A CASE STUDY UNDERSTANDING VIDEO REFLECTIVE PRACTICES OF VETERAN

TEACHERS

by

Kasey Clements-Hutchinson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

The purpose of this collective case study was to understand cameras in the classroom and

reflective practices of veteran teachers in Julianna School District (pseudonym). Utilizing the

General Self Efficacy Scale (GSE), demographics data questionnaire, three self-reflective

protocol questionnaires and interviews with nine teachers, three administrators, and three

instructional coaches, this study investigated how teachers' perceived video-reflective practices

influence teaching practices, professional learning, and instructional preparation. Three

elementary schools were chosen to participate in this study and from each, I selected five

participants. Three learning theories guided this study. Bandura's (1977) social cognitive theory

provided understanding of personal thought processes perceived through learning. Malcolm

Knowles' (1975, 1984) adult learning theory regarding self-directed learning and principles of

andragogy described how teachers perceive learning through reflection. Siemen's (2004)

connectivism theory provided a foundation component for learning though personal experience

or communities by focusing on the decision-making process supporting professional growth.

Data analysis occurred by conducting a thorough description of each case and their themes.

Additionally, each case was analyzed based on two cross-case themes. The first theme

represented how participants viewed video-reflective practices as a tool that influenced

instructional delivery. The second theme illustrated how participants believed video-reflective

impacted student learning. Noticing students within the instructional environment gave the

participants an unexpected opportunity to notice student engagement and behavior that facilitated

student achievement.

Keywords: Video reflection, professional learning, instructional coaching, instructional

practices

Copyright Page

Dedication

This work is dedicated to the individuals who have supported, motivated, guided, and loved me throughout the years. First, I must acknowledge my parents who have always believed in me. To my mother who without fail asked me about my journey and always provided words of encouragement during the toughest days. To my dad who believed perseverance was the key to success. I am blessed to have them cheer me along. My family has been so understanding and inspiring. To my son Parker, words cannot describe how much I love and respect you. You watched me struggle; something moms do not often do in public. However, you always offered words of hope and love. To my daughter Ryleigh, my precious girl, your drive inspired me. Thank you for understanding when I was buried in my work and did not attend a lesson or practice. You are a jewel. To my husband Joshua, thank you for standing by me in the good and the bad. Thank you for loving our family and understanding how important this journey has been to me. You have been my rock. I am a blessed woman. To my life mentor, Marilyn Orr, I would not be the person I am today without your hand guiding me as a child. You always knew me best. Finally, to God be the Glory, great things He has done. None of this would be possible without faith, hope, and love found in my personal walk with Him. Jesus Christ, the ultimate Champion!

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I would like to acknowledge my committee members and my APA editor for their commitment during this journey. Dr. Spaulding, thank you for your guidance and support. Dr. Courduff, you have pushed me to be the best I can be and dig deeper than I thought possible. Dr. Brunson, you have been a friend, a mentor, and an example. Your kind spirit and encouragement have been keys to my success. Dr. Park, you are an extraordinary leader. Your guidance, support, love, and expertise attributed to me finishing my journey. You have a gift; you truly have a heart for doctoral candidates. Words cannot express my gratitude. Finally, thank you to Dr. Martha Plumlee. You have been more than an editor. You have been a friend, a confidant, and motivator. I will forever cherish our friendship.

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List of Abbreviations

English to Speakers of Other Languages (ESOL)

General Self-Efficacy Scale (GSE)

Institutional Review Board (IRB)

Professional Development (PD)

Professional Learning Communities (PLC)

CHAPTER ONE: INTRODUCTION

Overview

Continuous improvement is vital to promoting teacher effectiveness in America (U.S. Department of Education, 2014a, 2014b). Educators across the globe face challenging tasks as student populations become more diverse and standards become more rigorous (Fitzgerald, Geraci, & Swanson, 2014). Teachers engage in professional development in efforts to enhance instructional knowledge, skill, and professional capacity to meet the needs of diverse learners. Likewise, school focus on increased academic success through relevant professional development (Hanson, Labat, & Labat, 2014). However, professional development environments can vary significantly regarding the framework, purpose, norms, and the overall direction of the process (Bill & Melinda Gates Foundation, 2015; Burridge & Carpenter, 2013; Stewart, 2014; Watson, 2014; Wilkie & Clarke, 2015). Professional development is the acquisition or analysis of in-depth learning combined with the ability to transfer and apply the knowledge to instructional practices (Stewart, 2014). Educational practices and strategies continue to evolve; therefore, teachers explore new initiatives and practices in efforts to cultivate and enhance the instructional environment. Unfortunately, in many cases, professional development supporting new initiatives, practices, and strategies fails to extend beyond the norms of lecture or disquisition (Bill & Melinda Gates Foundation, 2015; Watson, 2014; Wilkie & Clarke, 2015).

For decades, researchers have studied reflective practices in efforts to understand andragogic knowledge (Meristo, Ljalikova, & Löfström, 2013). According to Sogunro (2015), andragogy is a scientific discipline focused on the instructional needs and the characteristics necessary to cultivate learning for adult education. Various reflective models have emerged

because of andragogic insight. For example, Stenhouse (1975) focused on the inquiry-based

process that involved teachers and students as means to improve teaching and learning outcomes.

Another example is Schön's (1983) theory referencing reflection. Figure 1 visually explains

Schön's theory regarding reflection-in-action and on-action. In sum, in-action reflection refers to

"thinking on your feet" as an action is occurring (Schön, 1983). On-action reflection refers to

the process of going back and conducting a deeper analysis that encompasses the reason, action,

and environment of a given situation after completing the action (Schön, 1983). Additionally,

Mezirow (1990) suggested reflection includes content, process, and premise synthesizing

background knowledge and current learning. Although many models exist, reflective practices

most importantly focus on building professional capacity.
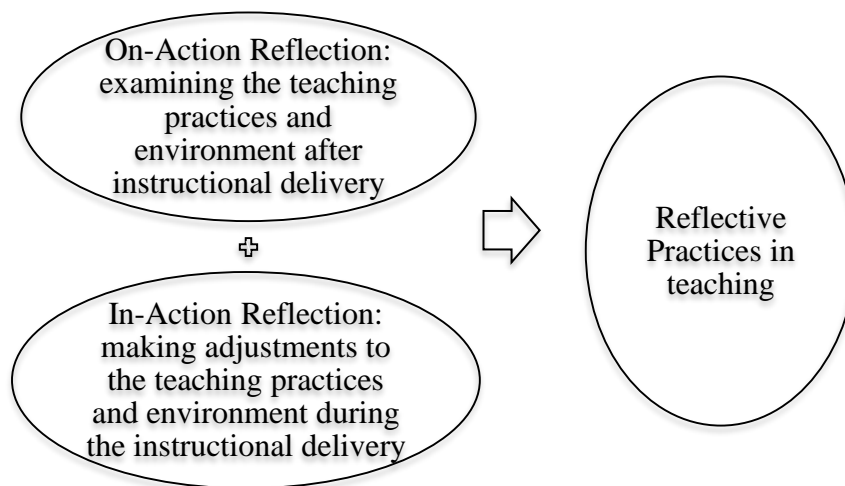
Figure 1. Reflection in-action and reflection on-action in teaching.

In this study, I investigated the perceptions and practices of veteran teachers who use

video-reflective practices to gain knowledge, insight and enhance professional development.

This chapter provides details regarding the problem and purpose of this study as well as the

significance, research questions, followed by key vocabulary.

Background

Reflective practice refers to the process of teachers aligning personal values and beliefs of teaching and learning with effective classroom practices (Farrell & Ives, 2015). Reflective forms and purposes may vary significantly; however, reflective practices are encouraged for educators in efforts to bring awareness to instructional decisions made while teaching and for promoting professional development (Danielowich, 2012). In other words, experience itself is not the teacher; experience does not parallel to learning from an experience (Sandholtz, 2011). This notion serves as a foundational component for current literature that promotes professional growth and development through reflective practice (Belvis, Pineda, Armengol, & Moreno, 2013; Cirocki, Tennekoon, & Calvo, 2014; Mourlam, 2013; Velez, Cano, Whittington, & Wolf, 2011).

Recognizing that adults learn differently than children, Knowles (1984) developed a theory of adult learning known as andragogy. Building off the earlier work of Carl Rogers, Knowles (1984) further explained that assumptions relating to personal views, experiences, ability, and willingness characterize andragogy. Professional development for adults is most productive when teachers are invested in the learning and contribute to the overall learning process (Stewart, 2014). Substantial research suggested that pre-service teachers are better prepared for classroom instruction when they utilize reflective practices (Cirocki et al., 2014; Endeley, 2014; Starks, Nicholas, & Macdonald, 2012; Stewart, 2014). Additionally, reflective practices improve both teaching and learning processes by helping teachers understand what is necessary to cultivate a learning environment (Cirocki et al., 2014; Starks et al., 2012; Velez et al., 2011). However, learning to teach and exhibiting professional judgment are skills that evolve over time and are driven by personal learning and mentoring (Endeley, 2014; Ineson,

Voutsina, Fielding, Barber, & Rowland, 2015). Technological enhancements such as videos, recording features, and the Internet have saturated schools as means to enhance instruction and accommodate learning (Sangra & Gonzalez-Sammamed 2010; Xu & Chen, 2016). Consequently, research using such advancements to promote ongoing reflective practices in-action and cultivate professional development among veteran teachers is understudied (Mourlam, 2013; Sangra & Gonzalez-Sanmamed, 2010). Such technological advancements have been implemented in select pre-service training programs in efforts to equip teacher candidates with the knowledge and skill necessary to promote continual reflective practices imperative for professional growth (Ditchburn, 2015; Ineson et al., 2015). Additional research is needed to understand the influence classroom cameras have on reflective practices and professional development of veteran teachers. Opportunities to engage in such practices in-service are under-examined despite the practicality and the convenience afforded through professional learning (Farrell & Ives, 2015). Therefore, understanding how teachers benefit from embedding video-reflective practice into personal, professional development will allow administrators and instructional coaches to gain insight and build capacity among other teachers.

Situation to Self

My inquiry to conducting this study began with an interest to understand how teachers make decisions to improve instructional practices. I am an instructional technology specialist, which means I work with teachers on integrating technology to improve instruction. I facilitate professional learning communities (PLC), through which I provide professional learning, model lessons in the classroom, and engage in one-on-one coaching with teachers to target specific needs or concerns related to instructional technology and curriculum. Additionally, I provide teachers with tools, resources, and strategies needed to integrate technology instruction. Weekly,

I conduct professional learning sessions for teachers throughout the district. I aim to provide teachers with opportunities to engage in hands-on learning and to practice new skills that support classroom instruction and technology integration.

Through my experiences as a classroom teacher, an instructional coach, and an instructional technology specialist, I understand how important relevance and rigor are to educate children and adults effectively. As a former elementary level teacher, I was most concerned with the curriculum content and less aware of the delivery associated with the teaching of content. However, in my current role, I recognize that content and process are vital, but delivery serves as a framework for relevant strategies and instructional practices. This understanding has strengthened my belief in the role of video-reflective practices, which give teachers the opportunity to look deeper into the strategies and practices that facilitate content learning. Reflective practices provide opportunities for collaborative learning as teachers identify personal strengths and weaknesses. I investigated the influences video-reflective practices have on the teaching practices of veteran teachers.

My ontological assumption guiding this study was that personal perceptions and experiences cultivate multiple realities that shape one's interpretation and reaction to real-world interaction. I believe people also see situations in learning from different perspectives. This way belief is true of my professional experiences as my background knowledge, life experiences, and values are contributing factors in shaping my interpretation. My study was grounded in social constructivism allowing for observations of complexities concerning the participants. I sought to understand these complexities through my multiple methods of data collection. I recognized my position as the human instrument with my purpose being to gather, review, and interpret data throughout the process (Lincoln & Guba, 1985). I considered the natural setting of my study as

well as the multiple data collection methods and as I understood the complexities of my inductive and deductive reasoning processes (Yin, 2013).

Problem Statement

Research suggests that teacher quality is a leading factor-promoting student learning (Coffey, 2014; Zhang & Campbell, 2013). Learning to be an effective teacher is a process that develops over time and requires continual professional development and refinement to achieve and maintain expertise (Burridge & Carpenter, 2013). Personal reflection of instructional practices is a foundational component of continual professional development. Although many pre-service teachers engage in opportunities to cultivate self-evaluation practices (Coffey, 2014), veteran teachers often lack the ability to self-evaluate naturally. Therefore, it is imperative to provide professional development opportunities that promote self-evaluations for teachers' in-service (Burridge & Carpenter, 2013; Jaeger, 2013). The problem investigated was the limited implementation of video-reflective practices among veteran teachers. For an educator, each lesson taught has the potential to become a professional development tool (Jaeger, 2013). Continued learning and refining are vital components for veteran teachers and fostered through personal reflection and self-evaluation of personal teaching practices (Burridge & Carpenter, 2013). Learning opportunities are optimal when teachers collaborate on similarities and differences based on personal reflection and understanding.

Purpose Statement

The purpose of this collective case study was to understand the influences classroom cameras have on reflective practices by elementary school veteran teachers in the Julianna School System (pseudonym) which is a rural district in the southern United States. Veteran teachers are defined as educators who combine experience, practice, personal interpretation, and theoretical

knowledge with social and leadership skills throughout their practice over time (Ersozlu &

Cayci, 2016). For the purpose of this study, veteran teachers were identified as teachers with

three or more years of experience based on the Georgia Teacher Keys Effectiveness System

(TKES). Reflective practice was defined as an approach teachers use to examine personal

teachings, attitudes, understanding, and knowledge content to improve teaching practices

objectively (Gün, 2011). Video reflection was defined as viewing teaching segments weekly

during personal, professional learning and planning opportunities. Three theories guided this

study. The first theory was Bandura's (1977) social cognitive theory. This theory provided

understanding of personal thought processes perceived through learning. The second theory was

Malcolm Knowles' (1975, 1984) theory regarding self-directed learning and andragogy. This

theory related to this study because reflective practices foster the internal desire to learn

(Knowles, 1984). The third theory was Siemen's (2004) connectivism theory. This theory

underpinned learning though personal experience or communities by focusing on the decision-

making process supporting professional growth.

<div align="center">**Significance of the Study**</div>

Practically, the results of this study made contributions to the knowledge base regarding

video reflection and the influence this practice has on instruction. Reflective practices provide

opportunities to analyze actions and promote professional learning (Belvis et al., 2013; Coffey,

2014; Farrell & Ives, 2015). As teachers become more familiar with video-reflective practices,

collaboration during professional learning communities or content-specific sessions, provide

opportunities for professional growth. Professional environments that focus on sharing

instructional strategies, modeling effective and ineffective instructional environments, and

engaging in personal and peer reflection provide the framework for effective teaching.

Empirically, in this study, I explored the influence classroom cameras had on reflective practices; therefore, I utilized the findings to address the literature gap regarding the lack of video-reflective practices of veteran teachers, providing insight and strategies to improve instruction. The results of this study may also prove insightful for those who avoid reflection due to lack of professional support and direction.

Theoretically, the results of this study significantly influenced instructional coaching, mentoring, and professional learning by providing effective practices for fostering cooperative and personal learning through reflection. Moreover, contributions provided extensions to Malcolm Knowles' (1975, 1984) theory regarding self-directed learning and andragogy. Contributions offered validation of Knowles' (1975, 1984) principles of andragogy. These principles included aligning the need and reason specific content was taught, providing task-oriented learning, accounting for background knowledge, and promoting self-directed learning. Additional contributions supported Schön's (1983) theory regarding reflective capacity by affirming and understanding that reflection-on-action provided the foundation for the process of continuous learning. Next, the findings provided reason to explore and facilitate graduate education programs based on the significant contribution seen in pre-service programs (Coffey, 2014). Lastly, the findings served as evidence to support the benefits of Audio Enhancement's VIEWpath™ and EduCam 360™.

Research Questions

One central research question and four sub-questions were investigated during this study.

The central question for this study was: How do video-reflective practices foster veteran teachers' perceived professional growth?

1. How does video reflection influence veteran teachers' self-efficacy?

2. How can the school-level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?

3. How does video reflection influence veteran teachers' instructional practices?

4. What role does instructional coaching play in video reflection for veteran teachers?

The central research question served as an overarching question supporting the interest of study. Stake (1995) explained that direct research questions are needed to outline the central issues grounded by the document review. Stake (1995) further noted that a flexible approach rather than an assumed forward blueprint must support the direction of the study. Yin (2013) explained the meaning and purpose of specifically stated questions. He itemized the 'who,' 'what,' 'where,' 'when,' and 'how' questions and the outlining rationale justifying the exploration of a specific topic. Yin (2013) noted 'how' questions generally focus on current events and relevance in isolated cases. This central question focused on the specific cases of lived experiences of teachers who utilize video-reflective practices for professional growth allowing them to give voice to personal experience and interpretation. This central question also provided guidance when understanding the phenomenon and the real-world context (Yin, 2013). Data supporting this question included interviews and self-reflective protocol questionnaires. Literature suggested that continued opportunities to practice delivery and reflect on such delivery and practice fosters professional growth (Dickson, Tennant, Kennetz, Riddlebarger, & Stringer, 2013; Meristo et al., 2013). Identifying strengths and weaknesses often promotes the ability to critically self-reflect and cause an immediate change in instructional strategies (Dickson et al., 2013; Meristo et al., 2013).

The first research question was designed to investigate the influence video reflection has on self-efficacy of veteran teachers. Self-efficacy in sum refers to personal assumptions that

influence thoughts and responses. Bandura (1997) explained that positive and negative experiences shape self-efficacy. Self-efficacy influences the ability to promote professional growth as content knowledge, personal fears, and expectations are juggled to create an environment conducive to learning. This question was designed to provide an item analysis of behavioral factors within each case to determine each veteran teacher's perceived self-efficacy. Survey and self-reflective protocol questionnaires responses produced the data used to address this question.

The second research question was constructed to understand the influence classroom cameras have on PLCs. The question also provided the opportunity to examine the professional growth fostered through PLCs by utilizing video reflection. PLCs are collaborative learning experiences that provide opportunities to work through tasks, complexities of varied attributes, and practices of knowledge sharing (Barab & Duffy, 2000). This opportunity also includes learning through connectedness, investment, and constructive feedback. These attributes influence the overall validation of the PLC experience that in turn influences the effectiveness of the session. By examining the second research question, I gained a better understanding of each teacher's perception of the PLC process. Self-reflective protocol questionnaires responses generated data to support this question.

The third research question was designed to understand the influence video reflection has on teaching practices of veteran teachers. Teachers are provided opportunities for professional learning through additional resources or supplemental material; however, teacher note opportunities to engage in reflective practices less often. Therefore, this question was grounded in Donald Schön's (1983) theory regarding on-action and in-action reflection capacity. Utilizing reflective practices during and after teaching provides opportunities to recognize effective and

ineffective instructional teaching strategies in a learning environment. This question was designed to elicit information that aided in understanding the perceived development resulting from personal reflection. Individual interview responses derived from standard open-ended questions supported this question.

The last research question was designed to aid in understanding the role instructional coaching plays regarding video reflection and professional growth. Instructional coaching provides cycles for learning through setting goals, incorporating learning, and applying the knowledge in an instructional setting (Knight et al., 2015). Teachers' perceptions of the instructional cycle coupled with personal reflective practices provide opportunities for identifying instructional strengths and weaknesses for veteran teachers. This question additionally provided validation for the instructional coaching model that promotes continued instructional support for in-service teachers through collaboration and modeling. Interview and self-reflective protocol questionnaire responses supported this question. Table 1 serves as a guide connecting the theorists, research questions, and data underpinning this study.

Table 1

Theoretical Framework Analysis

Theorist	Research Question	Data Source
Knowles 1984 Bandura 1997 Siemens 2004	How do video-reflective practices foster veteran teachers' perceived professional growth?	Self-Reflective Protocol Questionnaire 1,2, and 3 Interview
Knowles 1984 Bandura 1997	How does video reflection influence veteran teachers' self-efficacy?	GSE Self-Reflective Protocol Questionnaire 1,2, and 3 Interview

Theorist	Research Question	Data Source
Knowles 1984 Bandura 1997 Siemens 2004	How can the school-level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?	Interview Self-Reflective Protocol Questionnaire 1,2, and 3
Knowles 1984 Bandura 1997	How does video reflection influence veteran teachers' instructional practices?	Interview Self-Reflective Protocol Questionnaire 1,2, and 3
Knowles 1984 Bandura 1997 Siemens 2004	What role does instructional coaching play in video reflection for veteran teachers?	Interview

Definitions

1. *Andragogy* - A discipline focusing on the learning needs necessary to cultivate a learning environment for adults (Sogunro, 2015).

2. *Instructional Practices* - Solutions, strategies, and techniques identified to target learning results of students (Achinstein, 2002).

3. *mLearning* - Learning that is personalized, situated, and connected through a mobile device (Rommrell, Kidder, & Wood, 2014).

4. *Novice Teachers* - Professionals new to the educational profession (Sain, Kaware, & Douglas, 2014) and require full formative assessment process, at the induction level with three or less years of experience based on the Georgia TKES.

5. *Professional Development* - Utilizing opinions, strategies, and value systems with questioning, collaboration, and learning for professional empowerment (Levine & Marcus, 2010).

6. *Professional Learning* - The learning process that combines participation, practicing and applying to an instructional environment (Darling-Hammond, Wei, & Andree, 2010).

7. *Professional Learning Community (PLC)* - Professional educators and staff working and collaborating to improve student achievement (Hipp, Huffman, Pankake, & Oliver, 2008).

8. *Pre-Service Teacher* - Educational student participating in a preparatory program in efforts to become a future teacher (Chambers & Lavery, 2012).

9. *Substitution Augmentation Modification Redefinition Model* (*SAMR)* - A model designed to help inspire learning using technology (Puentedura, 2006).

10. *Self-Efficacy* - A person's belief of his or her capabilities to deal with complexities of life and experience (Bandura, 1997).

11. *Reflective Practices* - The process of correlating personal values and beliefs of teaching and learning and effective strategies focused on improving instructional practices (Farrell & Ives, 2015).

12. *Service Learning* - The collaborative learning process incorporating community service, content knowledge, skill, practice, and reflection (Coffey & Lavery, 2015).

