prioritizing reflection during more convenient times. In this model, the video became a time-saving tool. Rather than reflecting in the moment, this tool allowed teachers to pause and review their practice at a more convenient time. Choosing a quiet time to focus on specific learning goals also provided more opportunities for deeper reflection, identifying and reflecting on situations that may otherwise go unseen. It is also important to recognize, within the data, one teacher expressed a desire to continue using video reflection beyond their coaching cycles. This references how helpful video was perceived and the ultimate goal of building reflective practitioners.

Video Reflection as a Knowledge-Building Tool

Theme three recognizes the importance of using video to reflect on current practices.

Much as the literature suggested, the video became a tool for reflection. Reflective practices provided the encouragement and reassurance from the coach that many teachers desired. As mentioned in theme one, there was a strong desire for teacher feedback. Through video and collaboration with a coach, it could be suggested that this feedback provided enough assurance and resources to overcome teacher confidence barriers. The third theme prioritizes reflection in partnership with teacher efficacy. This will be explored further below.

While the ultimate goal of any professional learning model is to increase teacher knowledge, using video in this virtual learning environment allowed the teachers to reflect deeply. As stated, practitioners who practice reflexivity also tend to examine their pedagogical understandings and increase the likelihood of student success. Using video for reflection within this virtual coaching model encouraged teachers to build reflective habits. Considering how valuable reflection is to improving teacher practice, one could suggest that video enhances a literacy coaching model.

Building Teacher Efficacy and Capacity with Technology

Coaches often work to build teacher efficacy and nurture capacity when working alongside a teacher. The purpose statement of the coaching Essentials (MAISA, 2016a) document states, “Effective literacy coaching supports teachers to navigate the daily challenges they face in their classrooms successfully. As a result, instructional capacity and sustainability within the schools increases” (p. 1). Teacher efficacy and capacity go hand in hand throughout the literature (see Figure 2.4). This research defines teacher capacity as knowledge, skills, and dispositions (McDiarmid & Clevenger-Bright, 2008; NCATE, 2003). It is also important to note that this coaching model assumes that teacher capacity is unlimited. This vast capacity allows teachers to navigate the many complexities of their instruction, and it is the coach’s

responsibility to build upon their repertoire of skills and knowledge. Another critical term, teacher efficacy, was defined previously as the teacher's belief in their ability to change the educational outcome (Fives, 2003; Tschannen-Moran et al. 1998). Researcher Fives (2003) has situated teacher efficacy in partnership with a social context. Fives (2003) states that teacher efficacy directly results from teachers' pedagogical knowledge and beliefs (pp. 96-97). Through this lens, the coaches worked to build pedagogical knowledge and nurture teacher efficacy. Coaching conversation maps are one tool for recognizing teacher capacity and improving efficacy. This is an essential consideration as the data within this study identified the coaches' reflective questioning strategies in connection with improved efficacy.

Video Reflection Improved Teacher Efficacy

Efficacy and capacity continued to surface in the literature as coaching moved into a virtual space. The literature supported video conferencing and reflective conversations about increased teacher efficacy (McDaniel & Bloomfield, 2020; Vernon-Feagans et al., 2015). Increased teacher knowledge and efficacy are also closely related. Research question two explored the impact of coaching on both student learning and teacher knowledge. (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? When examining the data, multiple themes support this question.

Themes one and three tie together to establish that teachers' efficacy improved using video reflection and reflective coaching conversations. The first theme highlights the teacher's initially lower confidence levels regarding pedagogical practices and a desire for feedback. This was a clear indication of teachers not feeling skillful or efficacious. As both video and coaching conversations provided additional opportunities for reflection, there was also an increase in teacher efficacy.

Digital Resources Improved Literacy Knowledge

As the literature points out, there is a difference between confidence and efficaciousness. Confidence is only used with not feeling a certain way. However, efficacy is lacking in confidence and skill. This is where theme two connects to teacher efficacy. Theme two suggests that through coaching and collaboration, teachers were provided digital resources that improved their understanding of pedagogical practices. The resources increased teacher literacy knowledge concerning their specific learning goals. In partnership with using video to reflect on current practices for encouragement and feedback, the provided resources also increased teacher pedagogical knowledge. By increasing teacher confidence and improving the skill, there was also an increase in teacher efficacy.