13. *Video Reflection* - Objectively reviewing personal practices and observing classroom events recorded during instruction (Brunvand, 2010).

14. *Veteran Teachers* - Teachers who combine experience, practice, personal interpretation, and theoretical knowledge over an extended time (Ersozlu & Cayci, 2016) and afforded flexible assessment process at the proficient level with superior ratings and more than three years of experience based on the Georgia TKES.

Summary

Participants in this study used video-reflective practices in their schools. Julianna School System has cameras installed in all elementary school academic classrooms; however, system-wide video reflection is not a practice fully implemented. Current literature suggested that the groundwork for instructional planning embeds organization, presentation, implementation, evaluation, innovation, and reflection (Danielowich, 2012). Imbalance within these foundational components creates a potential disconnection that stifles personal growth and causes less effective teaching practices. Therefore, this study was conducted to investigate the role of video reflection on the perceived professional growth of veteran teachers. Chapter Two provides an outline of the theoretical framework underpinning this study as well as an in-depth review of current literature topics generating the research.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter explains the theoretical framework underpinning this study and the related literature validating the purpose of this study. I elucidated supporting theories in efforts to guide the focus and direction. Related literature topics including reflection, professional learning, efficacy, and instructional coaching provide groundwork substantiating the need to study.

Theoretical Framework

In 2006, Ruben R. Puentedura developed the Substitution, Augmentation, Modification, and Redefinition, (SAMR) model in efforts to enhance learning through technology. Puentedura's (2006) SAMR model consists of four technology classifications regarding learning. These classifications include substitution, augmentation, modification, and redefinition. Substitution is technology substituting for a learning activity without changing the functionality. For example, utilizing a device to take notes rather than a pen and paper would be substitution. Augmentation is technology substituting for the learning activity and providing changes to the functionality. For example, sharing notes taken on a device through email with colleagues would be augmentation. Modification is when technology redesigns the learning activity. Annotating notes or adding additional resources such as audio and video would be modification. Redefinition is technology providing opportunities for creations otherwise inconceivable without the technology (Puentedura, 2006). For example, sharing a template with multiple users to edit the information simultaneously, though collaborating, mapping, and creating would be redefinition. In sum, situation and augmentation are classifications that enhance learning. Modification and redefinition are classifications that transform learning (Puentedura, 2013).

Understanding Puentedura's (2006) SAMR model provides a better foundation for the learning components of mLearning. mLearning is defined as learning that is personalized, situated, and connected through a mobile device (Rommrell, Kidder, & Wood, 2014). Classroom cameras in my study were not considered mobile; however, the components of mLearning support this research and served as the directional component necessary to establish the research questions and data collection. The theoretical framework underpinned my direction and purpose while supporting collaboration with the participants in efforts to hear their voices (Crabtree & Miller, 1992). Three theories supported the theoretical framework. First, Bandura's (1997) social cognitive theory directed this study by understanding veteran teachers' personalized experiences of reflective practices and their perceived self-efficacy. Additionally, Knowles' (1984) adult learning theory directed this study because learning is situated between knowledge and self-directed learning by utilizing reflective practices. Lastly, Siemens' (2004) theory regarding connectivism directed the study as the beneficiary because learning is the connection between the learner and the technology.

Bandura's Social Cognitive Theory

Bandura's (1977) social cognitive theory focused on the thought process afforded through learning. Components influencing these processes include behavior, personal, and external factors. In sum, Bandura believed personal actions, cognitive abilities, and social settings influence the overall process for learning. Contributing factors rest within experiences both controlled and uncontrolled. Research suggested learning is conceptual through voluntary and involuntary experiences (Fosnot, 2013). Voluntary learning refers to unplanned learning derived from experience. This unplanned learning directly relates to external influences in the learning process. Involuntary learning refers to clearly defined learning and directly relates to

personal influences in the learning process. Teachers' behavior influences the self-reflective practice and the learning that occurs through the practice. With this in mind, voluntary and involuntary knowledge support the personalized component of mLearning and understanding because experience and perception predicate voluntary and involuntary processes. Furthermore, Bandura's social cognitive learning theory supports the modification classification of Puentedura's (2006) SAMR model because video-reflective practice provides an opportunity for learning to be redesigned based on personalized influences initiating the learning process.

Knowles' Adult Learning Theory

Knowles' adult learning theory focused on self-directed learning (Knowles, 1975) and andragogic principles (Knowles, 1984). When considering experience, understanding the role of taking the initiative for ones' learning and exploring the need to participate in the learning process provides a focus directed on the problems and solutions rather than content (Knowles, 1984). Research suggested that adults learn differently than children (Abela, 2009; Knowles, 1984), and Knowles (1984) noted five assumptions regarding adult learners. First, he believed self-concept matures as people move from dependent to independent. Secondly, he believed adult learners develop through experience as experience increases the opportunities for learning. Third, he believed people develop a readiness to learn and increase personal intellectual capacity as they mature. Next, Knowles (1984) believed that a person's orientation or purpose for learning shifts from subject-centered to problem-centered as he matures. Experiential situated learning fosters this orientation. Lastly, Knowles (1984) believed that people develop a motivation to learn and apply knowledge in conceptual processes as they mature. Figure 2 explains the maturity processes noted in Knowles' adult learning assumptions.
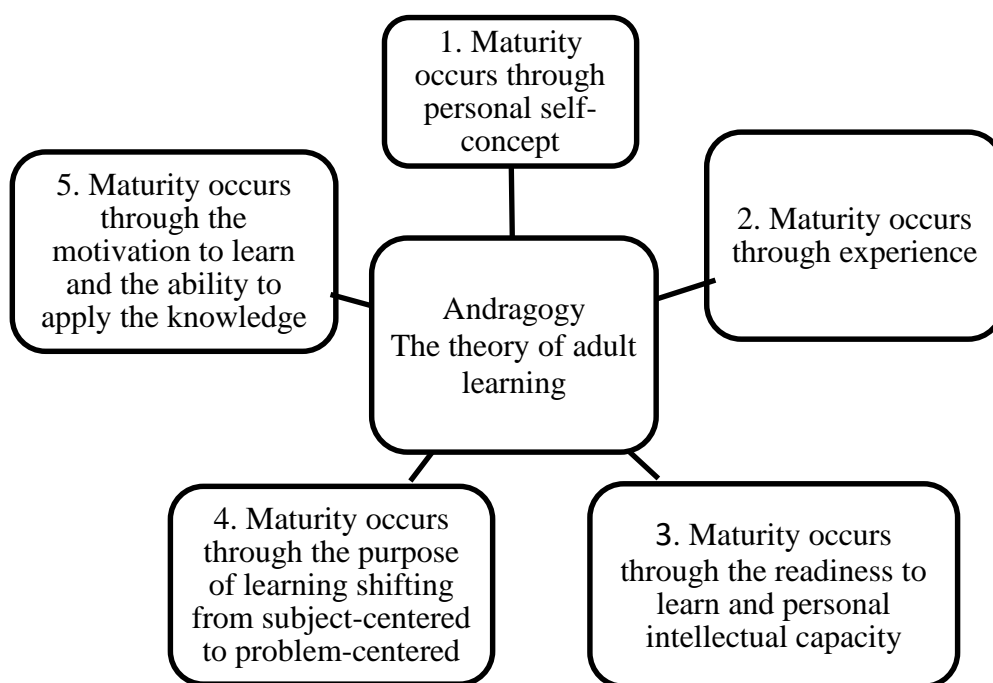
Figure 2. Andragogy, the theory of adult learning

Additionally, Knowles (1984) suggested four principles applicable to the adult learner. He explained that adults need to be involved, learn through experience, embark on relevant learning, and utilize problem-solving to increase knowledge. Knowles (1984) made assumptions based on his theory that adults are self-directed learners and that independent learning comes from experience and daily living. Essentially implying that people are driven personally rather than by external forces because adult learning combines an internal assessment of objectives and external environmental influences. This implication validates that experience drives learning (Abela, 2009; Knowles, 1984). Therefore, Knowles' (1975, 1984) adult learning theory supports the situated component of mLearning because of the position of learning between knowledge, personal initiative, and a desire to learn new objectives. Knowles' adult learning theory also supports the modification classification of the SAMR model because video-reflective practices

provide redesigned learning based on the notion that reflection promotes an internal assessment of learning objectives.

Siemen's Connectivism Theory

Connectivism theory incorporates ideas from behaviorism, cognitivism, and constructivism with informational sources (Siemen, 2004). Siemen (2004) identified information source connections as nodes. Siemen suggested that examples of nodes include individuals, groups, or communities. Connectivism principles combine diverse learning principles that nurture current critical learning through multiple information sources. The decision-making process that defines the learning objective, the meaning of the learning, and the application to reality (Seimen, 2004), underpins connectivism principles. For this reason, Siemen's nodes support the connected component of mLearning and understanding because the informational source ultimately defines the decision-making process. Likewise, Siemen's theory supports the redefinition classification of the SAMR model because reflective practices redefined the learning because of the technology.

<div align="center">**Related Literature**</div>

Learning environments are ever changing; therefore, teaching involves a process of combining experience, theory, knowledge, personal interpretation, and professional learning (Ersozlu & Cayci, 2016). Reflection is a foundational component in understanding how personal beliefs and content knowledge influence teaching practices and instructional decision (Farrell & Ives, 2015). Personal reflection serves as a vehicle for understanding how a teacher instructs and how students learn and can be utilized as a strategy to examine instructional content, preparedness, and classroom climate (Ditchburn, 2015; Ineson et al., 2015; Schön, 1987; Starks et al., 2012).

Reflection

When background knowledge is connected to thinking, practicing, and applying it stimulates growth (Maynes & Hatt, 2015). Therefore, reflection is a process of self-evaluating, understanding, and learning (Ditchburn, 2015; Watson, 2014). Self-reflection in education is not a new concept. As with other professionals, teachers ideally are in a continual state of learning and development through multiple experiences (Best & Winslow, 2015; Ditchburn, 2015; Maynes & Hatt, 2015; Watson, 2014). Reflective practices force teachers to examine their attitudes, beliefs, assumptions, and instructional practices in efforts to influence the teaching and learning process (Ditchburn, 2015; Tok & Dolapcioglu, 2013). Self-awareness influences performance, and performance influences opportunities; both facilitate professional growth and development (Cirocki et al., 2014).

Reflection is a process and begins by focusing on the acquisition of content. Acquisition of content refers to reviewing or analyzing specific content, such as reviewing a lesson, procedure, or lecture that previously occurred. Next, reflection moves to focusing on the ability or on 'how' questions. 'How' questions essentially frame the acquisition by understanding the steps taken in delivering content, the purpose of the content, and the relevance. Lastly, reflection focuses on outer-leveled functions such as behavior and competencies (Gün, 2011) by conducting a personal assessment of the teaching and learning process. Figure 3 provides a visual understanding of how the layers of reflection centralize the overall focus as one recognizes the logic driving the reflective practice. Inner-leveled reflection focuses attention on functions such as values and purpose (Gün, 2011). Focusing on inner-leveled reflection increases the ability to address strengths and weaknesses in teaching; however, personal awareness is unseen

unless self-reflection develops through a deeper level of personal and professional understanding

(Farrell & Ives, 2015).
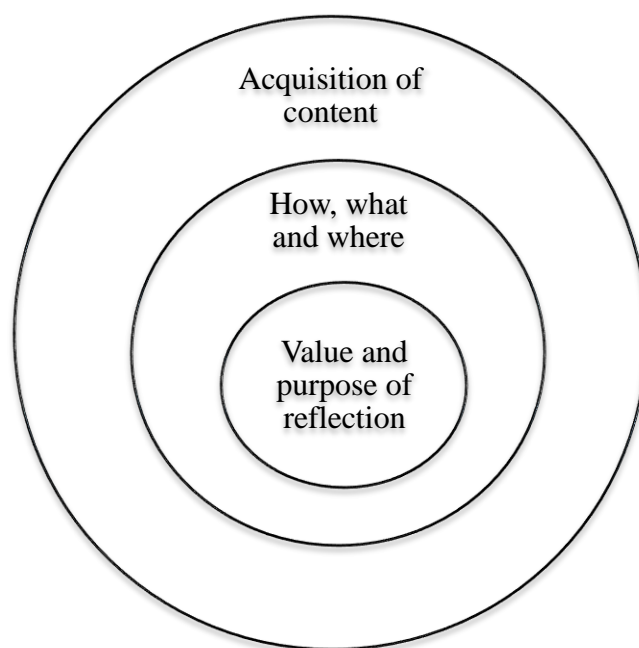
Figure 3. Layers of reflection

Response to reflection. Teaching requires possessing the ability to pay attention to what

is occurring and apply professional reasoning objectively to shift critical reflection to instant

change in classroom strategies (McCullagh, 2012). Ditchburn (2015) conducted a study of a

model program that collectively providing opportunities for pre-service teachers to engage in

reflective practices, collaboration, and research in the learning environment. Ditchburn

conducted the research in efforts to investigate the professional experience of pre-service

teachers and ensure the substantiation of reflection and engagement throughout the program.

The study suggested that the comprehensive program allowed pre-service teachers to analyze

their practice and the teaching process, which provided valuable insight for in-service teaching.

These findings supported that learning is a complexity that incorporates sight and sound

reflection and research-based strategies for professional growth and development to occur
(Cirocki et al., 2014).

Reflection is a necessity for an in-depth understanding of personal teaching and
professional growth to be developed; although challenging, the reflective practice is best seen as
a collaborative endeavor (Cirocki et al., 2014). Essentially, exploring personal style through
peer reflection can encourage collaboration, innovation, varied perspectives, and analytical skills
through guided inquiry of analyzing and affirming professional peers (Danielowich, 2012;
Endeley, 2014; Jaeger, 2013). In his case study, Danielowich (2012) investigated teachers who
worked with others through collaboration and reflection. He suggested there was a connection
between how teachers respond to others and themselves. In other words, he noted that critical
reflection combines the ability to recognize strengths and weaknesses of others and apply the
understanding in a setting, operation, and climate that promotes teacher learning. With his study,
Danielowich validated that reflective groups support diversity among professionals, foster
teacher-led professional learning, and encourage engagement and connectedness by looking back
over past events and considering alternatives (Danielowich, 2012; Jaeger, 2013; Talanquer,
Tomanek, & Novodvorsky, 2013).

Reflective practices through cogenerative dialogue. A conversation about an
instructional environment provides opportunities for teachers to notice what is taking place in an
instructional setting. Researchers have studied the art of making sense of what is noticed
(Talanquer et al., 2013). Ideally, noticing causes reflection that in turn creates change (Siry &
Martin, 2014; Talanquer et al., 2013). Significant research has evaluated the effectiveness of
cogenerative dialogues (Bondi, 2013; Bryce, Wilmes, & Bellino, 2016; Im & Martin, 2015).
Cogenerative dialogue is known as meaningful conversation about what is occurring in a

learning environment in efforts to improve the overall experience (Siry & Martin, 2014).

Scantlebury and LaVan (2006) described cogenerative dialogues as an avenue to help develop a

deeper understanding both personally and professionally. In cogenerative dialogue, relevant

questioning is vital to understanding various positions of all involved in the learning and growing

process. Siry and Martin (2014) suggested cogenerative dialogue provides insight to support

professional growth and development of pre-service teachers through instructional practices, data

analysis, student interpretation, and overall interaction. Such insight brings awareness to

learning interactions.

Reflection through video analysis. Video analysis can turn a fast-paced environment

into a dissected one in efforts to improve the overall experience. McCullagh (2012) conducted

an unintentional case study. This study developed after requesting a videoed teaching segment

from a veteran teacher to be used in a pre-service teacher preparatory course. The veteran

teacher later viewed the video segment and was very critical of his teaching practices and

learning climate. Prior to watching the video segment; the veteran teacher was satisfied with his

teaching practices. He was unaware of opportunities for growth until given the time and tools

necessary to self-reflect. Ultimately, a learning epiphany was not visible to the veteran teacher

until provided the opportunity to relive his experience and reflect after the teaching had occurred.

Reflection in pre-service programs. Teacher education programs are foundational

components of pre-service teacher education (Endeley, 2014). Pre-service teachers are

individuals seeking teaching licensure through an intensive college program focused on

providing candidates the opportunities to learn to teach through classroom experience,

demonstration, professional feedback, research, and practice (Endeley, 2014; Siry & Martin,

2014). Research suggests that teacher educations programs embedding experiences throughout

the pre-service process develop teachers with reflective practice skills that improve overall understanding of content delivery (Bondi, 2013; Ditchburn, 2015; Endeley, 2014). Programs embedding experience and reflective practice throughout the process synthesize critical skills necessary for personal substantiation (Daniel, Auhl, & Hastings, 2013; Meristo et al., 2013). In her case study, Coffey (2014) explored the effectiveness of video reflection, along with instructor feedback, as means to enhance the development of pre-service teachers. These efforts led to understanding discussions about the learning process of becoming an educator. Studies concluded that using video promoted skill development and critical reflection practices giving way to immediate learning and self-correction (Coffey, 2014). This understanding created the ability to notice what was taking place in the instructional environment. Additionally, Daniel et al. (2013) concluded that pre-service teachers became aware of the importance and validity of personal and collective reflection through the reflective process. Further findings suggested pre-service teachers demonstrated the ability to work through challenges constructively without sacrificing relationships or professionalism.

Video reflection in pre-service programs. Further literature suggested pre-service teachers benefit from some form of video-reflective practices (Ditchburn 2015; Endeley, 2014; Siry & Martin, 2014; Talanquer et al., 2013). Siry and Martin (2014) focused on pre-service teachers using video segments and cogenerative dialogue as means to reflect on personal practices as well as peer practices to build upon or change instruction in a science-learning environment. Videoed teaching segments allowed teachers to look back on experiences. Cogenerative dialog allowed participants to discuss different perspectives of an event. Findings suggested this practice fostered shared responsibility for the science instruction. Additional findings suggested using personal teaching segments during cogenerative dialogues were more

effective for pre-service teachers than watching video segments of nonrelated classrooms. Ultimately, this study suggested that the overall purpose was not only to notice what is occurring but also to improve practices (Siry & Martin, 2014).

Reflective practice promotes reflecting on skill by observing, trying, and modifying (Ditchburn 2015; Siry & Martin, 2014). The ultimate purpose of pre-service programs is to ensure candidates understand the multifaceted components associated with teaching and the importance of going beyond basic responsibilities to ensure instructional practices are targeted to promote effective teaching (Ditchburn 2015; Endely, 2014; Siry & Martin, 2014; Talanquer et al., 2013). Talanquer et al. (2013) conducted a study in efforts to understand what pre-service teachers are noticing when observing classroom instruction and examining the thinking process. Findings suggested that participants identified two categories of observations. Basic task observations encompassed objectives, student work, and content delivery. Direct task observations encompassed a deeper understanding of student abilities. The overall findings suggested that meaningful learning experiences promote teacher thinking (Talanquer et al., 2013). The use of reflective practices in pre-service programs allows teachers to consider the learner in the instructional process, assess the learning needs, and conceptualize theorized understandings about the components of effective practice (Ditchburn, 2015). Nonetheless, research indicated personal analysis and reflection must become routine to consider it as a valuable way to improve instructional practice (Ditchburn 2015; Endeley, 2014).

Service learning. Pre-service teacher preparatory programs have included service-learning for many years (Coffey & Lavery, 2015; Hildenbrand & Schultz, 2015). Service learning is a collaborative learning process of community service, content, knowledge, skill, practice, and reflection in an educational environment (Chambers & Lavery 2012; Coffey &

Lavery, 2015; Hildenbrand & Schultz, 2015). The focus of service-learning is to provide pre-service candidates with authentic opportunities that promote hands-on, interactive learning. Pre-service candidates are individuals interested in becoming future educators (Chambers & Lavery, 2012; Coffey & Lavery, 2015; Hildenbrand & Schultz, 2015; Wilkie & Clarke, 2015). Additionally, service-learning aims to increase self-esteem, promote social and professional awareness, enhance a sense of responsibility, and influence social competence (Chambers & Lavery, 2012; Coffey & Lavery, 2015). In most pre-service programs, service-learning consists of at least twelve hours per content-based course. Service-learning course hours focus primarily on communication, collaboration, reflection, and organizational skills necessary for working within a society professionally (Chambers & Lavery, 2012). Once transitioning from pre-service to in-service, a significant number of novice teachers believed their preparatory program provided a supportive framework for in-service success. However, they concluded that opportunities to participate in problem-solving settings to discuss the process of applying experiences afforded in pre-service to daily classroom instruction, teaching, and complexities were less often noted (Bailey & Taylor, 2015; Ditchburn, 2015; Ineson et al., 2015). Novice teachers are those who are new to the teaching profession and understand trends in educational practices (Sain et al., 2014). Haymore-Sandholtz (2011) suggested that giving novice teachers opportunities to reflect on teaching practices would be a valuable way to support student learning and promote professional learning and development.

In-service reflection. Veteran teachers can attest to continual instructional changes in the profession (Ersozlu & Cayci, 2016; Maynes & Hatt, 2015; Sain et al., 2014). Likewise, such teachers not only witness changes but also, they are in fact products of changes exposing them to multiple components that combine to improve the overall instructional process (Ersozlu & Cayci,

2016). For instance, Joseph et al. (2014) conducted a study seeking to understand how various data methods influence instructional decision-making. Additionally, Gün (2012) aimed to understand how multiple instructional observations influence learning complexities and provide direction for continued professional development. The aforementioned studies contained a common thread, which was improving teachers' instructional practices. Conceptualization of delivery methods, teaching styles, and influence may vary in process and belief. Nonetheless, teachers recognize the need to grow professionally.

Graduate and post graduate professional growth. According to the National Center for Educational Statistics (2016), 56% of the nation's public education teachers have graduate or post-graduate degrees. Graduate and post-graduate education notes that instructional changes have occurred within classrooms throughout the last decade, especially regarding learner styles and technology integration (Robinson & Hope, 2013). However, in many instances, instructional practices framing graduate programs often lack supporting experimental analysis and explanation processes necessary for developmental learning that pushes understanding beyond content knowledge to cognitive competency (Berrett, 2012; Robinson & Hope, 2013). This information brings to light another interesting factor. Despite high percentages of graduate-level teachers, teacher retention remains a significant topic for discussion. Lochmiller, Sugimoto, and Muller (2016) investigated the variation factors affecting teacher retention. Findings of this study suggested that experience in the field and school demographics were leading factors affecting teacher retention. Additional findings suggested teachers found themselves overwhelmed with additional responsibilities and pressures of high-stakes testing that took precedence over perfecting their craft (Best & Winslow, 2015; Donaldson, 2014). Despite efforts, teachers claim of a lack of time, training, or opportunities for meaningful professional growth (Erosozlu &

Cayci, 2016; Jaeger, 2013) creates challenges with balancing curriculum, pedagogical advances, and current instructional trends (Jaeger, 2013).

Necessitated by the various components influencing student achievement, teacher quality gaps are debatable topics. According to Best and Winslow (2015), multiple factors are contributors to the equity in educators, and changes must be set in motion for schools to close the gaps. Continuous planning, support, and structure facilitate instructional improvements. Nevertheless, change requires time, practice, patience, and support to evolve over time rather than instantaneously (Crow, 2015).

Efficacy of teachers. In many cases, self-efficacy beliefs can be associated with instructional and professional behaviors of teachers (Holzberger, Philipp, & Kunter, 2013). Teacher self-efficacy refers to personal assumptions that influence thoughts, feelings, and responses (Holzberger et al., 2013). Professional levels of understanding, knowledge, and personal fears are contributing factors or challenges teachers face regarding instruction. Meristo et al. (2013) conducted a study investigating veteran teachers' pre-service training coupled with teacher experiences and the effects on teacher efficacy. Findings suggested a support system that provides a collaborative environment in an educational setting was necessary to promote positive teacher self-efficacy. In sum, collaborative professional learning environments that foster growth by targeting teaching strategies, content, personal and professional reflection, and self-confidence promote the overall efficacy of teachers (Coffey, 2014; Sadler, 2013).

Professional Learning

Many teachers are unaware of their professional teaching practices (Burridge & Carpenter, 2013; Owen, 2014). This lack of awareness creates a need for professional learning where teachers can work collaboratively targeting instructional practices utilizing shared

responsibilities, values, inquiry, reflection, and experience throughout the process of learning (Owen, 2014). Wenger (1998) developed the community of practice theory. This theory was rooted in understanding human learning and social natures (Lave, 1988; Wenger, 1998). According to Wenger's community of practice theory, knowledge passes through communities of practice by creating, sharing, and refining, which allows community members to take ownership of the practice. Professional learning should not be isolated; educators should embed these practices into professional life connecting to meaningful integration and influence on teaching practices (Owen, 2014; Stewart, 2014). By embedding these practices, teachers are consistently aware of student data, learning styles, growth, and professional growth by developing, implementing, and evaluating cycles to guide professional development (Stewart, 2014).

Barab and Duffy (2000) provided significant research for professional learning through their work with situated learning and practice. These attributes utilize the process of colleagues collaborating to work through complexities by sectioning tasks, identifying variables, and creating a plan of action (Barab & Duffy, 2000). Wenger (1998) also, provided significant research and is considered a forerunner regarding professional learning, through his work known as the community of practice theory. Wenger believed shared interests and professional commonalities connect communities. He further explained communities are three dimensions: the what, the function, and ability to produce (Wenger, 1998). Likewise, professional learning communities closely align with Wenger's community of practice. Additional research (Stewart, 2014; Watson, 2014; Whitworth & Chiu, 2015) validated the collective approach of shared responsibilities with collaboration and reflection through ownership. These are vital factors for healthy professional learning. As professional learning evolves, additional components and

purposes including goal setting, data analysis, and research-based teaching continue to be noted (Owen, 2014).

      Professional learning communities. Professional learning communities (PLCs) create an environment for teachers to become both spectators and participators in a shared learning environment (DeMonte, 2013). PLC is group sharing, collaborating, and reflecting through an ongoing practice in efforts to enhance teaching practices and increase student achievement (DeMonte, 2013; Whitworth & Chiu, 2015).

      PLCs transition through cycles. The PLC cycle provides an environment where teachers learn in a professional setting and gain further knowledge from a collaborative experience (Whitworth & Chiu, 2015). Lave and Wenger (1991) suggested that social engagement is a critical component of the learning and social situation relationship. Lave and Wenger further explained that effective learning occurs within a framework that cultivates participation rather than individuality. The purpose of PLCs is to understand how instructional practices foster learning (Stewart, 2014). Nonetheless, an effective PLC focuses on continuous movement through various cycles to see improvements in teaching and learning. Stewart (2014) identified five professional development cycles that produce a course for improvement. First, student needs are identified using student data. This data lays the foundation for the second phase. Once the data reveals the needs, the next step would be to target teacher strengths and weaknesses. This information opens the way for the third phase that drives content-specific professional learning. Content specific learning can take place from a variety of strategies and methods including empirical, theoretical, and practical application. In turn, this knowledge is vital for success in the fourth phase. This phase transforms the knowledge into applicable, digestible, learning nuggets that cultivate concept mastery and provides a touch point for accountability.

Lastly, the fifth stage provides an opportunity to reflect and analyze teaching styles and learning

objectives in efforts to promote continual improvement, thus beginning the cycle again. Figure 4

explains the PLC cycles and provides a visual regarding the continual revolving stages.
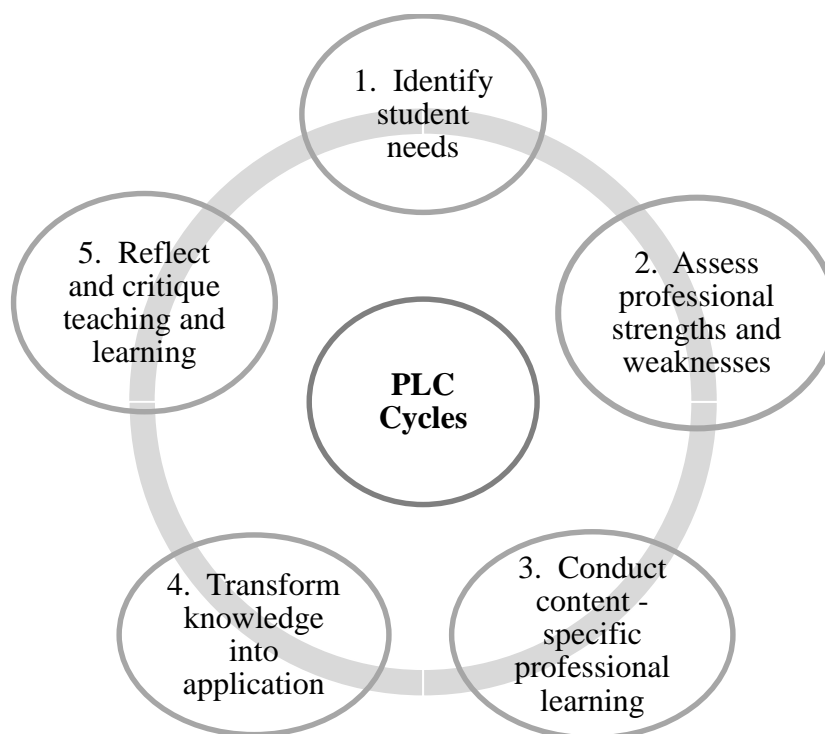
Figure 4. PLC Cycles

Purpose of professional learning communities. Significant research exists in various

areas of PLC understanding (Bond, 2013; DeMonte, 2013; Denver & Lash 2013; Desimone,

2009; Dixon, Yssel, McConnell, & Hardin, 2014; Mindich & Lieberman, 2012; Owen, 2014;

Stewart, 2014; Whitworth & Chiu, 2015) in efforts to define specific attributes of a PLC. PLCs

focus on a collaborative situation, with learner-driven objectives, combining active engagement

and shared values in a supportive environment. Researchers (Bond, 2013; DeMonte, 2013;

Denver & Lash 2013) believed PLC development occurs in stages and must be an ongoing focal

point for education professionals. Additionally, researchers (Mindich & Lieberman, 2012;

Stewart, 2014; Whitworth & Chiu, 2015) supported a continuous cycle of professional

development, growth, and increased achievement. Collectively, respective researchers shared a

common thread that targeted changing one's way of thinking from focusing on professional

knowledge to content delivery (DeMonte, 2013; Maynes & Hatt, 2015). PLC development can

be seen as beginning, emerging, or flourishing. The stages, displayed in Figure 5, move from

beginning to flourishing with examples listed next to each stage. Through all stages of reference,

the key component is continued growth to support learning.

Emerging
- An environment in which teachers are receiving direct instruction and lecture driven instruction

Beginning
- An environment in which teachers are given direct instruction with visuals and examples and a combination of lecture and cooperative learning instruction

Flourising
- An environment in which teachers are given the opportunity to apply, collaborate, and model learning while receiving feedback from the instructional leader and peers

Figure 5. Stages of PLCs

Elements of professional learning communities. High functioning PLCs are

autonomous environments where co-working teachers play a part in selecting learning objectives

and understand the collaboration process (Mindich & Lieberman, 2012). Professional learning

serves as an avenue for developing and broadening classroom techniques (Burridge & Carpenter,

2013; Daniel et al., 2013; Dixon et al., 2014; Mindich & Lieberman, 2012; Stewart, 2014;

Whitworth & Chiu, 2015). Unfortunately, in many professional learning environments,

challenges arise in the transfer from the instruction to understanding process (Burridge &

Carpenter, 2013; Whitworth & Chiu, 2015). Desimone (2009) identified five essential features

to professional learning that strengthen teaching practices and transferability. These features include content focus, active learning, coherence, duration, and collective participation (Desimone, 2009). Desimone further explained these elements collectively work to create a cycle of continuous learning by first focusing on the student learning objectives as they connect to teaching practices, next shifting to the soundness of the knowledge and concentration, and last collaborating to promote professional capacity and personal reflection.

   Content focus. An established Professional Learning Community (PLC) serves as an effective strategy to link skill, knowledge, and innovation across context fostering content understanding and delivery (Burridge & Carpenter, 2013; Denver & Lash, 2013; Dixon et al., 2014; Whitworth & Chiu, 2015). However, these ideas alone cannot validate professional growth. Many factors must be aligned to ensure professional growth (Denver & Lash 2013; Whitworth & Chiu, 2015). In fact, research regarding this topic itemizes various characteristics from study to study when discussing PLCs (Burridge & Carpenter, 2013; Desimone, 2009; Dixon et al., 2014; Owen, 2014). Nevertheless, several common threads exist. PLCs are moving from modeled strategies to direct application and process causing shifts (Denver & Lash 2013), thus making way for instructional coaching and reflection. Direct application and process create a direct focus on specific content and real-time teaching. Studies have indicated that videoing teaching allows pre-service teachers to focus on specific contextual elements; which force them to take a deeper look into their practice (Coffey, 2014). This analysis promotes meaningful reflection that enhances instruction and increases depth of knowledge.

   Active learning. A key element to a thriving PLC is participant investment. PLCs aim to build a culture that extends beyond the boundaries of collaboration (Coffey, 2014). Therefore, if teachers lack a sense of connectedness to the work or group of workers, providing and receiving

constructive feedback can be a challenging task (Stewart, 2014). Ideally, PLCs promote

professional growth that encourages openness to new and innovative instructional strategies

(Owen, 2014). Bond (2013) conducted an action research study regarding the development of a

PLC among pre-service teachers. His findings suggested that active learning was a factor as

participants struggled with time management, content, leadership, and constructive feedback.

His findings mirrored those beliefs of other researchers. For example, Stewart (2014) explained

that activities within professional learning should be positive yet analytical in efforts to improve

personal practices and aid others in growth as well. This explanation, in turn, signifies the idea

that an effective PLC is a process that requires clear direction. For active learning to occur, a

connection must exist between processing student data, understanding teacher and student

expectations, staying current on research-based strategies, and learner accountability (Bond,

2013).

     Collaboration. Working together longitudinally with common goals, norms, and

responsibilities facilitates a collaborative environment (Owen, 2014). Barab and Duffy (2000)

explained this notion through a situated learning model as teachers addressed a concern

dissecting the problem into digestible segments to discover the complexity of the issue.

Furthermore, shared responsibility for student learning, personal growth, and professional

respect are foundational components and characteristics of PLCs (Owen, 2014).

     Duration. Professional growth is a process that evolves over time. However, the

question remains regarding how much professional learning is enough. Ideally, learning

opportunities should occur consistently over time in efforts to examine new strategies, assess

personal understanding, and analyze teaching ability of academic content. Additionally, student

data ideally drives professional learning in efforts to examine new strategies, assess personal

understanding, and analyze teaching ability of academic content. Therefore, the duration of professional learning should progress through cycles of establishing a learning focus, practicing the concept, and assessing the understanding and practicality of the learning focus (Stewart, 2014).

Coherence. Theories and teaching methods provide various approaches to promoting instructional awareness. However, to ensure relevance, teachers are challenged with the task of balancing school initiatives and personal beliefs regarding teaching and learning. Nonetheless, this task is complex and one that evolves over time (Burridge & Carpenter, 2013). Training and follow-up support in efforts to understand the comprehensive plan influence the ability to understand, implement, and deliver such relevant content. According to Endeley (2014), pre-service teaching practice is the central component for producing quality teachers, and candidates should have opportunities to practice throughout the pre-service process continually. In other words, providing pre-service teachers opportunities to practice teaching continually should be the foundational component of an educational program followed by on-going professional support and content specific learning (Nalova, 2014). Ideally, teaching practice influences awareness, knowledge, personal assumptions, understandability, and rationality.

Professional learning communities and reflection. As seen in pre-service studies, the use of video can serve as a tool to capture teaching moments in efforts to promote learning (Coffey, 2014). Reflection provides an in-depth understanding of teaching and teachers' professional development (Cirocki et al., 2014). Therefore, the creation, communication, and collaboration process refine professional depth of knowledge and creates a desire for classroom implementation. Applying these practices in PLCs as points of reference in a collaborative setting strengthens the individual and the team. Daniel et al. (2013) suggested by building skills

for critical dialogue and reflection as a developmental skill practiced consistently, pre-service teachers grow accustomed to a sense of community within professional learning that fosters aspects of teaching considered "unnatural" (p. 159). Transferring these skills-based practices into PLCs can lay a foundational component to connecting individuality and community. Therefore, reflection that not only understands the technique of teacher but rather the approach to teaching by utilizing problem-solving is needed (Ditchburn, 2015; Sain et al., 2014). Connecting video to reflective practices offers a strategy to problem-solving in-action with shared responsibility and support for continuous learning and enrichment for teachers (Denver & Lash, 2013). Collaboration in PLCs allows teams to first identify important and contributing elements in an educational environment and content, second identify a plan, third execute the plan, and lastly reflect on the outcome (DeMonte, 2013). Utilizing video reflection in this process potentially allows teachers to extend this process by analyzing personal delivery and grade level planning strengths and weakness.

Instructional Coaching

Scholarship and continual research back accountability in education, therefore, teacher quality is often a topic of interest (Adnot, Dee, Katz, & Wyckoff, 2016; Wiswall, 2013). Instructional coaching, facilitating, and modeling promotes teacher training within the learning environment. Coaching promotes an environment that fosters reflection of instructional practices and instructional strategies in efforts to heighten current practices and new skills through a process of conversations, modeling, and motoring (DeMonte, 2013; Thomas, Bell, Spelman, & Briody, 2015). Learning environments that are simultaneously engaging, creative, and hands-on promote increased brain activity (Abiola & Dhindsa, 2012). Therefore, instructional cycles seek to promote collaborative learning that builds upon background knowledge and allows for

application and practice in a supportive environment (Knight et al., 2015). The cycle first begins

with identifying strengths, weaknesses, and setting goals for improvement or enlightenment.

Next, the cycle incorporates learning, which allows teachers to learn, experience, and observe

new strategies in a precise manner by breaking down the steps and allowing for assured

understanding. Lastly, the cycle employs improvement that allows teachers to practice, reflect,

perfect, and receive feedback both individually and collaboratively.
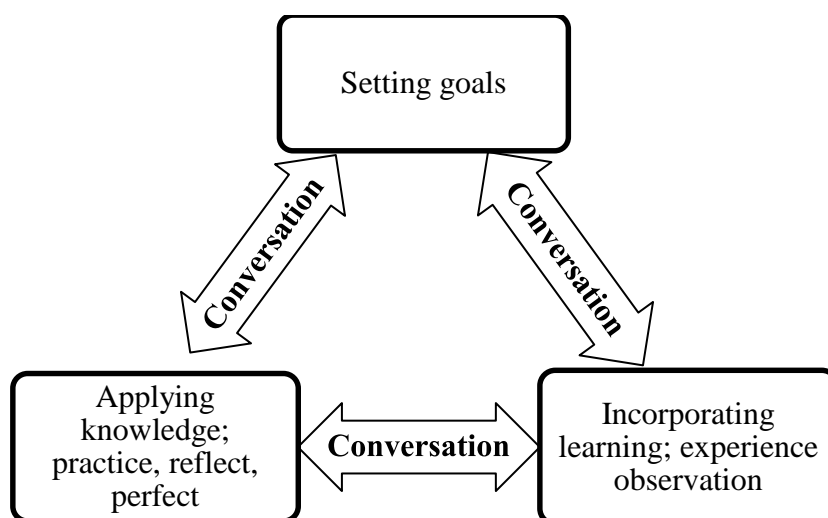
Figure 6. Instructional coaching cycle

Supportive conversation is a foundational component for every step of a coaching cycle

(Thomas et al., 2015). Figure 6 illustrates the central idea of conversation. Coaching also

promotes listening in the learning process (Thomas et al., 2015). For example, the University of

Virginia's MyTeachingPartner[TM] provides a professional development system for teachers to

utilize individually or collaboratively. The system offers three components, a video library of

teaching clips, a college course focused on teaching practices, and Web-mediated coaching.

Web-mediated coaching provides opportunities for instructional coaches to view uploaded

teaching segments and provide feedback for improvements to classroom instruction. Research

related to MyTeachingPartner[TM] indicated that teachers utilizing the system resources enhanced

student learning. Feedback fosters professional growth that pushes the boundaries of personal

learning by providing opportunities for teachers to examine teaching styles and practices as well

as identify learners' differences and needs related to instructional content (DeMonte, 2013).

Summary

Educating teachers of best practices is not a new concept; professional support continues

to be necessary as teachers develop their abilities to influence students' learning (Gable,

Tonelson, Sheth, Wilson, & Park, 2012; Robinson & Hope, 2013). Identifying professional

strengths and weaknesses allows teachers to focus on ways to improve themselves and support

colleagues by identifying areas where professional support is needed. Utilizing video-reflective

practices in teacher education programs is not a new concept; neither is the idea of reflective

practice to promote growth. As seen with pre-service programs, video-reflective practices

provide opportunities for pre-service teachers to notice what is occurring during instruction

(Ditchburn, 2015; Siry & Martin, 2014). As seen in specific in-service teaching situations,

video-reflective practices not only allow in-service teachers to notice what is occurring during

instruction for improvement but also an opportunity to be aware and celebrate accomplishments

(Ditchburn, 2015; Siry & Martin, 2014). Substantial research exists regarding reflective

educational practices as means of professional growth. Research has also been explored

validating the influence video analysis has on improving pre-service student teacher candidates.

However, the connection between reflection and video to promote ongoing growth in teachers in

the field lacks substantial evidence as current literature only lends itself to video reflection as an

isolated preparatory means of understanding rather than a systematic, ongoing experience.

Instructional practices, trends, and initiatives are ever changing; therefore, components of

teaching and ongoing professional growth are subjected to examination and improvement (Ersozlu & Cayci, 2016; Gable et al., 2012; Maynes & Hatt, 2015; Sain et al., 2014).

       This chapter included details regarding the theoretical framework and the related literature supporting this study. Theories were explained and interwoven in efforts to underpin the overall focus and direction. Related literature topics including reflection, professional learning, efficacy, and instructional coaching were discussed in detail providing foundational support for the need to study. Chapter Three includes an outline of the appropriate steps needed to collect and analyze the data in efforts to produce quality valid research.

CHAPTER THREE: METHODS

Overview

The purpose of this case study was to understand teachers utilizing video-reflective practices to influence their teaching and investigate an occurrence and expectation within bound situations (Miles & Huberman, 1994) by veteran teachers at Dixon Elementary, Fairways Elementary, and Love Elementary. Participants made contributions to this research through the GSE, self-reflective protocol questionnaires, and individual interviews. This chapter includes detail regarding the design, research questions, setting, participants, and the procedures utilized in this study. Figure 7 provides a visual representing the steps taken to conduct case study research.
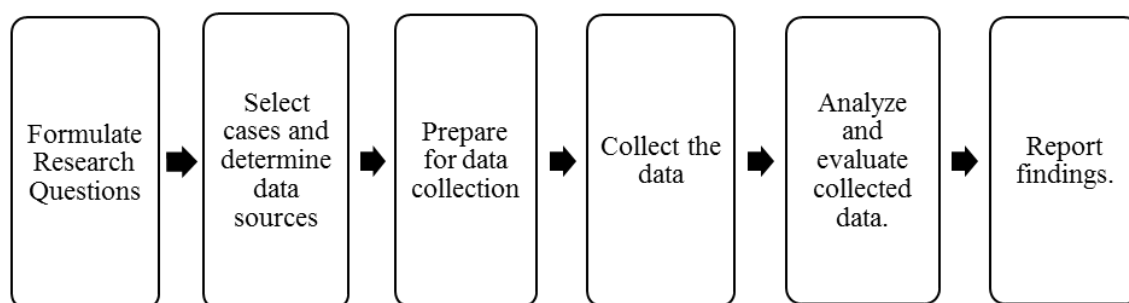
Figure 7. Research Plan Process

Design

This study was qualitative because exploration was needed to identify variables and to understand comparisons within each case (Yin, 2013). Case Study was the best design because this research focused on the influence of an activity with more than one individual (Smith, 1978),

thus providing a deep, comprehensive understanding of the problem. Additionally, I sought to

develop in-depth descriptions and perspectives of cases in a bounded integrated system (Stake,

1995; Smith, 1978). This process allowed multiple cases for me to "fence in" what was being

studied (Merriam, 1998, p. 27) and to understand the specific characteristics (Guba & Lincoln,

1985). Lastly, case study approach best fit because this research was focused on process rather

than the outcome only. This approach included understanding the instance rather than the

changes and capturing the perceptions rather than the verification (Merriam, 1998).