Additionally meaningful is the connection between increased teacher efficacy and student achievement. Theme two mentions an increase in student engagement. Student engagement could be a correlational response to the teachers' improved pedagogical skills. Regardless, student engagement was noted often throughout the data. Theme two also highlights an increase in formative assessment scores (i.e., writing abilities, phonological awareness, and letter knowledge). Again, this increased student achievement may also result from increased teacher knowledge.

Research question three tries to identify what teachers perceived as the impact of virtual coaching on student learning or teacher learning. If virtual literacy coaching is beneficial, it will likely continue to be utilized. After examining the data, a positive response was linked to teacher knowledge and student learning due to virtual literacy coaching. It is important to emphasize that teacher perceptions can influence participation in a professional learning model. The value of virtual coaching for teachers may extend beyond video conferencing or reflection into student achievement.

Three Contributing Factors in Virtual Coaching Relationships

Relationships are at the center of effective coaching models. The coaching Essentials (MAISA, 2016a) document states that effective coaches establish rapport and trust while engaging in non-evaluative conversations (p. 3). As members of different communities share specific values and learning is culturally and linguistically situated, it is important to recognize that coaching is a dialogic process that relies on relationships for learning. Robertson et al. (2020) built upon the premise that learning is inherently social and emphasized that there must be relational factors within the coaching model to co-construct higher levels of learning. Relationships between coaches and teachers are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L'Allier et al., 2010).

Teachers' perceptions of the coach and coachee's relationship can influence instructional implementation. Researchers Cutrer-Párraga et al. (2020) suggest the coaching process is multilayered and complex, requiring teachers to perceive the process positively and their coach to increase pedagogical capacity. It is essential to recognize that when teachers have a positive perception of coaching, there is an increased potential for transformation in pedagogy, including the use of research-based strategies and the probable impact on student performance (Holmes & Houston Independent School District, 2020). Therefore, coaching must be a relational action considering the participants' experiences.

Relationships continued to be meaningful as the study moved into a virtual literacy coaching model. Recognizing that learning is inherently social and that highly effective teachers are relationship builders (Cornelius-White, 2007; Lysaker & Furness, 2011), this study took a closer look at the coach and coachee relationship in a virtual setting. Research question three examined how dialogic relational interactions influence teacher participation in a virtual literacy coaching model. (2.) Relational and Dialogic: What relational practices exist within a virtual

coaching model? This question is answered within theme four.

Theme four emphasizes that relationships are vital for any successful coaching model. The data highlights that relationships can be established in a virtual literacy coaching model. However, many contributing factors can influence relational development. Focusing on the participants' perceptions, virtual relationships were established through positive actions, maintaining flexibility, and focusing on teacher-led goals.

Positive Interactions Build a Trusting Relationship

The shift in relational acceptance from the beginning to the end of the coaching model was noted within this data. While the coach attempted to establish a nonjudgmental coaching model, it was evident that during the first coaching cycle, teachers were still experiencing anxiety and apprehension regarding video sharing. There is potential for this apprehension to become a roadblock for coaching, and it will be explored further below. As the coaching cycles continued, the interactions between the coach and the teacher transitioned and appeared more comfortable. That could be due to the teacher becoming more familiar with processes, or it could be due to an increased level of trust. If it is correlated with increased confidence, then stakeholders must recognize that trust may require time to develop.

Providing Flexibility for Teachers Improved Coaching Interactions

In addition to positive actions, flexibility added to relational development. It was mentioned in the data that the coaches' flexible nature created a friendlier learning environment. Being flexible around a teacher's busy schedule and being flexible in response to coaching conversations were noted. This flexible and individualized professional development created an environment that supported relational development in a virtual setting.

Individualized, Teacher-Led Goals Influenced the Coaching Relationship

While allowing for flexibility within the coaching model provided a space for relational understanding, focusing in on teacher-led goals also improved the coach and coachee's dynamic. An important consideration in this case, is the nonevaluative relationship that was maintained throughout. The teachers developed their learning goals autonomously, while the coach guided the process. This allowed for a supportive, relational learning environment.

Stakeholders need to juxtapose the relational environment of a face-to-face coaching model with the relational environment of a virtual literacy coaching model. While face-to-face coaching can provide similar positive interactions and a focus on individualized goals, they often lack the flexibility an asynchronous virtual setting offers. Virtual meetings provided the teacher flexibility regarding asynchronous discussions and synchronous coaching from home. The virtual literacy coaching model provided opportunities to work around the teacher's busy schedule, which appeared to be a high priority in building relationships.

Virtual Coaching is not without Barriers

While technologies allow for multiple modes of communication and learning, the multimodality of virtual literacy coaching presented opportunities for access to coaching and technology barriers. Stakeholders can juxtapose the virtual coaching models' intent to provide coaching to areas that might otherwise go without while also considering issues of access to digital resources. While new modalities (e.g., video reflection, discussion boards, YouTube resources, Zoom conferencing, etc.) offer opportunities for coaching, exploring those modalities for access and understanding is also essential.

While the research questions did not directly address the term barriers, three barriers were identified while examining the following questions: (1.) Perception and Reflection: How

does classroom video reflection influence a professional learning model? (2.) Relational and Dialogic: What relational practices exist within a virtual coaching model? and (3.) Efficacy and Capacity: What do teachers perceive to be the impact of virtual coaching on student learning or teacher learning? While exploring the perceptions of teachers participating in this case, the data indicated three barriers to establishing a successful virtual coaching experience. Time and a cumbersome work environment were relayed as a concern, along with trust, and technical difficulties. While time and trust were mentioned previously, they were not addressed as barriers to the virtual coaching model. It is also important to note that time and trust are not specific to a virtual literacy coaching model. These are elements that may also exist within a face-to-face coaching model.

Lack of Trust Influences Coaching

As established in an earlier theme, virtual coaching can present uncomfortable feelings. Many teachers shared their nervousness about beginning the recording process. Before developing a level of trust, there was a noticeable decline in the quality of reflective conversation between the teacher and the coach. The first cycles of reflective video collaboration contained minimal teacher reflection. This begs whether it is too difficult for some participants to overcome anxieties or if additional actions must be taken to establish an in-person relationship before beginning virtual coaching. Trust stands as a transparent barrier to teacher participation.

Limited Teacher Time Impacts Coaching Commitment

The data also presented a barrier regarding teacher time. As stated, one view of time had a positive connotation, and the other was interpreted negatively. The positive association of time was defined as taking the time to reflect or invest in learning. The negative association of time was defined as something taking too much time or not having the time. The two contexts of

time are essential when considering the perceptions of teachers' experiences. Many teachers established concerns about their time before beginning the coaching cycles. When considering teachers' time, it is crucial to juxtapose an in-person coaching model with a virtual one. An in-person coaching model can offer on-the-spot feedback, which might benefit some. The virtual coaching model can offer asynchronous reflection and feedback, which may provide more autonomy for how a teacher's time is spent. Unfortunately, the issue of teachers not having enough time to participate in professional learning is not new and will likely continue to be a concern. This might also pose a barrier to new teachers who have not witnessed the rewards of participating in coaching.

Teacher Knowledge of Technology Influences Virtual Coaching Model

The technology could also be seen as a barrier. Access to a virtual community may not be enough to function within it. Johnston (2022) states that one of the most significant challenges to virtual coaching is understanding and using the technologies themselves. While the data did not illuminate rural connectivity issues, it highlighted some teachers' difficulties navigating digital resources. It might be necessary for virtual coaches to provide some technical support before and during the coaching process.