Furthermore, I sought to detail a process that portrayed naturalistic inquiry (Lincoln & Guba,

1985). Three elementary schools identified participants in efforts to attain an in-depth

interpretation of a problem or phenomenon and meaning for participants involved (Merriam,

1998). Each case identified five participants. The cases were collectively studied to understand

and analyze various viewpoints and influences of each embedded unit (Yin, 2013). A collective

case study design was used to explore cases within a real setting with replication in mind from

the onset (Yin, 2009), bounded by location and time (Merriam, 1998). A collective case study

design was most appropriate regarding the how and why the design of the research questions

(Yin, 2013). Collective cases make way for research that investigated greater differences across

the cases by creating an instance grounded in the how research questions that strengthen,

stabilize, and validate the study (Merriam, 1998). This study replicated the procedures for each

identified case yet allowed for minimal generalizations delineating the problem (Yin, 2009). The

primary focus was the commonalities that existed among teachers who utilize video-reflective

practices. Collective cases made it possible to understand similarities and differences of the

cases and interpret a generalized understanding (Merriam, 1998). Table 2 provides a qualitative

research design overview and evidence supporting case study as the method for this research.

This case study delimited an object of study, identified as a case, (Merriam, 1998), and included multiple sources of data to provide a comprehensive explanation of the problem (Yin, 2013). Data included the GSE, three open-ended self-reflective protocol questionnaires, and administration of open-ended questionnaire interviews, to warrant consideration of multiple sources of information in the data collection (Yin, 2013). The data analysis consisted of within-case analysis and cross-case analysis (Yin, 2013). The within-case format provided a description and themes of each case, followed by the cross-case format used for comparison in efforts to look for additional generalized themes and interpretations (Yin, 2013). Therefore, perspectives from each elementary school identified generalizations based on departmentalization, content-specific knowledge, professional learning, instructional coaching, scheduling, and student population.

Table 2

Research Design Analysis

Design	Focus	Purpose and Structure	Reason for rejection
Narrative	Exploring lived and told experiences and stories of an individual (Clandinin & Connolly, 2000)	Capturing detailed stories of individuals or small group of individuals, experiences through interviews and documents by Restorying into a framework: Linking ideas Sequencing events 3D narrative inquiry space (Connelly & Clandinin, 1990) "past conveys significance present conveys value, future conveys intention" (p. 9)	Narrative is not a suitable design because this research is not seeking to explore a lived experience of an individual retelling the story (Polkinghorne, 1995).
Phenomenology	Exploring the essence of how and why among individuals during a phenomenon or shared experiences (Moustakas, 1994; Patton, 1990)	Capturing the essence of commonalities and shared lived experiences of individuals through interviews by providing deep descriptions of the process and perspectives of the individuals (Moustakas, 1994)	Phenomenology is not a suitable design because this research is not seeing to understand the lived experiences, nor seeking personal and sustainable subjective meaning data based on shared experiences (Moustakas, 1994).
Grounded Theory	Developing a theory to explain a shared process derived from the participant's data (Strauss & Corbin, 1998)	Developing a theory based within the participant's views that provides a general explanation of a non-culture or location-sharing group through interview by providing codes (Strauss & Corbin, 1994).	Grounded Theory is not a suitable design because this research is not seeking the outcome or derived theory, (Strauss & Corbin, 1994), rather this research is seeking the thick rich descriptions throughout the process (Yin, 2009).
Ethnography	Exploring shared social patterns and or behaviors of an entire culturally driven group (Merriam, 1998; Wilcott, 2008)	Interpreting and describing the patterns and behaviors of a cultural group through interviews and fieldwork observations (Wilcott, 2008)	Ethnography is not a suitable design because this research is not attempting to conduct a sociocultural analysis of this unit of study (Merriam, 1998).

Research Questions

The overarching central research question was: How do video-reflective practices influence veteran teachers' perceived professional growth?

The additional sub-questions were:

1. How does video reflection influence veteran teachers' self-efficacy?

2. How can the school level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?

3. How does video reflection influence veteran teachers' instructional practices?

4. What role does instructional coaching play in video reflection for veteran teachers?

Setting

The setting for this study was Julianna County School System (pseudonym), a rural district in the southern United States. Julianna School System was selected because all classrooms have Audio Enhancement™ VIEWpath Educam 360™ systems installed. Audio Enhancement™ is a corporation that supports education through the development of video, audio, and instructional tools used to foster effective instruction. Specific tools used by Julianna School System include classroom audio systems and VIEWpath with Educam 360™. Classroom audio systems amplify and distribute sound throughout the classroom. The system provides a hands-free microphone for the instructor to wear as well as a cordless student microphone used to amplify sound, enhance involvement, and engage students. The VIEWpath system and Educam 360™ combine high-quality video cameras with surround sound amplification. The system also has the functionality to record and store sessions and multimedia with sharing capabilities.

Julianna School System installed audio systems, VIEWpath and Educam 360^{TM} in 2012. The district selected Audio Enhancement products in efforts to increase the quality of instruction and improve student achievement. For teachers, the system installation aims to promote flipped classrooms, reflective practices, and opportunities for interaction and feedback from colleagues, administration, or other professional affiliates. For students, the system aims to promote differentiated learning as well as opportunities to review lessons and activities. The system also offers options for absent students to join the classroom virtually with an Internet connection.

Julianna School System launched a training initiative for all schools in the county. During the 2013-2014 (middle and high schools) and 2014-2015 (elementary schools) school years, all school-level technology team members attended monthly training sessions regarding the systems. The training took place over six-month periods. Initial sessions were informational; latter sessions addressed application. The teams were charged with redelivering the information to the building level faculty and staff. Teams conducted building redeliveries of each training session during faculty meetings or team meetings. During the initial stages of the process, technology personnel at the district level provided monthly visits for additional support.

I purposefully selected three schools within the Julianna School System for this study. Dixon Elementary School, Fairways Elementary School, and Love Elementary School (all pseudonyms) were chosen by the district technology department to participate in this study because they sought to participate in video reflection by way of the Audio Enhancement^{TM} VIEWpath Educam 360^{TM} System, in efforts to improve instructional practices.

Participants

I chose participants from each of the three schools (cases) through criterion sampling in efforts to understand the problem through selected cases (Stake, 1995), and to assure instituting

quality research (Patton, 2001). With that in mind, three cases were identified in this study: Fairways Elementary School, Love Elementary School, and Dixon Elementary School. Each case identified three veteran teachers, one administrator, and one instructional coach using purposeful sampling with maximum variation to ensure diversity and variation among the participants (Patton, 2014). The overall goal was to identify participants within each case that contributed in-depth knowledge of the proposed study at hand. Each case was examined to understand the variable and similarities (Yin, 2013). The administrator and instructional coach interviews aided in identifying teacher sampling and ensured variations in participants' ages, ethnicities, and genders as well as grade levels and subjects currently being taught. Criteria for selecting the teachers was as follows: at least two years at the current site, more than three years teaching experience, and an academic content area teacher.

Procedures

Before beginning this study, I obtained written permission from the Julianna County School System (see Appendix B for Site Approval Letter) through the system Institutional Review Process. Next, I obtained approval to conduct research through Liberty University's Institutional Review Board (IRB) process (see Appendix A IRB Approval Letter). Before the data collection process began, individuals not assigned to participating schools were selected to pilot self-reflective protocol questions and interview questions (Yin, 2013). Piloting is recommended to ensure self-reflective protocol and interview questions can be easily understood and interpreted (Creswell, 2007; Gill, Stewart, Treasure, & Chadwick, 2008). Piloting self-reflective protocol questions and interview questions served as an indicator regarding the refining and clarification process of questioning and understanding (Sampson, 2004).

During week one, I first requested permission from selected schools to participate in this study (see Appendix D School Permission Letter) and hand-delivered informed consent to administrator and instructional coach participants (see Appendix C Informed Consent). Next, I conducted individual interviews with administrators and instructional coaches (see Appendix G Interview Questions Protocol) and utilized purposeful sampling to identify teacher participants (see Appendix G Interview Protocol). The interviews were to gain the vision of the school's administration regarding video-reflective practices for teachers in efforts to flesh out the expectation and the desired growth. Additionally, the interviews were conducted to discuss teacher participant selection. I then emailed invitation letters (see Appendix E Invitation Letter) to the teacher participants. During week two, I conducted site visits. The purpose of the visits was to review information about the study with the teacher participants. Additionally, I asked participants to sign a letter of informed consent (see Appendix C Informed Consent), listing specific details about the procedures, nature of the study, risks and benefits, and a research privacy agreement. During week two, I also gave teachers the GSE (see Appendix H GSE Scale) and demographic data questionnaire (see Appendix I Demographics) to complete. The purpose of the GSE was to gain an understanding of each participant's perceived self-efficacy prior to beginning this study. The purpose of the demographics data questionnaire was to gain a better understanding of the participant's age, gender, ethnicity, level of experience, educational level, certifications, and varied experience. I discussed the open-ended self-reflective protocol questionnaire procedures with teachers and discussed face-to-face interviews. During weeks three, four, and five using the system-wide camera system, teachers recorded classroom instruction and conducted a self-reflective observation utilizing self-reflective protocol questionnaires (see Appendices J, K, and L Open-ended Self-Reflective Protocols). Each week,

teachers selected an instructional segment, completed a self-reflective protocol questionnaire, and submitted their protocol responses via email within five days. I sent self-reflective protocol questionnaires to the teachers at the onset of weeks three, four, and five. During week six, I conducted face-to-face interviews with each teacher. Each thirty-minute individual interview consisted of open-ended questions and was audio-recorded using an iPhone for transcription utilizing transcribeme.com. During week seven, I analyzed all data of this collective case study to provide a descriptive summary of each case and the detailed setting. Figure 8 shows the study procedures.

My efforts regarding my data collection allowed me to "arrive at a comprehensive understanding of the group under study" and to "develop general theoretical statements about the regularities in social structure and process" (McCall & Wittner, 1990, p. 51). I used an iPhone to record data and utilized transcribeme.com. I used codes to identify similarities and differences between the cases. I described themes both in-case and cross-case. The data analysis process provided conclusions, generalizations, and assertions.
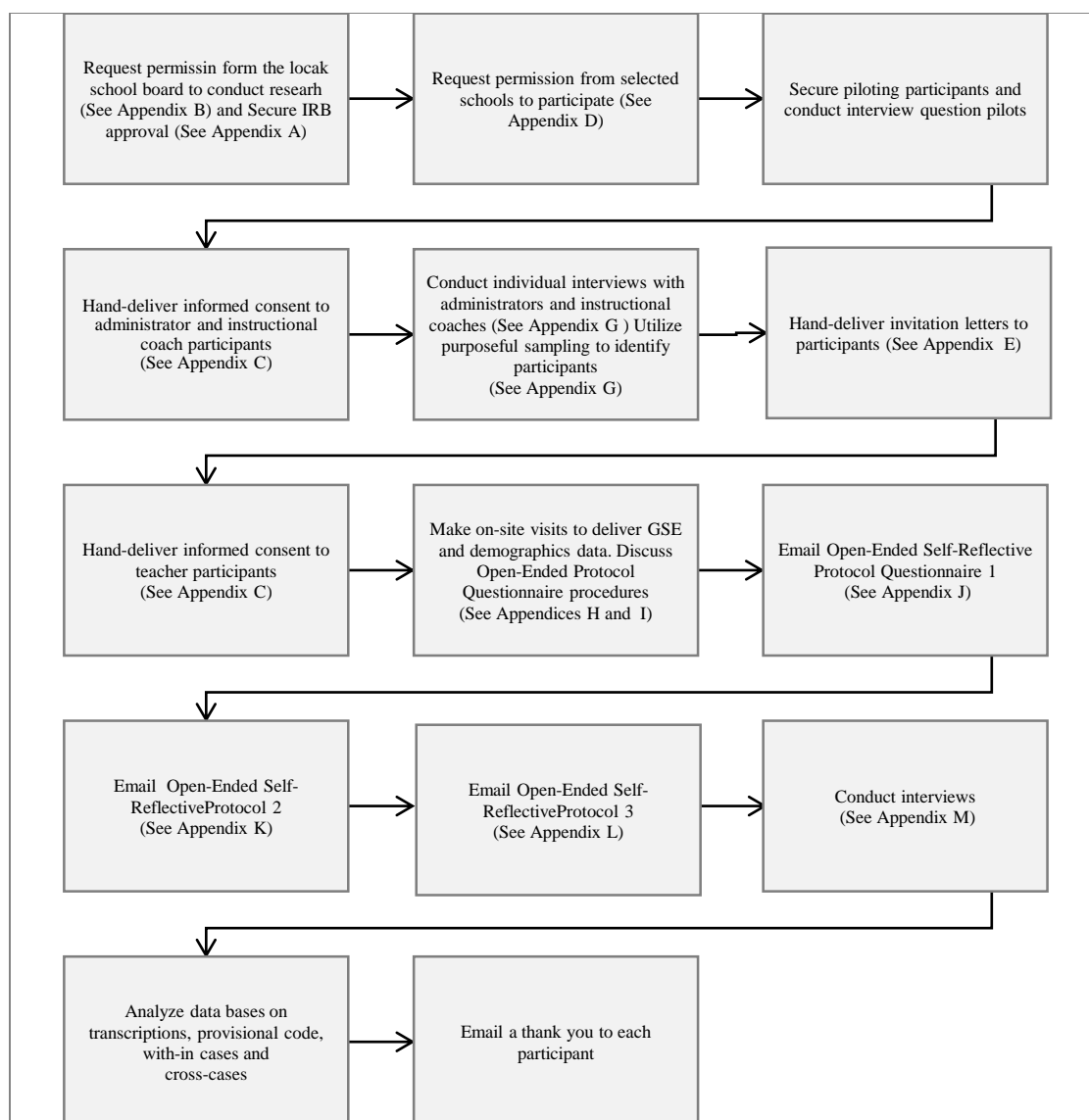
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┌─────────────────────────┐     ┌─────────────────────────┐     ┌─────────────────────────┐
│ Request permissin form  │     │ Request permission from │     │ Secure piloting         │
│ the locak school board  │ ──► │ selected schools to     │ ──► │ participants and        │
│ to conduct researh (See │     │ participate (See        │     │ conduct interview       │
│ Appendix B) and Secure  │     │ Appendix D)             │     │ question pilots         │
│ IRB approval (See       │     │                         │     │                         │
│ Appendix A)             │     │                         │     │                         │
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              │                                                               │
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│ Hand-deliver informed   │     │ Conduct individual      │     │ Hand-deliver invitation │
│ consent to administrator│     │ interviews with         │     │ letters to participants │
│ and instructional coach │ ──► │ administrators and      │ ──► │ (See Appendix E)        │
│ participants            │     │ instructional coaches   │     │                         │
│ (See Appendix C)        │     │ (See Appendix G) Utilize│     │                         │
│                         │     │ purposeful sampling to  │     │                         │
│                         │     │ identify participants   │     │                         │
│                         │     │ (See Appendix G)        │     │                         │
└─────────────────────────┘     └─────────────────────────┘     └─────────────────────────┘
              │                                                               │
              ▼                                                               ▼
┌─────────────────────────┐     ┌─────────────────────────┐     ┌─────────────────────────┐
│ Hand-deliver informed   │     │ Make on-site visits to  │     │ Email Open-Ended Self-  │
│ consent to teacher      │     │ deliver GSE and         │     │ Reflective Protocol     │
│ participants            │ ──► │ demographics data.      │ ──► │ Questionnaire 1         │
│ (See Appendix C)        │     │ Discuss Open-Ended      │     │ (See Appendix J)        │
│                         │     │ Protocol Questionnaire  │     │                         │
│                         │     │ procedures              │     │                         │
│                         │     │ (See Appendices H and I)│     │                         │
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│ Email Open-Ended Self-  │     │ Email Open-Ended Self-  │     │ Conduct interviews      │
│ ReflectiveProtocol 2    │ ──► │ ReflectiveProtocol 3    │ ──► │ (See Appendix M)        │
│ (See Appendix K)        │     │ (See Appendix L)        │     │                         │
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│ Analyze data bases on   │     │ Email a thank you to    │
│ transcriptions,         │ ──► │ each participant        │
│ provisional code,       │     │                         │
│ with-in cases and       │     │                         │
│ cross-cases             │     │                         │
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Figure 8. Study Procedures

The Researcher's Role

As the researcher, I was vital to the overall process of producing valid respectable research (Yin, 2013). Additionally, I am an instructional technology specialist in the school system where I conducted this study. The participants and I received the same district support related to using the classroom camera system for video-reflective practices. I was not an evaluator, supervisor, or instructional coach to the selected participants. I was the single

observer and recorder. I was the only interviewer and coordinator for interviews. As an instructional technology specialist, my interests in instructional practices overlap with the understanding of video-reflective practices. I strove to remain objective throughout the study and maintain a positive system climate with the fewest distractions possible by recognizing my role in this study as a human instrument regarding data collection and data analysis (Marshall & Rossman, 2011; Stake, 2010).

Data Collection

This study was qualitative research utilizing a collective case study approach, exploring a specific problem by examining cases within a real live setting (Yin, 2009) bounded by location and time (Merriam, 1998). Data collection began after receiving IRB approval (see Appendix A IRB Approval Letter), district and site approval (see Appendix B Site Approval Letter), and informed consents (see Appendix C Informed Consent). Data collection consisted of the GSE (see Appendix H GSE Scale), demographics data questionnaire (see Appendix I Demographics), three self-reflective protocol questionnaires (see Appendices J, K, and L Open-ended Self-Reflective Protocols), and interviews (see Appendix M Interview Questions Protocol). As the researcher, I sought to produce in-depth descriptions and perspectives of veteran teachers' who utilized video-reflective practice. I wanted to understand commonalities that existed within each case in efforts to inform teaching.

General Self-Efficacy Scale

The General Self-Efficacy Scale (GSE) was created by Schwarzer and Jerusalem (1995) to develop a general understanding of adult perceived self-efficacy. The scale also allows individuals to predict how they cope with daily experiences and stresses. In this study, I used Schwarzer and Jerusalem's GSE due to the reliability, which was established quantitatively

through samples from 23 nations with a Cronbach's alphas ranged from .76 to .90, with the

majority in the high .80s (see Appendix H GSE Scale). I gave participants the GSE during the

initial site visit. This scale consisted of ten questions relating to perceived self-efficacy and

cultivated the understanding that personal beliefs contribute to success outcomes (Schwarzer &

Jerusalem, 1995). This scale served to attach meaning to participant's decision-making process

during instruction and reflection. I received permission to use the GSE per the online protocol

(See Appendix N GSE Permission).

Demographics Data Questionnaire

Each participant was given a basic questionnaire in efforts to collect demographic data

that includes age, gender, ethnicity, level of experience; educational level, certifications, and

varied experience (see Appendix H Demographics).

Self-Reflective Protocol Questionnaires

Each participant identified three instructional periods to be videoed and conducted three

self-reflective video observations utilizing the self-reflective protocol questionnaires (see

Appendices J, K, and L Open-ended Self-Reflective Protocols) to outline their thought process

during personal video reflection. While Yin (2011) preferably recommends using open-ended

questions as conversation, probes or discussion prompts, open-ended question responses lend to

opportunities for higher depths of data clarification and comprehension (Harland & Holey,

2011). Harland and Holey (2011) further validated that open-ended questions provide significant

complex data regarding the interpretation of qualitative study. For this reason, self-reflective

protocol questionnaires were used to deeply understand the thought process of the participant's

self-reflection after classroom instruction has taken place. Self-reflection allowed the teachers to

see what was happening in their natural setting (Stake, 2010). All teachers can account for at

least one recorded 25-minute segment per week of academic instruction. Therefore, participants conducted three self-reflective observations utilizing the self-reflective protocol questionnaires while reviewing the recorded instructional segment. Participants completed personal observation and self-reflective protocol questionnaires for three consecutive weeks during the study.

Interviews

Interviews guide a conversation in a qualitative case study allowing the researcher to discover in-depth answers to the how and why research questions lived through the phenomenon (Merriam, 1998; Rubin & Rubin, 2011; Yin 2009). Dexter (1970) suggested an interview is a "Conversation with a purpose" (p. 136). I interviewed all participants. I interviewed administrators and instructional coaches at the onset of the study to identify teacher participants. I interviewed teachers after they completed the third self-reflective protocol.

Administrator and instructional coach interviews. At the onset of this study, I interviewed each identified administrator and instructional coach within each case. The purpose of these interviews was to gain the school's vision regarding video-reflective practices and understand the reason for prioritizing them within the identified schools (case). Most importantly, these interviews will serve as a setting for teacher participant recommendations.

Teacher interviews. I conducted face-to-face interviews after teachers completed three consecutive weeks of personal observations using self-reflective protocol questionnaires. As the researcher, it was my responsibility to be mindful of personal biases and minimize such influences on the study. Therefore, I used open-ended interpretive questions to provide an opportunity to validate my understanding yet provide additional opportunities for teachers to further explain information, feelings, or personal opinions of the phenomenon (Merriam, 1998).

Administrator/instructional coach and teacher interviews. I conducted standardized open-ended interviews with each participant for approximately fifteen minutes per interview (see Appendix M Interview Questions Protocol). Each interview uniformly presented the same open-ended questions in the same order (Patton, 2002). Before interviewing participants, I piloted all questions to ensure clarification and refinement (Sampson, 2004). This interview process allowed each participant to answer the same questions and allowed me to compare and analyze the responses in an organized manner (Patton, 2002). However, I was prepared to ask additional or follow up questions for clarification if needed. The interview questions were generated from the review of current literature, the research questions, and served as extensions to the self-reflective protocol questionnaires in efforts to analyze patterns that exist across cases (Patton, 2014). The district technology department assisted with selecting three veteran teachers to pilot the questions. This process promoted extensive detail regarding the interview format and provided a systematic framework for all participants (Patton, 2002). By using open-ended questions, the participants were able to "contribute as much detail as they desire" (Turner, 2010, p. 756) to the specified questions. This method served as a better approach than an informational conversational interview, which "constructs questions as you move forward" (Turner, 2010, p. 755). Each interview was audio-recorded using an iPhone. Each recording was given a file name using the participant's pseudonym. I uploaded each file to the transcribeme application for iPhone for transcriptions. I utilized member checking with the transcribed files to ensure validity. Participants were given a copy of the transcription and asked to review and make any necessary changes or additions within three days. I saved all files on a password-protected computer.