Through an exploration of the literature, it was anticipated that barriers might be presented through a virtual coaching environment. In this case, the perceptions of teachers participating suggested three specific obstacles to establishing a successful experience. Time and a cumbersome work environment were relayed as a concern, along with trust, and technical difficulties.

Constraints of the Study

Participant selection should be addressed when considering the constraints of this

study. While the selection criteria were purposeful and required participants to have sufficient experience with virtual literacy coaching to provide robust responses, the selection criteria may have limited the types of answers provided. In thoughtful consideration of the research questions, they aimed to discover teachers' perceptions of participating in virtual literacy coaching. Therefore, participants were required to have completed more than four cycles of virtual literacy coaching. This provided rich data and responses. Multiple teachers did not participate fully throughout the participant selection process, and their data was not subject to interpretation. By adding the perceptions of teachers who could not complete the virtual coaching cycles, the data might provide additional information about the difficulties of learning in a virtual environment.

This case study utilized a sociocultural perspective. There are critical theoretical perspectives that can provide more insight related to teacher identity, power, and positioning. Considering coaches' positioning and using dialogue for power or control would add another dimension to this research. Looking closer at the scaffolding of discourse and social communities of power, there is potential for vulnerabilities and tensions within coaching. Future research could examine the coach and coachee's relational interactions by illuminating the power structures within their coaching conversations.

Recommendations for Future Research

Virtual literacy coaching can help bridge the coaching gap in areas with limited resources. Through a deeper understanding of the research findings, there are affordances to using a virtual literacy coaching model. The findings suggest that relationship building can transcend into a virtual coaching environment. Properly considering relational factors, a literacy coach and teacher can build a positive virtual coaching relationship. Additionally, stakeholders should recognize the impact of virtual literacy coaching on teacher efficacy. Teachers are better

positioned with resources and confidence when provided with resources and learning. These positive findings are helpful for stakeholders who are looking for innovative ways to deliver professional knowledge to teachers in areas with limited resources.

While the data did not support specific rural internet connectivity issues, I recall issues arising throughout the coaching process. Access to technology resources and support continues to be a concern. Focusing on internet access and technology resources will provide an additional layer of understanding about the usefulness of virtual literacy coaching. It would be helpful to focus further research on how rural technology resources impact professional development and student achievement.

As mentioned previously, this study used purposive sampling. By only sampling those that were successful with the virtual coaching model, there is a selection of data that is not equally represented. Those that did not complete or volunteer for virtual coaching may provide additional information to better understand the use of virtual literacy coaching as a tool for professional growth. Further research would enhance stakeholders' understanding of why some teachers did not want to participate in a virtual literacy coaching model.

Summary

Literacy coaches work as change agents by modeling classroom lessons, providing instructional feedback, analyzing student data, and partnering with schools to build a more robust reading program. While substantial research supports literacy coaching as an effective way to improve teacher instruction (Byington & Kim, 2020; Johnston, 2022; Vikaraman et al., 2017; Wetzal et al., 2020), little is known about moving the coaching environment into a virtual space. This qualitative case study examined the relational and reflective actions influencing literacy coaching in a virtual space across three tenets: (1.) Perception and Reflection, (2.) Relational

and Dialogic, and (3.) Efficacy and Capacity.

In addition to coaching being a relational process, it also requires opportunities for reflectivity (Garmston et al., 1993). Coaches can encourage the transformation of pedagogical practices through experiences that require reflection. This virtual model of coaching provided many opportunities for building reflective practices. Through reflective coaching conversations and video reflection, teachers increased their understanding of pedagogical practices and transferred their new learning into the classrooms.

One aspect of coaching that influences the transformation of teacher practice is the tenet of relational trust. Relationships between coaches and teachers are fundamental to effective literacy coaching and can fuel pedagogical capacity-building (L'Allier et al., 2010). While there were initial concerns about building relationships in a virtual coaching environment, relationships were established by using positive actions, showing flexibility, and supporting individualized goals. These relational interactions occurred in various virtual environments, including discussion boards, video reflection comments, and synchronous virtual coaching conversations.