Data Analysis

I utilized a collective case study to gain in-depth data by understanding the nature of embedded cases within each case. I collected data from the teacher participants through the GSE, three self-reflective protocol questionnaires, and interviews. Data analysis included conducting an item analysis of the GSE. The GSE scale correlated questions based on feelings, perceptions, and satisfaction, and provides a total score of the correlated questions. However, all GSE questions focused on the individual's ability to influence a given situation rather than respond to a specific occurrence. With that in mind, I purpose was to look at the mean of each question and understand the participant's perceptions prior to conducting self-reflections. Each self-reflective protocol contained different questions prompting the participant to look at various aspects of the teaching and learning environment thus providing an in-depth understanding of the participants thought process regarding the learning climate. The individual interviews were conducted to gain an understanding of the participant's perception, response, and feeling regarding the self-reflective process.

I first began with reviewing transcriptions and notes from the self-reflective protocol questionnaires, GSE, and individual interviews. I housed these files on a password-protected computer in Microsoft Word format. I read through these documents many times to familiarize myself with the data. I made notes on the documents of key ideas and concepts that deemed significance and identified issue-related meanings (Stake, 1995). I also uploaded data to ATLAS.ti software program for organization and analysis. The software allowed me to study the passages and word phrases. ATLAS.ti also allowed me to organize the ideas, patterns, and data meaning. From there, ATLAS.ti served as an instrument for identifying codes. Codes are words or phrases that capture the voice of the data (Saldana, 2013). Provisional codes were devised

based on the preparatory literature reviewed for the study and used in the data analysis. Table 3

contains these provisional codes. I was not limited to the provisional coding during the

investigation and was open to other codes arising (Crabtree & Miller, 1992). Therefore, I

modified and expanded the list of codes and phrases to ensure all data was represented with

descriptive codes (Saldana, 2013).

Table 3

Provisional Codes for Data Analysis

Research Question	Theoretical Framework	Provisional Code	Shorthand Code
RQ2	*Knowles 1984* *Bandura 1997* *Siemens 2004*	Professional Learning	PL
RQ4	*Knowles 1984* *Bandura 1997* *Siemens 2004*	Instructional Coaching	IC
RQ3	*Knowles 1984* *Bandura 1997*	Teaching Practices	TP
RQC	*Knowles 1984* *Bandura 1997* *Siemens 2004*	Reflective Practices	RP
RQC	*Knowles 1984* *Bandura 1997*	Video Analysis	VA
RQ1	*Knowles 1984* *Bandura 1997*	Self-Efficacy	SE

Once all data was appropriately coded, I compared codes to identify similarities and

differences among the cases. I was able to modify the codes. I divided the codes into two

general thematic categories. I discussed specific codes for each of the generalized themes in

Chapter Five. After a thorough investigation of the data and development of thematic categories, I constructed vignettes of each case. I utilized naturalistic generalizations to develop and explain comparisons cross-case (Stake, 2010).

Data analysis is designed to express a deep understanding of the cases and decipher the findings through data saturation of what is observed and noted (Merriam, 1998; Patton, 2002). Therefore, I presented a descriptive analysis of the insight gained through the study of each case. Due to the understanding that each case is considered an independent study, I conducted cross-case analyses producing a better understanding of likenesses across cases (Yin, 1989). Figure 9 provides a visual representing the data plan analysis.
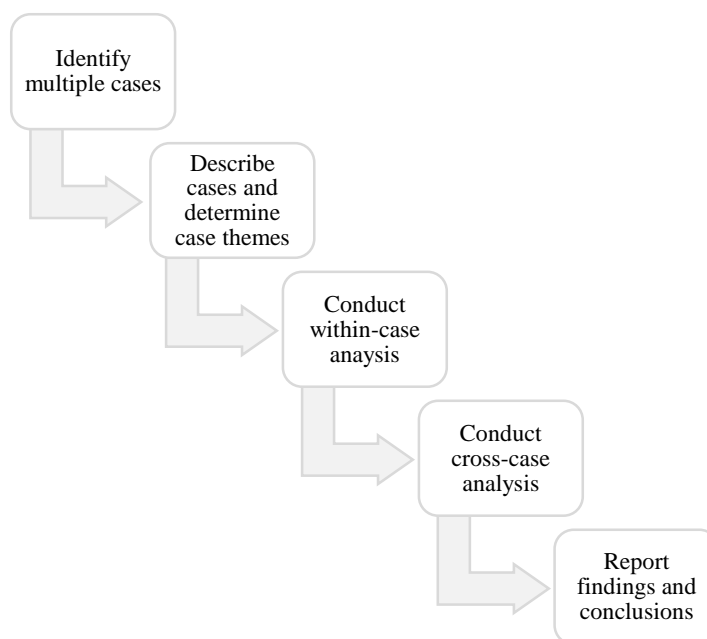

Figure 9. Data Analysis Plan

Trustworthiness

I addressed the trustworthiness of this study through credibility, dependability, confirmability, and transferability, otherwise known as validation strategies (Stake, 2003; Yin,

2013). The following sections describe the criteria in detail and explain how I addressed each in this study.

Credibility

Credibility is foundational for validity (Yin, 2013). Triangulation was a key component for increasing credibility (Stake, 1995). By identifying multiple cases and methods of data collection and analysis, I established triangulation through substantiating evidence (Lincoln & Guba, 1985). As an impartial researcher, I reported my personal and professional knowledge that may hedge on the on the validity of my data collection and analysis. As a researcher, I understood that being unbiased was challenging (Patton, 2002). With that in mind, I stated my professional background knowledge, training, and current profession as related to this topic of study. Additionally, in efforts to establish credibility, all transcribed data was anonymously recorded. I used pseudonyms for each participant, setting, and school district.

Dependability and Confirmability

Increasing internal validity establishes dependability (Yin, 2013). I first established dependability by consistently utilizing standardize interview questions and field note templates with all participants. I ensured confirmability through member checking. According to Lincoln and Guba (1985), the most valuable way to support research credibility is known as member checking. Participants reviewed transcribed interviews and provide feedback regarding interview accuracy, allowing them to "play a major role" in the study (Stake, 1995, p. 115), to review my interpretations, and provide more clear and concise language if necessary. This process provided an additional layer of review to avoid missing elements critical to the study (Stake, 1995). The validation process provides the groundwork for future researchers to conduct further studies (Yin, 2013).

Transferability

A thick description regarding each participant's experience and the setting was provided to address transferability (Lincoln & Guba, 1985). I provided interconnected detailed descriptions of the setting, an overview of the study process (Yin, 2003) and thick, rich analysis regarding the bounded system (Smith, 1978) which fuels the "interpretation of context" (Cronbach, 1975 p. 213). Data saturation also established transferability when I reached the point where new information no longer emerged (Patton, 2002). Additionally, I informed the readers with necessary information regarding my findings to determine if similarities or variations exist within each case and participants including but not limited to demographics, socioeconomic status, and ethnic composition (Stake, 2010).

Ethical Considerations

"Qualitative researchers are guests in the private spaces of the world" (Stake, 2003, p. 154). Therefore, ethical consideration must be acknowledged. As the researcher, I acknowledge my personal experience as I proceeded through the IRB process, obtained approval from Liberty University, secured participant informed consent, and ensured participant and data confidentiality. To safeguard data and participants' identities, I understood my position as an instructional technology specialist was an important factor in my inquiry to this study; however, I removed my feelings. I obtained IRB approval before beginning this research. Furthermore, I assigned pseudonyms to all participants to ensure confidentiality. During the initial on-site visits, participants completed and sign informed consent forms authorizing me to document findings. All physical written and audio copies were scanned into and stored on my password-protected computer by pseudonyms. At that point, I shredded all physical copies. All electronic data and digital files stored on a password-protected computer will be destroyed three years after

publication. All participants were aware of all safeguarding efforts for the duration of the study. Lastly, I ensured participants understood consent and had them sign a statement acknowledging that I would report any information concerning harm to others.

Summary

The focus of this study was to understand the professional practice and identify commonalities that promote professional growth through video-reflective practices. As an advocate for teachers, I aspired to focus on improving instructional practices in efforts to build professional capacity. I was interested in understanding practices, techniques, and insight these participants gain through video reflection. In this chapter, I provided detail regarding the collective case study's design, which was to understand the influences classrooms camera has on reflective practices. I outlined the research questions, setting, participants, and procedures. I discussed the data collection and data analysis, followed by an outline of trustworthiness and ethical concerns that pertain to this study. Next, in Chapter Four, I will provide information about the findings specific to this study.

CHAPTER FOUR: FINDINGS

Overview

This chapter addresses the results of the data collection and analysis of this collective case study, in which I examined how classroom cameras influenced video-reflective practices of veteran teachers in elementary classrooms. In this case study, multiple cases were investigated collectively to understand the influence video-reflective practices have on self-efficacy, growth in Professional Learning Communities, instructional practices and preparedness, and instructional coaching. I understood a specific problem through collective cases by examining each embedded unit within a natural setting. I utilized multiple cases in this study to allow for some generalizations due to the nature of the embedded units.

One overarching research question and four sub-questions led this study. Each was investigated and explained within the data collection and analysis.

How do video-reflective practices influence veteran teachers' perceived professional growth?

1. How does video reflection influence veteran teachers' self-efficacy?

2. How can the school level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?

3. How does video reflection influence veteran teachers' instructional practices?

4. What role does instructional coaching play in video reflection for veteran teachers?

I collected data over a six-week period from three administrators, three instructional coaches, and nine elementary teachers at three sites. Stake (1995) suggested that triangulation is a key component for increasing credibility in research. Triangulation is a process of using multiple sources of data in efforts to understand a problem or phenomenon and justify the results. This research included the GSE, three self-reflective protocol questionnaires, and individual

interviews. All participants completed individual interviews. However, the purpose of the interviews with the administrator and instructional coach participants was to understand the school's vision and priority of video-reflective practices and most importantly, to identify three veteran teacher participants at each site. Along with individual interviews, all nine teacher participants completed the GSE and three self-reflective protocol questionnaires. This chapter reports the data collected from those documents.

<div align="center">

Participants

</div>

The principal and instructional coach at Dixon, Fairways, and Love Elementary Schools were interviewed independently utilizing case study interview protocol (see Appendix G Interview Questions Protocol). The purpose of these interviews was to gain the school's vision regarding video-reflective practices and understand their priority within the identified schools (case). Additionally, these interviews served as a setting for teacher participant recommendations. Each principal and instructional coach utilized a pseudonym to maintain confidentiality.

Principal Heart

Principal Heart served in education for 25 years. Her experience included special education paraprofessional, classroom teacher, instructional coach, and assistant principal prior to becoming principal at Dixon Elementary School six years ago.

Principal Henry

Principal Henry had been in education for 22 years. He began his administrative journey 10 years ago as an assistant principal. He had been the principal at Fairways Elementary School for two years.

Principal McDowell

Principal McDowell served in education for 16 years with eight years of administration. He transitioned from the District Special Education Department to become principal at Love Elementary School.

Coach Black

Coach Black was an instructional coach for four years within the Julianna School District. This year was her first year as Dixon Elementary School's instructional coach.

Coach Julian

Coach Julian had been in education for 14 years and was an early childhood master teacher. She had been the instructional coach at Fairways Elementary School for five years.

Coach Young

Coach Young was a literacy specialist and the instructional coach at Love Elementary School for two years.

Based on interviews utilizing specific open-ended questions (see Appendix G Interview Questions Protocol), the administrators and instructional coaches were able to identify three veteran teacher participants within each case. Nine veteran teachers, three from each site, were emailed an invitation letter to participate in research regarding video-reflective practices. All participants expressed interest and agreed to complete a demographics questionnaire (see

Appendix I Demographics), the GSE (see Appendix H GSE Scale), three self-reflective protocol questionnaires (see Appendices J, K, L Self-Reflective Protocols), and participate in an individual interview (see Appendix M Interview Questions). Before the collection of any data, each participant read and signed an informed consent form (see Appendix C Informed Consent).

Each teacher participant was given a pseudonym to protect their identity. The sample size of this collective case study was nine teacher participants. Three participants were identified within each case allowing for multiple perceptions of video-reflective practices and heightening the study's trustworthiness. Appendix I presents the information on the demographics questionnaire. Specific information included age, ethnicity, gender, years of experience, highest degree, certifications, and varied experience. Each participant is described in more detail in the subsequent narratives within this chapter.

Results

The rationale for this collective case study was to understand the influential factors associated with video-reflective practices of veteran teachers. The data collected from the interviews were categorized based on the connection to the research questions and comprised themes and meaning that emerged from this study. Self-reflective protocol questionnaires were used to gain a firsthand perspective of each participant's perception. Questionnaire answers expounded and substantiated the participant responses to individual interviews questions.

General Self-Efficacy Scale

All nine teacher participants completed the General Self-Efficacy scale during individual on-site visits. Participants were asked to complete the scale after they had read and signed the informed consent form. The GSE consisted of ten questions. The response format was as follows: 1 = not true at all, 2 = hardly true, 3 = moderately true, and 4 = exactly true. Hard copies of the completed GSE were scanned, given a file name based on the participants' pseudonym, and stored within a file on a password-protected computer. I shredded the hard copies after scanning them.

Self-Reflective Protocols

Teacher participants completed self-reflective protocol questionnaires one, two, and three for three consecutive weeks. Each participant received a self-reflective protocol through email at the onset of weeks three, four, and five. Each week the instructions remained the same and included (a) record a teaching segment utilizing the Audio Enhancement^{TM} VIEWpath Educam 360^{TM} system, (b) select an instructional segment for review, (c) complete the self-reflective protocol questionnaire simultaneously with reviewing the teaching segment of choice, and (d) submit the completed protocol questionnaire via email within five days. During week three, Holly returned her first self-reflective protocol within three days. The remaining eight participants returned their self-reflective protocol on the fourth or fifth day. During week four, Holly and Tasha returned their second self-reflective protocol within one day. Debbie returned hers within two days. Sally, Jennifer, and Suzie returned theirs within three days while Tyler, MaryLee, and Jessica returned theirs on the fourth or fifth day. During week five, Sally, Debbie, Jennifer, MaryLee, and Suzie returned their third self-reflective protocol within one day. Holly, Tasha, Tyler, and Jessica returned their self-reflective protocol within two days. I assigned all self-reflective protocols file names based on the participant's pseudonym and stored within a file on a password protected computer. The ATLAS.ti software program was used to organize, code, and thematize this data.

Interviews

I conducted all teacher participant interviews after they completed the third self-reflective protocol. Scheduling of teacher interviews occurred at each participant's convenience. All nine teacher participants were asked the same seven questions to promote standardization of the interview process. I used verbatim language and inflection with no additional questions asked.

Interviews varied in length and averaged approximately 15-20 minutes. Every interview was audio recorded, using an iPhone and transcribeme application. Each file was created using the participant's pseudonym. Once transcriptions were complete, member checking was conducted to ensure validity. Participants were emailed a copy of the transcription and asked to review their transcription. I allowed participants three days to review, make changes, additions, or confirm the interpretation of the transcription. The ATLAS.ti software program was used to organize, code, and thematize the confirmed transcriptions.

Provisional Codes

Once all transcriptions were accepted, the data analysis process began. I first constructed vignettes of each embedded unit. Prior to data collection, I created a general list of provisional codes based on the research questions as shown in Table 4. ATLAS.ti software program was utilized to organize all primary documents which included transcriptions and questionnaires. The software served as an organizational instrument for me to study the text passages and the word phrases, to organize the ideas and the patterns, and to generate meaning necessary to identify themes. I next reviewed the evidence and grouped the codes into two general thematic categories. From there I referenced specific codes for each of the generalized categories.

Data that addressed video-reflective practices as a self-assessment tool for understanding instructional delivery were referenced with five codes as determined in Table 4. The codes were used to address how various aspects of scaffold instructions were influenced by video reflection, how instructional planning was impacted by noticing the instructional environment, how self-perceptions varied through refection, and how making sense of what participants noticed fostered self-directed change. Additionally, participants viewed video reflection as an opportunity to promote community learning.

Table 4

Provisional Codes in Theme 1: Video reflection influenced instructional delivery

Provisional Code	Research Question Shorthand Code	Number of Cases
Scaffold instruction	TP	8
Instructional planning	TP	9
Self-perception	SE	6
Self-directed change	SE	9
Community learning	PL	9

Other data that addressed video-reflective practices impacted student learning were referenced with four codes as determined in Table 5. These codes were used to categorize data that addressed how video-reflective practices allowed participants to notice student engagement and behavior that influenced student achievement. Additionally, participants viewed reflection as a way to assess their students' higher order thinking skills through varied depth of knowledge questions.

Table 5

Provisional Codes in Theme 2: Video reflection impacted student learning.

Provisional Code	Research Question Shorthand Code	Cases
Student Engagement	TP	9
Student Behavior	TP	5
Student Achievement	TP	7
Depth of Knowledge Questioning	TP	8

These code sets were used to support the themes identified in this case study's findings. This design included establishing with-in case analysis with detailed descriptions and the thematic relations to each teacher participant. Additionally, a cross-case analysis served as an opportunity to discuss commonalities among cases concerning the two identified themes.

Case 1: Love Elementary School

Love Elementary Schools serves pre-kindergarten through fifth-grade students. Love Elementary employed 34 teachers and 15 support staff members. Additionally, Love's student population consisted of 449 students. Concerning race, 73.7% identified as African American, 18.48% identified as Caucasian, and 12.2% identified as other. Love is a Title I school with 79% of the student population receiving free or reduced lunch. Love first opened in 1884.

Theme Development

Jessica. Jessica was a second-grade teacher at Love Elementary School. She taught for eight years and held a bachelor's degree in early childhood and special education and a master's degree in early childhood education. Jessica was a 43-year-old African American female. Her eight years of experience were in first and second-grade education. When assessing her personal self-efficacy, Jessica felt her strengths included, remaining calm, determined, and focused on her goals while remaining flexible. Likewise, Jessica noted her self-efficacy weaknesses included when faced with opposition; and she tended to shy away from her desired outcome (Jessica, questionnaire, November 17, 2017).

Theme 1: Video reflection influenced instructional delivery. Jessica acknowledged that she enjoyed reviewing my teaching sessions. She felt that she was able to immediately identify her delivery strengths and weaknesses (Jessica, interview, December 19, 2017). She explained she was able to see things that she did more than she had anticipated (Jessica, interview,

December 19, 2017). For example, Jessica noted, "I noticed myself saying 'Good Job' without explaining what was good" (questionnaire, November 27, 2017). "I praised my students continually and gave them feedback but, it wasn't direct feedback" (Jessica, interview, December 19, 2017). Jessica also noticed that she stood in specific areas in the room. Even though she scanned the classroom, she never wanted her students on the other side of the room to feel like she was not there for them (Jessica, questionnaire, December 13, 2017). She believed she could immediately change and become more mindful of her movement around the room (Jessica, interview, December 19, 2017).

Jessica was certain that personal reflection influenced her professional growth because she had already started adjusting areas of weakness. She explained that she had already begun giving her students wait time and "It's beautiful" (Jessica, interview, December 19, 2017). Tweaking areas such as letting go of the control and giving them time to work through the process was extremely valuable and lent to student understanding (Jessica, questionnaire, December 4, 2017). She noted that adjusting and providing her students specific, meaningful feedback allowed her to see if her instructional delivery methods were effective (Jessica, questionnaire, December 13, 2017). Jessica stated, "I corrected the wait time and interesting enough I thought I did that well until I watched my teaching videos" (interview, December 19, 2017). Jessica embraced the learning and celebrated her strengths.

Theme 2: Video reflection impacted student learning. Jessica explained, "I expected to see my students doing a lot more and me doing less teacher talk but what I noticed there was a lot of teacher talk" (interview, December 19, 2017). She noted that the students were engaged but noticed a teacher-centered environment where she was mainly talking and going through processes (Jessica, interview, December 19, 2017). She realized she needed to give her students

time to work through the process on their own and promote critical thinking skills (Jessica, questionnaire, December 13, 2017). For example, Jessica was able to see that her students collaborated well and that watching gave her a chance to notice collaborative pairs (Jessica, questionnaire, December 13, 2017). She felt she could gauge their understanding based on their interactions with each other. She was happy to see that lessons on building community were transcending into small group instruction and facilitating the learning process (Jessica, questionnaire, December 13, 2017).

Jessica felt that video reflection gave her a deeper look into her classroom (Jessica, interview, December 19, 2017). She explained, "I noticed I give directions and ask my students to repeat the directions which provided an opportunity for me to immediately check for understanding" (Jessica, interview, December 19, 2017). She went on to say that she also noticed that her chimes were very effective and lent to smooth transitions. She felt she could work on quicker transitions but knowing the students recognized the signals and what to do right away was good (Jessica, questionnaire, December 13, 2017).

Reflection gave Jessica a chance to go back and ask herself important questions about the environment and student learning (Jessica, interview, December 19, 2017). Jessica stated, "I asked myself questions like 'What do I want the instructional environment to look like?' 'Can I visualize what I want them to be doing at this point in the lesson?' 'What are the steps I'm going to take to get them to a particular point?'" (interview, December 19, 2017). She felt that those were questions she could not answer without watching and noticing her students' responses and engagement (Jessica, interview, December 19, 2017). She was able to see if they needed more background knowledge to take what she had given them and produce a product. Essentially,

Jessica believed that the use of critical-thinking skills could be measured based on noticing what was happening in the learning environment (Jessica, questionnaire, December 13, 2017).

Jessica stated, "I really enjoyed watching myself" (interview, December 19, 2017). She never mentioned watching teammates' videos as a way to promote professional growth. However, she did see the benefit in personal video reflection. Jessica explained that reflection could promote team collaboration through common conversations about specific content delivery. She went on to explain that meaningful reflection was critical. Answering meaningful questions as she reflected helped her look for lesson components she otherwise would overlook (Jessica, interview, December 19, 2017).