Teacher efficacy and capacity go hand in hand throughout the literature (see Figure 2.4). Coaches often work to build teacher efficacy and nurture capacity when considering the transformation of teaching practices. One benefit of a virtual literacy coaching model was the reported increase in teacher efficacy. Through the use of video reflection and reflective questioning, teachers were displaying more efficacious behavior. This behavior included a rise in teacher confidence and an increase in pedagogical skills.

These findings were based on teachers' perceptions of participating in a virtual literacy coaching model. It is essential to consider the perceptions of those participating in developing an

effective program. Considering the attributes and barriers will ensure a successful and equitable coaching program. While barriers were examined, teachers considered these minimal for the overall effectiveness of the virtual coaching model.

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Appendices

Appendix I: Indiana University IRB Approval

APPROVAL LETTER

To: Wohlwend, Karen

Protocol #: 14446

Protocol Title: Exploring the Efficacy of Virtual Literacy Coaching in a Northern, Rural Educational Service District

Type of Submission: Amendment

Level of Review: Expedited

Approval Date: Thursday, January 5th 2023

Expiration Date: no date provided

**If Expiration Date = "No date provided," this research does not require annual renewal; thus there is no expiration date.*

IRB-IUB approved the above-referenced submission. Conduct of this study is subject to the IU HRPP Policies, as applicable.

Additional Notes:

Amendment A001

This research is approved under the following expedited categories:

-Category 5

-Category 6

-Category 7

Documents approved with this submission:

Attachments

Data Collection Instrument _ Interview Protocol.docx

Other FERPA Email.docx

Other District Consent Results Google Form.pdf

Other District FERPA and Site Request to Research.docx

Informed Consent Statement Participant Consent Form.docx

You should retain a copy of this letter and all associated approved study documents in your research records.

If you have any questions or require further information, please contact the HRPP via email at irb@iu.edu or via phone at (317) 274-8289.

Appendix II: Site Permission and FERPA Exemption



**INDIANA UNIVERSITY CONSENT REQUEST FOR RESEARCH
Virtual Literacy Coaching
IRB #14446**

Hello,

As a literacy coach with Cheboygan-Otsego-Presque Isle Educational Service District, I have been working with teachers to build instructional capacity. Literacy coaching requires collaboration around student work for the purpose of increasing teacher effectiveness and student achievement. Over the past two years, I have also been working on my educational doctorate. My dissertation research is tied to the work that I am already doing as a virtual literacy coach, studying the development of teacher instruction and student achievement through a virtual coaching model. To continue with my plan to study how to improve reading instruction, Indiana University requires that I notify school districts and ask for permission to study instructional activities and student work samples. In my dissertation research, I will examine my own practice as a literacy coach, looking at my teacher interactions, and related classroom activities and assessments that are already in place. The information shared between the teacher and coach/researcher will remain the same. Additionally, all student work that I collect for the purpose of research will have any personal identifiers removed and pseudo names assigned. All student work samples will be deleted once they are no longer needed for the purpose of this study. Teacher participation is completely voluntary and is not required to be a part of virtual literacy coaching through Cheboygan-Otsego-Presque Isle Educational Service District. There are no additional major responsibilities for your staff; my classroom support will continue as usual. If you would like more information, you can contact me at kpeters@copese.org or 863-232-7336. I appreciate your consideration and participation in this study.

Kim Peters

Literacy Coach, COPESD

Ed. D. Student, Indiana University

- You have site permission to study the impact of virtual literacy coaching in our K-3 classrooms.
- You have the district's permission to use student work for research with the purpose of improving instruction without written parental consent, as no personal identifiable information will be shared in the research.

Print Name: _____ Signature: _____

District and Position: _____ Date: _____

Appendix III: Participant Consent



INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR RESEARCH

Virtual Literacy Coaching IRB#14446

You are being asked to participate in a research study. Scientists do research to answer important questions that might help change or improve the way we do things in the future. This consent form will give you information about the study to help you decide whether you want to participate. Please read this form, and ask any questions you have, before agreeing to be in the study.