MaryLee. MaryLee was a third-grade teacher at Love Elementary School. She taught for 12 years and held a bachelor's degree in elementary education, master's degree in teaching and learning, and a specialist degree in elementary education. MaryLee was a 34-year-old Caucasian female. She also held an English to speaker of other languages (ESOL) endorsement and a gifted endorsement. Her 12 years of experience have been in first and third-grade education. When assessing her personal self-efficacy, MaryLee felt her strengths included her perseverance, resourcefulness, problem-solving, and troubleshooting skills, as well as her flexibility (MaryLee, questionnaire, November 16, 2017).

Theme 1: Video reflection influenced instructional delivery. MaryLee was honest and stated, "I wasn't super excited about video reflection; I honestly thought this is going to be awful" (MaryLee, interview, December 19, 2017). However, she said she "Actually really kind of enjoyed it" (MaryLee, interview, December 19, 2017). She believed once she stopped and just looked at her teaching and learning environment, she could see everything going on in her classroom (MaryLee, questionnaire, December 12, 2017). She happily noted, "I saw a lot more

'good' things happen than I expected" (MaryLee, interview, December 19, 2017). She learned

that she scaffolded questions well (MaryLee, questionnaire, December 6, 2017). She felt that she

had "cool lessons" (MaryLee, interview, December 19, 2017). For MaryLee, video validated

that she did a nice job.

MaryLee stated that she really liked having the time to sit down and look at what she was

doing, as well as what the students were doing (MaryLee, questionnaire, December 6, 2017).

She was candid and acknowledged that she could see that she needed to add rigor to her

independent work because there were kids that could do more. She realized that she needed to

increase her wait time. She noted that she had lesson plans and she followed them, but

sometimes she veered when she was teaching (MaryLee, questionnaire, December 12, 2017).

Going back, and reflecting, she stated, "I can acknowledge the whole point; the objectives of this

lesson was for my kids to get to here" (MaryLee, interview, December 19, 2017).

She asked herself, "Did we get there?" (MaryLee, interview, December 19, 2017). She

explained they have assessments but when she went back and viewed her lesson she could be

candid and see, "Maybe we bombed this because I didn't actually get them from 'X' to 'Z'"

(MaryLee, interview, December 19, 2017). She explained, "You see little things to tweak, but

there's nothing wrong with that" (MaryLee, interview, December 19, 2017). MaryLee

concluded video reflection created gratifying moments as well as eye opening moments

(MaryLee, questionnaire, December 12, 2017).

According to MaryLee, "I think video reflection is really valuable with lesson planning"

(MaryLee, interview, December 19, 2017). This reflection gave her the opportunity to evaluate

the questions she was asking during instruction (MaryLee, questionnaire, December 12, 2017).

For example, MaryLee explained that she writes her essential question in her lesson plans and

has a section for higher order depth of knowledge questions. She further noted that she puts them in there and sometimes she gets to them and sometimes she does not. However, with video reflection, she explained that she could go back and see how she was arriving at the higher-order question. She felt like it was a check and balance opportunity and an opportunity to slow down and think about what she was doing (MaryLee, questionnaire, December 12, 2017).

MaryLee acknowledged that she wanted to keep watching her teaching segments (MaryLee, interview, December 19, 2017). She believed it would be useful to set professional goals and assess those goals based on video reflection (MaryLee, interview, December 19, 2017). She stated, "I think it could be a good way to keep track of professional growth if we video reflected on our teaching with purpose and utilizing questions that guided the reflection" (MaryLee, interview, December 19, 2017). She felt questions were very beneficial and helped her see what was going well and what was not going as planned. MaryLee stated, "During this study, questions that I reflected upon were questions that I wouldn't have thought to ask or look at so it as kind of neat" (MaryLee, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. MaryLee was excited to state, "I noticed that my kids do a lot more on their own than I realized" (MaryLee, interview, December 19, 2017). She felt she learned that her kids were "A lot cooler" and "could handle a lot more than she gave them credit for" (MaryLee, interview, December 19, 2017). She noticed that they could handle more rigor higher order questioning. She recognized that she was very controlling in what she wanted to happen within the learning environment. She realized that she needed to step back, and "let them be a little more" because she was able to say, "Look what they did when I just stopped and let them do it" (MaryLee, interview, December 19, 2017). That was an "aha" moment for her. MaryLee was enlightened as she watched the students' engagement (MaryLee,

questionnaire, November 30, 2017). She felt they were more engaged when given the opportunity to be creative (MaryLee, questionnaire, November 30, 2017). She was able to make that adjustment within her learning environment immediately. She noted that the engagement fostered understanding which supported achievement (MaryLee, questionnaire, November 30, 2017).

According to MaryLee, "When I was a beginning teacher, I videotaped myself all the time to reflect on my abilities" (MaryLee, interview, December 19, 2017). She felt as a veteran she stopped. She explained, "I guess you feel like you know what you're doing, but it was nice to go back and see so many years later that I notice things that I had to work on" (MaryLee, interview, December 19, 2017). That was the biggest take away for MaryLee. She found power in stopping and noticing what her students were doing. She believed that sometimes she had one perception of her students' abilities and felt she could predict how they would struggle, however watching she was able to notice and validate rather than predict and perceive (MaryLee, questionnaire, December 6, 2017). She explained, "I don't give them enough chances to be creative" (MaryLee, questionnaire, December 6, 2017). There was no question about it, her students learned best when they were creating and participating (MaryLee, questionnaire, December 6, 2017).

MaryLee felt guided video reflection could be most beneficial. She stated, "I think coming up with questions guiding what you're looking for together is a really good idea" (MaryLee, interview, December 19, 2017). She was hesitant to share her videos with teammates but was not opposed. She explained, "Depending on the relationships with teammates, I could be open; but obviously it would have to be within a really trusting environment in order to watch each other's teaching videos" (MaryLee, interview, December 19, 2017). If people watched

their own video that could be a very non-threatening opportunity to self-evaluate, she noted. "Having specific topics and common questions to self-reflect individually and come back together with teammates and just discuss what everyone saw in themselves" could be a great way to grow collaboratively (MaryLee, interview, December 19, 2017).

Tyler. Tyler was a fourth-grade teacher at Love Elementary School. She taught for 18 years and held a bachelor's degree in early childhood education, master's degree in curriculum and instruction and specialist degree in curriculum and instruction. Tyler was a 44-year-old African American female. She also held a gifted endorsement. She was working on a science endorsement and an instructional coaching endorsement. She spent her 18 years of experience in pre-kindergarten, second grade, and fourth grade. When assessing her personal self-efficacy, Tyler felt her moderate strengths included her confidence, problem-solving, coping, troubleshooting skills, and flexibility. Likewise, Tyler noted her self-efficacy weaknesses included dealing with opposition, resourcefulness, and making decisions within an uncomfortable situation (Tyler, questionnaire, November 17, 2017).

Theme 1: Video reflection influenced instructional delivery. Tyler explained that she tries to reflect at the end of each day, but she had never reflected while watching herself teach. She stated, "It was so eye-opening; I saw some things I liked, and I saw some things I changed" (Tyler, interview, December 19, 2017). She felt being able to actually see what she was doing right and what she needed to change was a very helpful experience. Tyler felt that reflecting helped her assess the rigor of her instruction (Tyler, questionnaire, December 5, 2017). As she watched, she was thinking of additional questions she could have asked her students. Noticing their response, she could see they were ready (Tyler, questionnaire, December 5, 2017). At times she felt she did not give them a chance to think outside the box. She explained that she

asked them the basic questions but did not give them the chance to think critically (Tyler, questionnaire, December 5, 2017). That was where she noticed opportunities for bringing in higher order depth of knowledge questions. She believed, "My kids can handle critical thinking" (Tyler, interview, December 19, 2017). She went on to say, "I was able to tweak that immediately" (Tyler, interview, December 19, 2017).

According to Tyler, "Video reflection really did show me whether or not I chose the right delivery method for my students" (Tyler, interview, December 19, 2017). She noted reflection also enhanced her future lesson planning as she assessed her strengths and weaknesses (Tyler, questionnaire, November 28, 2017). She explained that she closely noticed her word phrasing and recognized that "Maybe I should have said it this way rather than that way" (Tyler, interview, December 19, 2017). She felt she was able to go back and make adjustments the next day. Tyler stated, "Reflection helped me see what I needed to change, what I needed to do differently, and recognize what I did on point; it was nice to pat myself on the back too" (Tyler, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. Tyler believed, "Video reflection helped me gauge my students' engagement and notice their understanding (Tyler, interview, December 19, 2017). She further noted, "Video reflection gave me more" (Tyler, interview, December 19, 2017). Tyler explained that being able to go back and see her kids understand the content was an "aha" moment (Tyler, questionnaire, November 28, 2017). She felt that watching them explain in detail to a shoulder buddy who did not quite grasp the concept from her instruction was amazing and indicated her students' understanding (Tyler, questionnaire, December 12, 2017). "Realizing my students were using the vocabulary" was critical and served as an easy way to assess the students' achievement (Tyler, interview, December 19, 2017).

According to Tyler, video reflection allowed her to see when her students lacked background knowledge (Tyler, questionnaire, December 12, 2017). During a lesson about equivalent fractions, Tyler realized that some of her students were not remembering their multiplication facts creating difficulty with the content (Tyler, questionnaire, December 12, 2017). She felt that watching the video of her teaching she could notice their facial expressions to assess their understanding. She learned that some students do not speak up when they do not understand and noted this as an opportunity to help them overcome this fear. Tyler recognized that being able to see what she did that worked and what she needed to change promoted understanding for all of her students (Tyler, questionnaire, December 12, 2017).

Tyler was open to the idea of sharing her videos with teammates. She felt it would give her team the opportunity to receive feedback on teaching styles and classroom settings. "Providing meaningful feedback while viewing classroom challenges can be a powerful tool for facilitating professional growth" (Tyler, interview, December 19, 2017). Tyler explained that seeing the "real" environment not just the "good part that we want to record for an evaluation" builds a team and promotes trust (Tyler, interview, December 19, 2017).

Case 2: Dixon Elementary School

Dixon Elementary Schools served pre-kindergarten through fifth grade age students. Dixon Elementary employed 41 teachers and 20 support staff members. The student population at Dixon consisted of 441 students with 24% identified as African American, 56% identified as Caucasian, and 18% identified as other. Dixon was a Title I school with 68% of the student population receiving free or reduced lunch. Dixon first opened in 1954.

Debbie. Debbie was a first-grade teacher at Dixon Elementary School. She taught for 14 years and held a bachelor's degree in early childhood education. Debbie was a 37-year-old

Caucasian female. Her 14 years of experience included teaching in kindergarten and first grade.

When assessing her personal self-efficacy, Debbie felt her strengths included her confidence, her

goal-oriented nature, her ability to solve problems, and troubleshooting while remaining calm

and flexible (Debbie, questionnaire, November 17, 2017).

   Theme 1: Video reflection influenced instructional delivery. According to Debbie, "It

really opened my eyes to all the little details of the lesson" (Debbie, interview, December 19,

2017). She felt she noticed with intention and saw instructional strategies that she could adjust

immediately. For example, Debbie noticed how long it took to deliver a mini-lesson and realized

that maybe sometimes the lesson would take too long. She felt she could shorten the chunks of

lessons especially during reading (Debbie, questionnaire, November 27, 2017).

   Debbie stated, "It was strange to watch myself at first, but after the first one it was no big

deal" (Debbie, interview, December 19, 2017). Debbie noted that it would help her students at

times if she would break up the content (Debbie, questionnaire, November 27, 2017). She felt

that at times they would become very intrigued which pushed the time beyond what she had

intended. During one of her lessons, she noticed the class was on the rug for 18 minutes. She

felt she could be more mindful of time elements. Debbie also believed that watching her lessons

could influence further lesson planning (Debbie, questionnaire, December 11, 2017). For

example, while watching a lesson on comparing and contrasting texts, she noticed that the

following day she would be able to guide the students less and require them to fill in a graphic

organizer because they grasped the content very well (Debbie, questionnaire, December 11,

2017).

   Likewise, Debbie felt video reflection served as an encouragement to good practices that

take place in her classroom. Debbie stated, "I don't really feel like I do those things, but when I

watched myself, I was like, Oh I really did do a good job with wait time or think time" (Debbie, interview, December 19, 2017). Debbie felt empowered by watching her strengths within her classroom and recognized her effectiveness as a teacher (Debbie, questionnaire, November 27, 2017).

Theme 2: Video reflection impacted student learning. Debbie stated, "I was able to watch not only myself, but my students and how they reacted to the different things that I was doing and saying" (Debbie, interview, December 19, 2017). Debbie felt this helped her focus on their engagement and understanding. She felt their excitement was a highlight. She noticed that during a compare and contrast lesson, her students were very excited about the texts. She expressed that watching them read along on the repeated parts was very fulfilling. Debbie stated, "I liked noticing how the students interacted with me" (Debbie, interview, December 19, 2017). She felt this gave her a better understanding of their knowledge and achievement.

Debbie discovered that she gauged the instruction based on how much attention the students gave her. In turn, she noticed that the students' attention was directly related to their engagement which ultimately influenced their achievement. She felt that recording influenced this cycle because her students, "Tried to shine more when I record." She laughed and stated, "It made them sit up tall" (Debbie, interview, December 19, 2017).

Debbie recognized the benefits of video reflection and was open to sharing her videos with fellow teachers (Debbie, interview, December 19, 2017). Debbie acknowledged that her team planned together and shared lesson plans. She said that video reflection could be something they could work on together especially if they worked specifically on noticing what is occurring in an instructional environment with clear intentions (Debbie, interview, December 19, 2017).

Holly. Holly was a second-grade teacher at Dixon Elementary School. She taught for 14 years and held a bachelor's degree in early childhood education, and a master's degree in elementary reading and literacy. Holly was a 35-year-old Caucasian female. Her 14 years of experience included teaching in kindergarten, second grade, and fourth grade. When assessing her personal self-efficacy, Holly felt her moderate strengths included her ability to solve problems, her goal-oriented nature, her confidence, her resourcefulness, and her ability to remain calm and flexible. Holly noted her self-efficacy weaknesses included dealing with opposition and making decisions within an uncomfortable situation (Debbie, questionnaire, November 17, 2017).

Theme 1: Video reflection influenced instructional delivery. Holly was very reluctant to utilize video-reflective practices. She had used video reflection with a loosely formed purpose and meaning within her school. However, once completing video reflection within this study, she stated, "This was very eye opening with my teaching as well as what the students were doing during the time I was teaching" (Holly, interview, December 19, 2017). Holly further explained,

"I didn't think or expect to see things that I could change immediately in my teaching, but when I reviewed my videos I could go back in the very next lesson that I taught during the same day and change how I did something." (Holly, interview, December 19, 2017).

She realized she repeated herself a lot (Holly, questionnaire, November 28, 2017). She stated, "I might give the same directions five times but when they went to do what they were told, some of them didn't really do it" (Holly, interview, December 19, 2017). She went on to explain that she implemented change to where she would give them directions and have them repeat what they were supposed to do. She did this so that when they went back to their seats, they would have a

better understanding of the task or be able to assist a shoulder buddy if needed (Holly, questionnaire, November 28, 2017). She felt this was an easy adjustment that she would have otherwise missed without reflecting.

Holly felt that she noticed instructional techniques and strategies that she could change while planning. For example, Holly noticed that she conducted most of her teaching from the rug (Holly, questionnaire, December 12, 2017). She explained, "So now I changed some things" (Holly, interview, December 19, 2017). She utilized the tables more (Holly, questionnaire, December 12, 2017). She felt that she could shorten the rug time and utilize more table time because she noticed the students were merely focused on their tables (Holly, questionnaire, December 12, 2017). Holly stated, "I found areas I didn't realize I was weak in and changed those things because of it" (Holly, interview, December 19, 2017).

Ultimately, Holly believed that reflective practices give teachers the opportunity to grow in knowledge of the content and "realizing that you might need to know a little bit more about this content so that you can further teach it" (Holly, interview, December 19, 2017). Holly also felt that this process validated the techniques that she considered strengths but never noticed those techniques in action (Holly, questionnaire, November 28, 2017). She explained she was not sure if she really was implementing components such as activating strategies and shoulder buddies. She stated, "I was able to see that those things were really happening" (Holly, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. Holly felt, "You can really influence their comprehension by noticing" (Holly, interview, December 19, 2017). She explained that watching her students during the videos gave her a better understanding of their performance based on their engagement and responses. Holly learned that just because a student

was "wiggly" did not mean he or she was not comprehending (Holly, questionnaire, December 4, 2017). She explained that some of her students were active on the rug which she would consider unfocused. However, she noticed that even in their movement, they were still comprehending. She stated, "In those times normally I would have thought they would not have been paying attention, but they really were" (Holly, interview, December 19, 2017). She believed that just understanding where and how her students learn best was the most beneficial for her personally.

Holly made her position very clear. She stated, "I don't want to share my videos with other people" (Holly, interview, December 19, 2017). She also did not think others would want to share theirs as well. However, she did see the benefits of a grade level team recording the same lesson and collaborating with a meaningful questionnaire. She felt this process would be most beneficial to watch one more intently and notice what was good, what changes to make, and what additional components to implement (Holly, questionnaire, December 4, 2017). Holly summed this experience with, "This was uncomfortable but beneficial" (Holly, interview, December 19, 2017).

Sally. Sally was a first through fifth-grade gifted teacher at Dixon Elementary School. She taught for 20 years and held a bachelor's degree in early childhood education, a master's degree in public administration, and a specialist degree in middle grades mathematics. Sally was a 56-year-old Caucasian female. She also held a gifted endorsement and was TSS certified. Her 20 years of experience varied from kindergarten through fifth grade and gifted services. When assessing her personal self-efficacy, Sally felt her strengths included her ability to solve problems, remain goal-oriented, remain calm, and remain flexible (Sally, questionnaire, November 17, 2017).

***Theme 1: Video reflection influenced instructional delivery*.** Sally explained, "Video reflection helped with classroom management skills because I was able to see when the students needed clarification or repeated instruction by watching their responses" (Sally, interview, December 19, 2017). For example, she noticed while students were working through the content of an online pyramid game on Greek and Latin roots, her directions were not able to find success with the verbal cue prompts. It helped with grouping and pairing for the next day's instruction (Sally, questionnaire, December 11, 2017). Sally was candid and acknowledged that everything did not go as she had planned during some of her video-reflection lessons, but the opportunity allowed her to assess the skill and determine if the problem was an instructional delivery problem or a content problem (Sally, questionnaire, December 11, 2017). From that analysis, she felt she could make adjustments that fit the students' needs. Ultimately, Sally felt that viewing lessons and how she presented information made her reflect more on how to be a better teacher and how she presented her lessons.

Sally said, "I was able to see if my instructions were effective" (Sally, interview, December 19, 2017). She further explained that "Sometimes you don't reflect enough while you are teaching in the moment" (Sally, interview, December 19, 2017). With video reflection, Sally noted that she could go back and see what happened, what worked and what did not (Sally, questionnaire, December 11, 2017). She felt that her ability to differentiate was a strength. However, she was able to see if she needed to add a little more to her instruction on specific topics the next day. She explained that utilizing video reflection, she was able to understand what worked but maybe she should have planned more and added additional examples to her plans (Sally, questionnaire, December 11, 2017).

According to Sally, "Reflection is a part of growing, not just in teaching but in real life (Sally, interview, December 19, 2017). Sally envisioned video reflection as a growth opportunity not only for teaching instructional strategies but the planning process as well. Sally was confident that video reflection influenced the way she would plan her lessons in the future. She said, "You always think that you are stronger than you are" (Sally, interview, December 19, 2017). She explained that when she went back and reviewed her teaching, she could be analytical and critical at the same time but not "beat herself up" (Sally, interview, December 19, 2017). She felt that video-reflection was non-threatening and allowed her to be honest with herself because she was reflecting in a non-threatening environment. She could review at her leisure. However, she noticed, "It was helpful to review immediately if that instruction was the same instruction I had planned for another class" (Sally, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. Sally noted, "I could watch not just what I was saying but how the kids were responding" (Sally, interview, December 19, 2017). She further explained, "During teaching, you can't watch every child's face while you are talking (Sally, interview, December 19, 2017). However, she noted that during video reflection, their responses were critical. For example, during a lesson about the first Thanksgiving, Sally recognized that reviewing background knowledge was a struggle and making connections between the first Thanksgiving and the impact of that event on American history was a difficult connection (Sally, questionnaire, December 4, 2017). Sally discovered based on their responses, she needed to relinquish direct instruction and allow the students the freedom to explore. Video reflection gave Sally the opportunity to view how she was presenting the content and assess if her method met the learner's needs (Sally, questionnaire, December 4, 2017).

Sally stated, "Video reflection definitely guided the way I taught and planned because of the immediate feedback I noted from the students' responses during instruction" (Sally, interview, December 19, 2017). She said she immediately noticed their engagement which she linked to grasping or not grasping the instruction which informed her of student achievement (Sally, questionnaire, December 4, 2017). She went on to explain that she was able to identify the depth of knowledge questioning and gauge if the students were ready for more or needed additional assistance. For example, during an independent lesson on Greek and Latin root words, students were accessing instructional materials and digital resources through the county supported Learning Management System. Sally noticed the students worked independently at their own pace which immediately promoted differentiation (Sally, questionnaire, December 11, 2017). Sally also noticed the students felt in control of their learning, accountability, and educational goals. She could see that they were able to learn, review, and discover while completing online assignments (Sally, questionnaire, December 11, 2017). Sally went on to say, "That was very eye-opening to me; my expectations changed based on whether the students understood" (Sally, interview, December 19, 2017).

Sally noted, "You can't notice everything that goes on behind your back" (Sally, interview, December 19, 2017). She explained it is hard to manage who is on task and who is not (Sally, questionnaire, December 4, 2017). However, watching the video, she was able to notice their motions to assess whether they truly understood what she said and the directions she was giving. She said, "A lot of time I circle around the room, but I don't see everything;" nonetheless, "The video caught everything" (Sally, interview, December 19, 2017). She felt she could clearly see if every child was or was not grasping the instructions, understanding the content, and actively engaged. That was one "aha" moment to Sally.

Sally never mentioned utilizing video-reflective practices with her team mates. However, she did express her forward thinking and explained, "This may be futuristic, but I can see us getting to the point of holographic teaching and incorporate videoed lessons for teaching students" (Sally, interview, December 19, 2017). She believed that incorporating these practices now would help prepare teaching and learning in a technologically driven world.

Case 3: Fairways Elementary School

Fairways Elementary Schools served pre-kindergarten through fifth-grade students. Fairways Elementary employed 43 teachers and 19 support staff members. The student population at Fairways consisted of 498 students with 53% identified as African American, 18% identified as Caucasian, and 29% identified as other. Fairways was a Title I school where 80% of the student population received free or reduced lunch.

Jennifer. Jennifer was a third-grade teacher at Fairways Elementary School. She taught for 23 years and held a bachelor's degree in elementary education, a master's degree in reading education and curriculum and instruction, and a specialist degree in leadership/administration and supervision. Jennifer was a 43-year-old Caucasian female. She also held leadership, math, and reading endorsements. Her 23 years of experience varied from pre-kindergarten through fifth-grade education, physical education, eighth-grade literature and eighth-grade algebra. When assessing her personal self-efficacy, Jennifer felt her strengths included her ability to solve problems, remain goal oriented, confident, calm, resourceful, and troubleshoot while maintaining flexibility (Jennifer, questionnaire, November 20, 2017).

Theme 1: Video reflection influenced instructional delivery. Jennifer's school supported student dynamic grouping instruction. Students were grouped based on similar performance levels. Jennifer stated, "I chose the most challenging class for review," as she felt

this group of students was not moving as far academically as she had planned (Jennifer, interview, December 19, 2017). After completing three self-reflective protocol questionnaires, Jennifer recognized that she had been starting each lesson with higher-order thinking questions rather than scaffolding the background knowledge questions (Jennifer, questionnaire, November 30, 2017). Jennifer stated, "If I went too high with depth of knowledge question levels, I immediately lost them in the lesson and thought I was re-engaging them, but I wasn't" (Jennifer, interview, December 19, 2017). She continued by saying, "I realized in reflecting that I needed to warm up" to those higher order questions (Jennifer, interview, December 19, 2017).

Jennifer prided herself on strong classroom management. However, once viewing her classroom instruction, she explained, "I had to let go of my strength as a classroom management person because that's not what I saw; it wasn't just about management" (Jennifer, interview, December 19, 2017). She further stated, "It was about stepping away from that and realizing that it was my delivery and what I was delivering" regarding questions that most influenced the classroom climate (Jennifer, interview, December 19, 2017). She felt she had an "aha" moment when she candidly reflected on the content delivery in relation to student behaviors. Jennifer explained, "Often you don't even think of how you're delivering the questions to the kids" (Jennifer, interview, December 19, 2017).

Jennifer acknowledged that she changed the way she plans her lessons based on video-reflective practices for this group of students (Jennifer, questionnaire, November 30, 2017). She felt that she needed to do a better job customizing the questions she was asking the students. She realized through reflection that she was not meeting their needs (Jennifer, questionnaire, November 30, 2017). They had the ability to obtain the skill and achieve higher-order thinking questions but required a different direction (Jennifer, questionnaire, December 6, 2017). Jennifer

stated, "My lesson plans have to be different; I have to build them up and support them the best I can" (Jennifer, interview, December 19, 2017).

Jennifer thought that some of the PLC time was ineffective because many PLC topics speak generally rather than to individual needs. For example, Jennifer explained that when discussing data in a departmentalized grade level with people who did not teach the subject area and were not experts in the specific subject area was a poor use of time. Rather, Jennifer felt that guided meaningful and purposeful reflection with team members or instructional coaches would "Immediately influence what I do in the classroom" (Jennifer, interview, December 19, 2017). Although Jennifer was open to sharing videos and learning from co-worker's videos, she felt the power of video reflection was found in the ability to self-evaluate and have honest reflection. For example, Jennifer noted that she recognized if students misbehaved she would change her tone or move among the students in efforts to "pull them back in" (Jennifer, interview, December 19, 2017). She realized that was not fair because the misbehavior stemmed from the types of questions she was asking and their lack of knowledge to provide an answer. She further explained noticing what was occurring in the instructional environment provided an opportunity for her to feel more effective than she had felt in 23 years of teaching.

Theme 2: Video reflection impacted student learning. Jennifer felt she had a good understanding of her students' learning and that she differentiated her content to meet the specific needs of all students (Jennifer, questionnaire, November 30, 2017). She explained that this group was her middle academically performing group. According to Jennifer, video reflection provided an opportunity for her to watch the way her students were responding (Jennifer, questionnaire, December 6, 2017). She explained that when she intentionally noticed their responses she could immediately make connections between student engagement and

student achievement (Jennifer, questionnaire, November 30, 2017). For example, Jennifer noted, "When they became disengaged, I realized it was because I was starting to hit them with the depth of knowledge questions at a higher level and their brains weren't even on the yes or no answered questions" (Jennifer, interview, December 19, 2017).

Jennifer believed student achievement was a result of good teaching and student engagement supported good teaching. The district provided resources for classroom instruction that Jennifer used daily; however, she realized that to ensure student achievement and engagement, she had to make adjustments to the content to meet individual needs. Jennifer continually pointed to the fact that it was right there, noticing her students' responses and reactions fueled her lesson differentiation (Jennifer, questionnaire, December 13, 2017).

Jennifer summed up her experience by saying, "We don't reflect enough" (Jennifer, interview, December 19, 2017). Reflection is an untapped resource that can promote non-threatening non-punitive growth. Jennifer felt reflection with a purpose provided an opportunity for her to put her thoughts on paper, be honest with herself, and embrace her strengths and weaknesses. She stated, "I think that having the time to reflect on what you're actually saying and doing is what you need to grow" (Jennifer, interview, December 19, 2017).

Suzie. Suzie was a kindergarten teacher at Fairways Elementary School. She taught for 11 years and held a bachelor's degree in early childhood and special education, a master's degree in early childhood, and a specialist degree in teaching leadership. Suzie was a 52-year-old Caucasian female. Additionally, Suzie held a reading endorsement, an ESOL endorsement, and special education certification. Her 11 years of experience varied between kindergarten and first grade. She also taught second grade within a co-teaching environment. When assessing her personal self-efficacy, Suzie felt her strengths included the ability to solve problems, accomplish

goals, remain confident and resourceful, and troubleshoot while remaining flexible (Suzie, questionnaire, November 20, 2017).

Theme 1: Video reflection influenced instructional delivery. Suzie's first thought after video refection was, "There's a lot of things that I can't see all the time" (Suzie, interview, December 19, 2017). She explained that kindergarten was a fast-paced environment and was consistently changing based on the children's attention span. Suzie felt that by watching her instructional lessons, she was able to see if she was animated enough to keep her students' attention (Suzie, questionnaire, November 30, 2017). She went further to say video reflection helped her assess content delivery during her whole group lesson on the rug. Suzie stated, "I was able to ask myself questions like, 'Do I need to move certain students closer to me?'" She also asked herself the question, "Would I want to listen to me if I was a student in this class?" Answering these questions allowed Suzie to make adjustments the next day to fit the students' needs (Suzie, interview, December 19, 2017).

Suzie was able to make adjustments during lesson planning because she believed reflecting helped her plan lessons and activities that better kept all students engaged (Suzie, questionnaire, November 30, 2017). Suzie stated, "I'm aware that their needs constantly change and that I need to readjust my thinking to meet their needs" (Suzie, interview, December 19, 2017). Suzie felt that video reflection provided a key element to meeting their needs as she was able to "reflect on what the people were doing in my room." Suzie further stated that she was able to "see her class with new eyes," because of video reflection (Suzie, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. Suzie stated, "Video reflection gave me an idea of who was really engaged" (Suzie, interview, December 19, 2017). She

believed she was able to notice what the students were doing and evaluate their engagement. For example, Suzie explained that they were counting by tens and she could see who was getting it by watching the video because she could not see them all at once during the lesson. She felt she could pinpoint students who were not engaged (Suzie, questionnaire, December 12, 2017).

According to Suzie, "I was able to determine student engagement based on watching them" and tie that engagement to individual achievement. Video reflection gave Suzie the opportunity to see "How many of you are really looking at me? How many of you are listening" (Suzie, interview, December 19, 2017)? "Now I see why you're not getting it (the content), because you're never paying attention" (Suzie, interview, December 19, 2017). Suzie explained that she was able to talk with some of her students about paying attention. When they denied she was able to say she saw them on the camera. She felt she could redirect and simply say, "I really need you to pay attention" (Suzie, interview, December 19, 2017).

Reflection made Suzie aware. "I could see students who were struggling and pull them over the next day to see where they truly were with a skill and determine if they lacked mastery or motivation" (Suzie, interview, December 19, 2017). Video reflection helped Suzie differentiate. For example, when in small groups, Suzie identified patterns based on student engagement (Suzie, questionnaire, December 6, 2017). She also noticed participation (Suzie, questionnaire, December 12, 2017). Suzie explained that participation was a kindergarten skill that she assessed. For Suzie, video reflection eliminated assumptions (Suzie, questionnaire, December 6, 2017).

Noticing on purpose was very interesting (Suzie, interview, December 19, 2017). She felt she could be honest with herself without feeling criticized. Suzie felt video reflection could be beneficial among her teammates. She was very open to sharing and learning from fellow

teachers rather than learning from conversation only. Suzie felt that it would be important to establish the purpose of video sharing and to understand these practices would not be intended "to critique each other" (Suzie, interview, December 19, 2017).

   Tasha. Tasha was a fifth-grade teacher at Fairways Elementary School. She taught for five years and held a bachelor's degree in early childhood education. Tasha was a 33-year-old Caucasian female. Additionally, Tasha was dual-certified special and regular education. Her five years of experience included all subjects in third grade, fifth-grade reading, and fifth-grade social studies and science. When assessing her personal self-efficacy, Tasha felt her strengths included her ability to solve problems, accomplish goals, and solutions. Tasha noted her self-efficacy weakness was dealing with opposition (Tasha, questionnaire, November 20, 2017).

   Theme 1: Video reflection influenced instructional delivery. This year was Tasha's first year in fifth grade. She realized once engaging in video reflection, although she thought she was going back and reviewing the content, she did not scaffold as much as the students needed. She explained that this was possibly because she was not as confident in a new subject. Tasha stated, "Being a teacher you want to know everything and be able to answer all their questions but I 'parking lot' many questions" (Tasha, interview, December 19, 2017). Tasha said that video-reflective practices allowed her to see "things that I know I'm not great at and want to become better at" (Tasha, interview, December 19, 2017).

   Tasha acknowledged that she anticipated her strengths and weaknesses, but personal awareness through video reflection brought her thoughts to reality. For example, she explained noticing that she "spoon fed" her students more than she thought and recognized the depth of knowledge questioning often lacked in the classroom (Tasha, interview, December 19, 2017).

Tasha felt that she could increase her question levels immediately (Tasha, questionnaire, November 30, 2017).

Tasha acknowledged that she made adjustments to her lesson plans based on video-reflective practices. Specifically speaking, she explained while students were in small group she needed to make her activities more interesting, so she added graphic organizer components (Tasha, questionnaire, November 30, 2017). Students engaged with technology worked efficiently and remained on task (Tasha, questionnaire, December 7, 2017). Students working with paper and pencil were not quite as interested. She felt the lack of engagement stemmed from the depth of knowledge of the essential question (Tasha, questionnaire, December 7, 2017). Tasha expressed she could push the students harder. She then explained noticing the student grouping. She stated, "I could see students interacting with each other and whether or not they're actually working together or not working well together." She went on to say she was able to notice where she could "mix it up a little bit," and, keep the instruction exciting (Tasha, interview, December 19, 2017).

Theme 2: Video reflection impacted student learning. Tasha explained that she was very hard on herself while reflecting on her teaching. She paid specific attention to small group instruction and discovered, "You can really see if what you're giving your students is engaging enough if you watch how they respond" (Tasha, interview, December 19, 2017). Tasha truly felt she could gauge the students' depth of knowledge based on noticing what was occurring in the classroom (Tasha, questionnaire, December 7, 2017). She also felt that she did not provide enough wait time which could factor in student achievement (Tasha, questionnaire, December 12, 2017). Tasha linked students' engagement to achievement and acknowledged that depth of knowledge questions bridged them together.

Tasha stated, "I found this pretty interesting video-reflection provided an opportunity to take a deeper look into the instructional environment in a non-threatening way" (Tasha, interview, December 19, 2017). Tasha felt that reflection with purpose allowed her to stay focused and notice her delivery and the students' receptiveness. She was very open to sharing videos and learning from her co-workers' videos and stated, "I would like to see other teachers that are really strong in specific content areas" (Tasha, interview, December 19, 2017). She further noted, "It would be amazing to have them share so I could just watch rather than them feel pressured having someone observing" (Tasha, interview, December 19, 2017). Tasha felt she could learn from those meaningful, purposeful experiences.

Cross-Case Analysis

Cross-case analysis is the process of facilitating a comparison of commonalities and dissimilarities within case study research (Khan & VanWynsberghe, 2008). In this study, I explored the influence classroom cameras had on the reflective practices of nine elementary veteran teachers. I collected data through the GSE, three self-reflective protocol questionnaires, and individual interviews. The data indicated that participants valued personal awareness because reflection influenced instructional delivery and impacted student learning. Provisional codes were established to develop common themes during the data analysis process.

Interview questions were categorized based on the connection to the research questions. The first two interview question addressed the central research question, "How do video-reflective practices influence veteran teachers' perceived professional growth?" The third interview question addressed the second research question, "How can the school level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?" The fourth interview question addressed the first research question, "How does

video reflection influence veteran teachers' self-efficacy?" The fifth interview question addressed the third research question, "How does video reflection influence veteran teachers' instructional practices?" The sixth interview question addressed the fourth research question, "What role does instructional coaching play in video reflection for veteran teachers?" The last interview question was open-ended allowing for the participants' thoughts about video-reflective practices which gave opportunity to further expound on each research question. Participants' responses to the GSE addressed the first research question, "How does video reflection influence veteran teachers' self-efficacy?" I used responses to the three self-reflective protocol questionnaires to provide instances that expounded and substantiated responses from individual interviews. Cross-case analysis lent to common themes that correlated to the research questions.

Research Question Results

Central Question: How do video-reflective practices influence veteran teachers' perceived professional growth?

All nine participants believed that video reflection was an effective means of influencing professional growth. Even though administrators and instructional coaches strongly supported video-reflective practices, all participants felt that self-reflection was a professional growth resource that they needed to utilize more often. Jennifer reported that she felt this was an untapped resource and did not fully realize the access to easily self-reflect (Jennifer, interview, December 19, 2017). She explained that she utilized reflection with her administration two years prior, but after that, she did not revisit self-reflection. She went on to say that not asking teachers to self-reflect will cause it to become a lost resource. Sally explained that by noticing what was occurring in the instructional setting she could assess the effectiveness of the instructional strategy and make adjustments in her lesson plans accordingly (Sally, interview,

December 19, 2017). MaryLee felt that through video reflection she was able to set and assess personal, professional goals (MaryLee, interview, December 19, 2017). Jessica expressed that she immediately made changes within her instructional environment simply because she took the time and noticed (Jessica, interview, December 19, 2017). These participants felt that self-reflection was a safe personal assessment that provided an opportunity to see what was happening within the instructional environment without pressure from peers or administration. Participants perceived this personal assessment as a missing component to instructional planning.

Video reflection was a way for teachers to assess verbal and nonverbal student learning. Nine participants stated that video reflection gave them a better understanding of their students' engagement. Suzie believed that noticing the students' engagement was a clear indicator of student achievement (Suzie, interview, December 19, 2017). She noted that when watching the instructional session, she was able to see why certain students were not mastering the content because they lacked engagement during the lesson. Tyler stated that she felt empowered watching an instructional session and seeing her students utilize vocabulary as they collaborated with each other (Tyler, interview, December 19, 2017). She felt she could easily see the engagement and understanding and that made her feel good. MaryLee, Tasha, and Jessica felt that they could give the students more and allow them to think independently utilizing higher order questions based on their students' responses (MaryLee, interview, December 19, 2017; Tasha, interview, December 19, 2017; Jennifer, interview, December 19, 2017). Jennifer believed she needed to scaffold her question because she noticed frustration and lack of understanding from her students as she viewed her classroom instruction (Jennifer, interview, December 19, 2017). Debbie and Holly explained that they could assess their students' attention spans based on their responses which linked to student understanding (Debbie, interview,

December 19, 2017; Holly, interview, December 19, 2017). Sally recognized, based on her students' responses, she needed to utilize alternative strategies to maximize understanding (Sally, interview, December 19, 2017). She further noted that when she noticed what was occurring, she saw the need for additional strategies such as identifying similarities and differences and nonlinguistic representation the next time.

Sub-Question One: How does video reflection influence veteran teachers' self-efficacy?

All nine participants identified personal strengths and weaknesses within their instructional environment. By utilizing video-reflective practices within a non-threatening environment, the participants felt as though they could provide a clear self-assessment and give personal glows and grows. Tyler explained that while watching a teaching segment, she assessed her implementation of a strategy change within the lesson (Tyler, interview, December 19, 2017). She was happy with the fact that she was able to handle an unforeseen situation even though she felt that to be a personal weakness. She further noted that the strategy change yielded an 81% mastery of the content within her students. Likewise, Holly explained that while watching she noticed that she needed to adjust her comprehension strategy and allow for echo time during the following day's instruction, even though she felt that being able to find several solutions for a problem to be a personal weakness (Holly, interview, December 19, 2017). Debbie observed that during a lesson on landforms her content delivery method was clear because all students could describe a plain and tell here where they were located geographically at the end of the lesson (Debbie, questionnaire, December 5, 2017). This scenario validated Debbie's self-assessment of sticking to her aims and accomplishing goals as a strength (Debbie, interview, December 19, 2017).

All nine participants recognized unexpected moments within their instructional environment. Most of these moments were discovered based on noticing specific details within the classroom otherwise missed during the instructional day. During reflection, MaryLee felt her instruction was very ineffective (MaryLee, questionnaire, December 6, 2017). She noticed children were being pulled out for services, one student was checked out for early dismissal, and support personnel came to work with a student unannounced. She concluded that the ineffectiveness was partially because of the movement. She felt better about the lesson once she watched the video and was able to determine and attribute the lack of success to circumstances beyond her control and it helped validate her personal strength of being able to remain calm no matter what comes her way. Likewise, Sally reviewed a teaching segment within a problem-based instructional environment. She recognized that her students learned better when given opportunity to create and explore all possibilities to a situation (Sally, questionnaire, December 4, 2017). Sally recognized that relinquishing direct instruction was a difficult task for her yet it validated her strength of being able to remain calm when faced with difficulties (Sally, questionnaire, December 4, 2017).

Sub-Question Two: How can the school level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?

All nine participants acknowledged video reflection as a professional learning tool. Eight participants were open to sharing videos with teammates. MaryLee, Tasha, and Suzie were open to sharing instructional videos but felt that trust would be the foundation for success (MaryLee, interview, December 19, 2017; Tasha, interview, December 19, 2017; Suzie, interview, December 19, 2017). Suzie felt that that making clear norms and explaining video reflection as a professional growth tool rather than a peer critique would be critical (Suzie, interview, December

19, 2017). Tasha believed that setting norms within a non-threatening environment would be key to authentic reflection (Tasha, interview, December 19, 2017). Jennifer, Tyler, Jessica, Sally, and Debbie were open to learning and sharing with teammates (Jennifer, interview, December 19, 2017; Tyler, interview, December 19, 2017; Jessica, questionnaire, December 13, 2017; Sally, interview, December 19, 2017; Debbie, interview, December 19, 2017). Debbie felt that video reflection could help others notice strategies for chunking instruction (Debbie, interview, December 19, 2017). Sally believed that regularly reflecting with peers with guided reflection questions would give every teacher an opportunity to improve on something personally in efforts to better serve students (Sally, interview, December 19, 2017). Jessica believed that everyone has something good to share that could help a fellow teammate, and video reflection would allow teams to see good teaching in action (Jessica, questionnaire, December 13, 2017). Jennifer was motivated and excited about video reflection but felt that time constraints within her team meetings would possibly influence the process (Jennifer, interview, December 19, 2017). The idea of a video reflection opportunity inspired Tyler to gain feedback from her peers within the natural classroom setting (Tyler, interview, December 19, 2017).

Holly was against sharing her videos with teammates and felt that others would not want to share their videos as well (Holly, interview, December 19, 2017). She explained that she saw the benefit of discussing personal strengths and weaknesses with teammates just not through sharing. MaryLee, Holly, Jennifer, Tasha, and Sally felt that utilizing questionnaires and reflecting with meaning would be an effective way to personally reflect and collectively discuss opportunities for growth (MaryLee, interview, December 19, 2017; Holly, interview, December 19, 2017; Jennifer, interview, December 19, 2017; Tasha, interview, December 19, 2017; Sally, interview, December 19, 2017). Holly believed that if her teammates shared a reflection purpose

and discussed within PLCs, everyone would have the opportunity to self-reflect and learn from one another (Holly, interview, December 19, 2017).

Sub-Question Three: How does video reflection influence veteran teachers' instructional practices?

All nine participants felt that video reflection allowed them to notice student engagement and participation. MaryLee felt that by taking a closer look into her classroom she was able to see students she considered sneaky, and without disrupting instruction, she could make adjustments for them immediately (MaryLee, questionnaire, December 6, 2017). She also explained that noticing the floor plan and the flow of instructional materials helped her maximize the classroom space and learning areas. Suzie explained that through video reflection she could see who was engaged during small group instruction by noticing their actions (Suzie, questionnaire, December 6, 2017). She went on to say that during small-group instruction students are in various learning areas within the classroom. As she watched, she could pinpoint reasons why certain students were unable to complete tasks and assignments (Suzie, interview, December 19, 2017). Even though watching small group instruction was more like a "Silent movie," Suzie felt that she could get a good idea of how students collaborated and worked independently (Suzie, interview, December 19, 2017). Jennifer felt that by watching her students, she could see why discipline issues were arising (Jennifer, interview, December 19, 2017). She was able to shift her instructional strategy the next day to scaffold learning to keep all students engaged.

Sub-Question Four: What role does instructional coaching play in video reflection for veteran teachers?