All research is voluntary. You can choose not to take part in this study. If you decide to participate, you can change your mind later and leave the study at any time. You will not be penalized or lose any benefits if you decide not to participate or choose to leave the study later.

The purpose of this study is to explore the efficacy of virtual literacy coaching in a northern, rural educational service district.

We are asking you if you want to participate because you have participated in virtual literacy coaching. The study is being conducted by the primary investigator, Dr. Karen Wohlwend, and Kim Peters, Ed.D. student at Indiana University in the Literacy, Culture, and Language Education department.

If you agree to be in the study, you will do the following:

- Agree to the researcher accessing collaborative materials such as: classroom video recordings with time-stamped reflective dialogue between the coach and teacher, discussion board dialogue, goals and reflective comments, educational learning resources that were shared, student instructional data for lesson planning or reflection, and video recorded coaching conversations between the teacher and coach.
- Optional for Teachers: participate in a 1 hour interview following the completion of virtual coaching

Data may be collected from previous years' coaching cycles.

Before agreeing to participate or opting out, please consider the risks and potential benefits of taking part in this study. While taking part in the study, the risks are minimal. When participating in the interview, you can tell the researchers that you are uncomfortable or you would like to skip a particular question. While completing the coaching cycles, you can opt out of sharing any videos that make you uncomfortable. There is always a risk someone outside the study team could get access to your research information from this study. More information about how we will protect your information to reduce this risk is below. We don't think you will have any personal benefits from taking part in this study, but we hope to learn things that will help researchers in the future.

You will not be paid for participating in this study and there is no cost to participate in the study.

We will protect your information and make every effort to keep your personal information confidential, but we cannot guarantee absolute confidentiality. No information which could identify you will be shared in publications about this study. All electronic data, including recordings, will be password protected and stored in a secure virtual environment.

Your personal information may be shared outside the research study if required by law. We also may need to share your research records with other groups for quality assurance or data analysis. These groups include the Indiana University Institutional Review Board or its designees, and state or federal agencies who may need to access the research records (as allowed by law). Information collected in this study may be used for other research studies or shared with other researchers for future research. If this happens, information that could identify you, such as your name and other identifiers, will be removed before any information or specimens are shared. Since identifying information will be removed, we will not ask for your additional consent

If you decide to participate in this study, you can change your mind and decide to leave the study at any time in the future. If you decide to withdraw, please let your coach know that you would like to remove yourself from the study via email.

If you have questions about the study or encounter a problem with the research, contact the researcher, Kim Peters at 863-232-7336 or peterki@iu.edu.

For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or to offer input, please contact the IU Human Research Protection Program office at 800-696-2949 or at irb@iu.edu.

PARTICIPANT'S CONSENT

In consideration of all of the above, I agree to participate in this research study. I have an electronic copy of this informed consent document to keep for my records. All signatures will be collected via Google Form.

Participant's Printed Name: _____

Participant's Signature: _____ **Date:** _____

Printed Name of Person Obtaining Consent: _____

Signature of Person Obtaining Consent: _____ **Date:** _____

Appendix IV: Interview Protocol

Semi-Structured Interview Protocol

Domain 1. Teacher-Coach Relationship (End of Cycle Zoom Sessions)

Lead-off Question

“Tell me about a typical coaching conversation. Start from where you first login to Zoom and then take me through all of your conversation, topic by topic. Don’t be afraid of giving too much detail. I am interested in everything.”

Possible Follow-up Questions:

1. Okay, so the coaching sessions took place during your planning period. Can you tell me more about that?
2. When you said that your coach planned your next lesson with you, could you describe a planning session that you remember?
3. So, you shared that you reviewed your previous lesson with the coach. Can you describe a lesson that you reflected on in more detail?
4. You mentioned that you did(not) find value in (event). Can you tell me more about that?

Domain 2: Providing Research Informed Strategies

Lead-off Question

“Try to remember a time when a coach gave you a suggestion to implement something new in your classroom. Can you describe it as if you were making a movie about it?”

Possible Follow-up Questions

1. Okay, so you shared that you used (insert new strategy) in your classroom. Can you tell me more about what that looked like?
2. You mentioned that it took some time to implement (insert new strategy). Can you walk me through your preparation for implementation in detail?
3. You mentioned that you reflected on your new practice independently. Could you tell me more about that?
4. So, you shared that you are now comfortable with (insert new strategy). Can you tell me about a time that you have used this strategy after the completion of your coaching cycles?

Domain 3: Virtual Professional Learning

Lead-off Question

“Think back to the use of Sibme (the virtual platform) and record yourself teaching. Can you tell me more about that process?”

Possible Follow-up Questions

1. You mentioned your experiences using the huddles within Sibme. Can you tell me more about that?
2. Okay, you shared that reflecting asynchronously was more convenient. Tell me more about how that does or doesn't fit into your schedule.
3. So, you stated that rewatching your lesson via video allowed you to notice different aspects of your teaching. Can you tell me about a time when that happened?

Appendix V: Formative Assessment

Background: Formative Assessments were used throughout the coaching process to monitor for student gains as they related to the individualized teacher goal area. All formative assessments were given and reported on by the teacher.

Skill Area	Formative Assessment Tools Observed in Data Set
Phonological Awareness	Teacher Observation Informal Decoding Inventory (Walpole & McKenna) Heggerty Assessments
Writing	Teacher Observation Student Rubrics
Letter Identification and Letter Sound	Teacher Observation Test of Letter Sounds (Walpole & McKenna) Letter/Sound Identification (MLPP)

Kimberly M. Peters, Ed. D.

Work and research interests include early literacy development, particularly among marginalized populations; Specific areas of expertise includes kindergarten through third grade reading and writing development, working with teachers around literacy instruction, and issues of equity in literacy education

EDUCATION

Doctor of Education, 2023, Literacy, Culture, and Language Education, Indiana University, Bloomington, IN

Master of Education, 2011, Early Childhood Education, Brenau University, Gainesville, GA

Bachelor of Science, 2005, Special Education and Elementary Education, Central Michigan University, Mt. Pleasant, MI

TEACHING EXPERIENCES

Literacy Coach

2020 - Present: Intermediate School District | K-3 Literacy Coach and Consultant

Teacher

2016-2020 Grayling Elementary | K and Y5 Teacher, Volleyball Coach

2012-2016 Veterans Memorial Elementary | 2nd and 3rd Grade Teacher, Math Point of Contact

2011-2012 Parkside Elementary | 2nd Grade Teacher, Engineering Academy Instructor

2007-2011 Winter Haven High School | Special Education Teacher, Resource, Honors English

2005-2007 Shepherd High School | Special Education Teacher, Volleyball and Track Coach

PUBLICATIONS

Peters, K. M. (2022). Challenging the Poverty Narrative Through Children's Literature. In *Poverty Impacts on Literacy Education* (pp. 191-212). IGI Global.

Peters, K. (2022). Virtual Literacy Coaching: A Response to Time, Space, and Resources. *Michigan Reading Journal*, 54(3), 8.

PRESENTATIONS

March 2022, Challenging the Poverty Narrative Through Children's Literature, Michigan Reading Conference, Lansing, MI

November 2022, Challenging the Poverty Narrative Through Children's Literature, NCTE's Conference on English Leadership, Anaheim, CA

PROFESSIONAL TRAINING

LETRS, 2022-2023

Cognitive Coaching, 2021-2022

Adaptive Schools, 2022

Essential Coaching Practices for Elementary Literacy, 2020

Trust Based Relational Intervention, 2020

Statewide Autism Resources, and Training, 2019-2020

Foundations for Learning and Behavior Support, 2019

Essential Instructional Practices in Early Literacy Pre-K, 2019

Essential Instructional Practices in Early Literacy K-3, 2019

PROFESSIONAL AFFILIATIONS

Michigan Reading Association

International Literacy Association