All nine participants acknowledged video refection as a tool for professional learning communities. However, Jennifer was the only participant that discussed utilizing video-reflective practice with an instructional coach (Jennifer, interview, December 19, 2017). She also mentioned using this practice with her team as well. MaryLee, Jessica, Tyler, Debbie, Tasha, and Suzie were open to sharing videos with teammates to promote collaborative professional growth (MaryLee, interview, December 19, 2017; Jessica, questionnaire, December 13, 2017; Tyler, interview, December 19, 2017; Debbie, interview, December 19, 2017; Tasha, interview, December 19, 2017, Suzie, interview, December 19, 2017). Debbie, Tyler, Jessica, Sally, Suzie, and Tasha were open to sharing videos with teammates to promote collaborative instructional planning (Debbie, interview, December 19, 2017; Tyler, interview, December 19, 2017; Jessica, questionnaire, December 13, 2017; Sally, interview, December 19, 2017; Suzie, interview, December 19, 2017; Tasha, interview, December 19, 2017). Holly was open to utilizing reflective questionnaires and sharing personal learning experiences with teammates that promoted professional growth and instructional planning, however, she was not open to sharing her videos with others (Holly, interview, December 19, 2017).

Summary

Participants in this study identified a variety of reasons why video-reflective practices fostered personal, professional growth and development. All nine participants believed video-reflective practices influenced instructional delivery. Most participants believed video reflection provided an opportunity for them to conduct an open conversation with themselves and noticed what was occurring during the instructional delivery with intention. Video-reflective practices laid the foundation to assess content scaffolding, instructional planning and fostered self-directed change within a non-threatening environment for most participants. Video-reflective practices

also allowed participants to gain a clear self-perception of what was occurring in the instructional environment with the opportunity to build a community of learners with teammates. Additionally, all nine participants believed video-reflective practices impacted student learning. Participants agreed they could easily identify student achievement, student engagement, student behavior, and depth of knowledge question interaction within each video segment. All participants believed they could instantly implement personal growth from guided, meaningful, self-reflection.

CHAPTER FIVE: DISCUSSION

Overview

I conducted this study to understand the perception and influence of nine veteran teachers who implemented video-reflective practices. I answered one overarching research question and four sub-research questions using the GSE, three self-reflective protocol questionnaires, and interviews. The purpose of this study was to understand the influence classroom cameras have on video-reflective practices of elementary teachers. Findings of this study contributed to meaningful reflection opportunities for increased personal awareness in the instructional environment.

In this chapter, I include a summary of the findings and a breakdown of the themes developed through data analysis. A discussion of study findings ensues related to the relevant literature and theoretical framework in Chapter Two. I also include a discussion of practical implications, determine limitations, and lastly, provide recommendations for further research.

Summary of Findings

Nine case analyses and a cross-case analysis resulted in the development of two themes. The first theme revealed that video-reflective practices influenced instructional delivery. The second theme affirmed that video reflection impacted student learning. Answers to the research questions confirmed these themes.

Central Question: How do video-reflective practices influence veteran teachers' perceived professional growth?

All nine participants considered video-reflective practices as a tool for influencing instructional delivery. Many participants felt that video reflection provided the opportunity to notice how they scaffold instruction. Others believed that watching the learning environment

allowed them to become better instructional planners and provide instructional modifications based on what they noticed from their students.

Sub-Question One: How does video reflection influence veteran teachers' self-efficacy?

All participants discussed that video-reflective practices provided an opportunity to assess personal strengths and weaknesses. Some participants felt that video reflection validated segments of rigorous, relevant instruction. Others found that personal self-perception of delivery was inaccurate causing immediate self-directed change. All participants indicated that self-awareness influenced instructional delivery.

Sub-Question Two: How can the school level implementation of classroom cameras foster veteran teachers' growth in Professional Learning Communities?

All participants indicated that video reflection served to promote professional learning. Many participants viewed video reflection as a way to build a collaborative community within their grade level. Most participants revealed that utilizing guided questionnaires for meaningful reflection caused them to reflect with purpose and focus on specifics occurring in the learning environment often undiscovered otherwise. Those participants also believed that utilizing guided questions within a collaborative community would promote personal reflection and collective discussions for individual and team growth.

Sub-Question Three: How does video reflection influence veteran teachers' instructional practices?

All participants indicated that video-reflective practices serve as a tool for impacting student learning. Many participants believed they were able to observe authentic engagement by watching instructional segments. Those participants also believed they could easily see the connection between engagement and achievement as they noticed what was occurring in the

instructional environment. Others believed that video reflection gave them a clear picture of undeniable student behaviors, which were often undetected. Other findings included how participants were able to identify strengths and weaknesses in depth of knowledge, higher order questions given to the students which caused immediate self-directed change.

Sub-Question Four: What role does instructional coaching play in video reflection for veteran teachers?

One participant indicated that utilizing video-reflective practices would provide an opportunity for individual or collaborative instructional coaching. Most participants acknowledged professional growth would occur through meaningful refection with guided questionnaires; however, those participants saw the professional learning as a team-planning opportunity rather than a means for coaching.

Discussion

Based on the data collected in this study, I discovered that video-reflective practices influenced instructional delivery and participants felt that it impacted student learning. Burridge and Carpenter (2013) asserted that personal examination of teaching practices promotes understanding and provides the insight necessary for enhancing teaching, learning, and professional development. Participants in this study described learning afforded through video reflection as an unused resource, as they believed reflection allowed them to notice moments within the instructional environment that would otherwise go unseen and unchanged, thus validating Bandura's (1977) social cognitive theory. Additionally, participants recognized that self-perception and reality were not parallel and afforded opportunities for self-directed change. Other examples of learning were cited by the participants as teachers perceived video-reflective practices as a way to assess student engagement. Teachers believed that noticing engagement

was linked to understanding student achievement and behavior. Schön described reflection on-action as opportunities of, "Thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome" (Schön, 1983, p. 26). Knowles (1975) maintained that adults can and do engage in self-directed learning.

Although video-reflective practices were encouraged within the schools of the participants in this study, consistent practice and direction were not evident. Siemen (2004) concluded that decision-making in itself is a learning process, which in part explained why participants viewed video refection as a way to build a community of learners within grade levels. Siemen affirmed that diverse opinions drive learning as decisions are based on circumstances; validating that what works today may not work tomorrow. Conceptual learning is through voluntary and involuntary experience (Fosnot, 2013).

Scaffold Instruction

Logical steps to attaining goals can be achieved through scaffold instruction (Anwari, Yamada, Unno, Saito, Suwarma, Mutakinati,, & Kumano, 2015). Researchers noted that scaffold instruction is a key element to guiding students to a deeper comprehension and acquisition necessary for content mastery (Blikstein, Gomes, Akiba, & Schneider, 2017; Fisher & Frey, 2014; Grassian & LeMire, 2017). In this study, participants provided examples of how video-reflective practices provided an opportunity to observe how to better scaffold instruction based on the verbal and nonverbal feedback they noticed of their students during instructional segments. Participants acknowledged that they consistently discussed and reviewed strategies to promote effective scaffolding, however watching the instructional environment provided them with the chance to see if their strategies were effective or needed adjustments based on the students' interactions. Essentially, exposing teachers to various teaching practices, experiences,

reflection, and participation positively influences the curriculum framework and delivery process (Burridge & Carpenter, 2013). Participants' element of surprise regarding the connection between video-reflective practices and self-assessed scaffold instruction led to positive views of the reflective process. Teachers indicated unexpected learning occurred during the reflective process causing them to embrace the learning opportunity rather than engage in such practices as an act of obligatory compliance.

Instructional Planning

The literature reviewed for this study indicated that many teachers are unaware of their instructional practices (Burridge & Carpenter, 2013; Owen, 2014). Although a significant amount of time is devoted to instructional preparedness, participants noted that they had not utilized video reflection as means to support instructional planning. All nine teachers provided examples of how video reflection influenced their future instructional planning based on assessing the lesson direction and content master. Consequently, participants used time designed for instructional planning for discussing resources, strategies, and content rather than planning based on assessing the needs of the students. Hill, Ball, and Schilling (2008) stated, "Knowledge of teaching moves" (p. 378) ideally validating awareness is needed to understand student logic to assess student achievement. Participants noted that reflection-initiated adjustments to the next day's instruction based on students' interactions. Participants further noted that watching students struggle after the lesson had occurred caused them to adjust small groups and differentiated lessons otherwise left unnoticed. Guskey (2017) stated, "Looking beyond the intended goals to the broader array of possible outcomes is an important aspect of evaluation and vital in judging effectiveness" (p. 34).

Community of Learners

Previous research correlated student outcome and continued quality teaching; therefore, the need for increased professional learning targeting relevant and rigorous teaching practices and strategies should always be considered (Owen, 2014). Teachers foster challenging and rigorous instruction to aid in understanding how students think, and to provide opportunities for them to explore their thinking (Tarlow, 2014). All participants acknowledged that video-reflective practices gave them the opportunity to notice students' thinking which could facilitate collaborative professional learning. Most participants were open to the idea of learning from peers through video reflection. Some believed that learning from each other within a non-threatening environment deemed better teacher "buy-in" than learning from model example instructional videos with non-relatable climates and cultures. Educators cannot consider professional learning effective if what is taught does not help better assist learners (Guskey, 2017). Likewise, professional learning must focus on relevant information that supports change. Participants in this study believed "real" experiences occurring within their student culture cultivated that authentic professional learning.

Self-Perception

Personal self-efficacy influences instructional behaviors of teachers (Holzberger, Philipp, & Kunter, 2013). A teacher's perception of the learning environment and the learning barriers influence their self-efficacy (Skaalvik & Skaalvik, 2016). Six participants believed that video reflection caused them to reassess their perception of their instructional delivery. They noted what was occurring was contradictory to what they perceived was occurring. Additionally, teachers stated that video reflection provided examples for them to notices strengths and weakness that influenced student learning. The literature reviewed for this study indicated that

experience does not mirror learning from experience when fostering professional growth (Cirocki et al., 2014; Mourlam, 2013; Sandholtz, 2011). While video-reflective practices were intended to understand perceived professional growth to enhance student achievement, the participants first noticed that before assessing topics in isolation they had to process their inaccurate self-perceptions that led to why content was or was not mastered. Understanding personal teaching practices and experiences is a key component to expanding personal knowledge and perfecting what is already utilized (Maynes & Hatt, 2015), a key to self-accountability.

Self-Directed Change

Educators are continuous professional learning negotiators caught between instructional content and structural context (Slavit & Roth McDuffie, 2013). Multiple factors influence the decision-making process of teachers. Costa and Kallick (2004) affirmed teachers must "Become continual and internally driven learners: self-analyzing, self-referencing, self-evaluating, and self-correcting" (p. 2). All participants in this study indicated that video-reflective practices fostered self-directed change that was facilitated by awareness. Participants explained that immediate change was supported by video reflection as they noticed strengths and weaknesses within themselves. Some participants believed that self-directed change only occurs when one looks inward. They believed that viewing model instruction does not stimulate self-directed change because change requires taking personal responsibility. Slavit and Roth McDuffie (2013) indicated that teachers who self-identified their needs increased their ability to understand ways they can improve their practices. Slavit and Roth McDuffie further noted that teachers benefit from personal understanding that causes a transformation to occur from a philosophical practitioner to a scholarly professional. Participants in this study felt that self-directed change

was the key to substantiating a long-term commitment to better instruction. They felt that

change derived by conformity only promoted short-term adjustments. According to Cummings

(2011), educators establish the learning environment, learning goals, objectives, activities, and

evaluative tools before learning occurs and assessed throughout the process. Likewise, personal,

professional growth should reflect this process.

Student Engagement

Student engagement is considered a predictor of continued academic performance (Perry

& Steck, 2015). Likewise, student engagement is associated with increased academic

proficiency (Fredricks et al., 2011). Student engagement included participation, effort,

completion, and interest as related to the topic of discussion (Fredricks et al., 2011). All

participants in this study stated that video-reflective practices allowed then to assess student

engagement as the instruction was taking place. Many participants felt that as they were

teaching, they missed specific engagement of many students. They went on to explain that

noticing every aspect of the learning environment as teaching was occurring was a challenging

task that caused important details about the students' understanding and interest to be

unintentionally overlooked. Perry and Steck (2015) stated that student engagement influenced

whether a student sets an internal goal or leaning objective for an instructional task. The

participants indicated that video reflection provided an observatory lens that helped them

transition instruction into more of a student-centered environment which allowed them to

actively work through processes and objectives. They believed by noticing positive and negative

student engagement they could assess students' commitment to academic tasks and academic

mastery. This essentially validated that students' self-efficacy and cognitive ability influenced

their immersion of academic content (Perry & Steck, 2015).

Student Achievement

Research suggested that various factors influenced student achievement (Best & Winslow, 2015; Bill & Melinda Gates Foundation, 2015; DeMonte, 2013; Whitworth & Chiu, 2015; Zhang & Campbell, 2013). Participants in this study linked student achievement to student engagement and acknowledged that video-reflective practices gave them an opportunity to become aware and foster cognitive engagement. Teachers noticed that they called on less eager students more often and recognized that relationships with students were influenced by only focusing on those who were more engaged and internally motivated to participate. Teachers believed that the lack of engagement fostered a lack of achievement, and a lack of achievement influenced the teacher-student relationship. Perry and Steck (2015) stated, "A learning environment that encourages students to increase their level of self-efficacy can facilitate greater use of self-regulated learning and cognitive strategies and subsequent success in actual task performance and academic achievement" (p. 129). Participants believed that building relationships with less eager students influenced how they attended to a given task. They also believed that recognizing engagement and ways to support engagement enhanced independent student-centered learning.

Student Behavior

Menzies, Lane, Oakes, and Ennis (2017) stated, "One of the most powerful ways to minimize behavior challenges is to ensure students participate in the task at hand" (p. 205). In the instructional environment, a teacher expects that students are learning by listening to others' responses within discussions. Cultivating an environment that fosters active participation from all students can influence those off-task and less likely to remain engaged (Menzies et al., 2017). Participants in this study stated that video-reflective practices allowed them to see what

their students were doing and understand why in certain situations unacceptable behavior was occurring. Participants indicated that a lack of engagement links to many behaviors because of the content complexity. Additionally, some participants believed that becoming aware of their behaviors provided an opportunity to hold conversations with students and provide support and encouragement to foster engagement during future instructional sessions. Others believed that conversations with students encouraged opportunities for re-teaching non-mastered content. Participants validated that content knowledge was critical, and the lack thereof fostered an opportunity for students to become off-task and pose a behavioral concern. Participants believed that video-reflective practices influenced how they managed behaviors of students, cultivating an environment where learning occurred.

Depth of Knowledge Questioning

Teachers primarily cultivate change in the learning environment (Slavit & Roth McDuffie, 2013). Noticing what is occurring in the learning environment facilitates this process. Participants in this study stated that video-reflective practices gave them a clear picture of how well their students were critically thinking about a given topic. Being able to apply judgment, or critique with reason fosters critical thinking (Collins, 2014). Several participants believed they did not challenge their students enough with their depth of knowledge questions that fostered critical thinking. Others believed that they moved too quickly to higher-order questions without providing foundational support built on background knowledge and experiences. Participants believed that watching teaching segments helped them better prepare their students to think critically and independently by noticing their responses and overall engagement. A primary goal in teaching is to prepare students to "Be wise by guiding them towards how to make sound decisions and exercise reasoned judgment" (Collins, 2014). Participants noticed that their

students' engagement influenced decision making which cultivated a clear indicator of the students' understanding. Collins (2014) explained that generally teachers are quick thinkers without detailed preparation. Unfortunately, this generally means the questions are more like to focus on recalling information rather than application and inquiry learning. Video-reflective practices provided an opportunity for teachers to assess their ability to plan and execute higher order thinking questions and foster critical thinking.

Implications

The findings from this collective case study can be used as strategies to construct distinct professional learning opportunities supporting habitual behaviors that foster meaningful lesson planning, student engagement, and rigorous instruction in pursuit of increased student achievement. Additionally, administrators can take advantage of the tactics identified by the participants to generate professional goals, shared goals, and veritable collaborative learning. Findings from this study revealed implications from teachers' perspectives having ramifications on instructional delivery and student learning. This study draws upon the conclusion that becoming aware and noticing what is occurring in the instructional setting is vital to all stakeholders including teachers, administrators, and instructional coaches in supporting instructional preparedness and authentic learning that meets the needs of all students.

Implication One

First, this study discovered that teachers must have a reflective guide or questionnaire to reflect on a personal instructional segment objectively. Having the ability to reflect with purpose requires teachers to notice specific happenings within the instructional environment without overlooking them. Purposeful reflection is a challenging task. Many become distracted by insignificant details.

Reflective practices in the classroom require teachers to reflect on themselves and their students. Assessing personal strengths and weaknesses is hard; especially when noticing student engagement. In many instances, students' lack of engagement stemmed from a disconnect with the content and delivery method rather than unsatisfactory behavior. Recognizing that this instance is a significant instructional delivery weakness is a challenge. Recognizing that many educators miss this instance is evidence for assessing personal effectiveness.

Teachers must have the ability to notice what is occurring in the learning environment to reflect on instructional practices effectively (Siry & Martin, 2014). Ability is fostered by purpose; purpose is guided by direction; direction is cultivated by planning. Reflective guides serve as a foundational component to foster reflective capability. Reflective guides promote thinking. The thinking process facilitates planning for future lessons and encourages change. Reflection is insignificant to consider if not connected to awareness, personal growth, and learning.

Implication Two

The second implication indicated that instructional coaches must facilitate the use of video-reflective practices to promote professional growth. Instructional coaches provide resources, strategies, models, and guidance to enhance the professional growth of teachers. Coaches should consider video-reflective practices as a resource coaches refer to when assisting teachers. In this study, I found common elements when assessing professional learning. However, learning was not connected to coaching, but rather to self-directed change.

Coaches are active members of most building leadership teams and work to provide evidence-based practices through professional learning. Related research reviewed for this study substantiated that reflection promotes self-awareness, performance, and opportunities for growth.

However, teachers becoming reflective professionals of personal practices, often require

coaching in the process (Abiola & Dhindsa, 2012). Video-reflective practices are unutilized

resources that underpin the foundational premise of professional learning. Most teachers are

given additional strategies, resources, or books to read to enhance the learning environment.

However, they have the "tools" needed to foster awareness by noticing how they deliver

instruction and how students respond. Instructional coaches daily wear their "toolboxes" of

research-based strategies that foster student achievement. Adding video-reflective practices to

their resources is important to facilitate professional growth.

Implication Three

The final implication that arose from this study was that building administrators must

support the use of video-reflective practices to insure the initiative is implemented with fidelity.

Brunson (2015) stated, "New initiatives implemented without focused progress toward a

performance goal are likely to be unsuccessful or short-lived" (p. 42). In other words, video-

reflective practices will become less significant within schools without administrator buy-in.

The administrator is considered the instructional leader of a given building. However, with the

varied duties and responsibilities under the umbrella of administrator, many new ideas and

initiatives lose momentum due to the lack of follow-up and accountability. Joining forces with

instructional coaches, administrators can implement a plan that advocates for teacher self-

awareness and fosters professional growth rather than routine compliance.

Communication is vital to ensure professional growth. Goals are critical to foster

meaningful learning. Support is crucial in successfully implementing change. However, fidelity

is fundamental when establishing habitual behavior. Administrators fuel the process for habitual

behavior to occur with utilizing video-reflective practices. All stakeholders working together to

establish a learning opportunity for teachers enhance the feeling of shared goals and desired outcomes.

Delimitations and Limitations

Delimitations are the researcher's decisions and set parameters on a study (Simon, 2011). Delimitations for this study included the setting of the investigation identified, as Julianna School District because all school within the district have installed Audio Enhancement and EDU360 camera systems. Criterion sampling set boundaries on the study by only including veteran teachers with at least two years at the current site and more than three years teaching experience. Standard open-ended questions designed for the interviews were delimitation by limiting the responses given by the participants. A Collective Case Study design was a delimitation because this research investigated selected cases. Lastly, my choice to explore the process of video reflective practice rather than influence on student achievement was a boundary limiting this study.

This collective case study included nine classroom teacher participants and contained limitations and weaknesses characteristic in qualitative research. The students within these classrooms ranged from kindergarten to fifth grade with varying ability levels. These variances included students receiving special education services through co-teaching and resource classes. Additional variances include students receiving gifted services and students receiving ESOL services. Classrooms within the Julianna district serve a variety of students with diverse learning and language needs which created limitation beyond my control. Limiting the type of students within each classroom would change the direction of the study and influence perceptions of a reflective teacher. Likewise, class size and additional support staff within each class was a

limitation as distractions and or assistance may influence the climate of the learning environment.

Although all teacher participants were considered veteran teachers based on Georgia TKES, they possessed differing amounts of teaching experience and various levels of experience with utilizing video-reflective practices. In this study, some participants had been teaching over 20 years, while others taught for a period less than 10 years; thus, contributing different perceptions of video reflection. Although administrators expressed the value in video-reflective practices, their requirements and expectations were limited as well. All schools within Juliana School district were encouraged to utilize video-reflective practices, but as seen with the participating sites, variations regarding requirements and expectations were noted. If I had included other sites, I might have identified additional factors influencing video reflection among veteran elementary teachers.

Teachers chose self-reflection times therefore, they may have proceeded through a lesson indifferently, potentially limiting the scope of authentic reflection. Likewise, participants' shared experiences, personal feelings, and attitudes toward video reflection could be considered a limitation. Although this was a study based on personal perceptions and awareness, the participants' trust of the researcher and position within the district could have influenced the participants' actual self-awareness. These limitations were unavoidable.

Recommendations for Future Research

Research substantiated that reflective practices influence teaching (Ditchburn, 2015; Endeley, 2014; Maynes & Hatt, 2015; Sain et al., 2014; Siry & Martin, 2014). Research also discussed influential factors that supported student achievement (Best & Winslow, 2015; Bill & Melinda Gates Foundation, 2015; Zhang & Campbell, 2013). In this study, I aspired to

understand and highlight the participants' experiences and how their perceptions of video-reflective practices influenced personal, professional growth. My aspiration for this research was to understand the value of video reflection causing administrators, instructional coaches, and teachers to have meaningful conversations about implementing these practices with teaching in efforts to enhance instructional delivery and increase student achievement. Based on the data collected during this study, video-reflective practices should not be viewed as an initiative but rather a habitual behavior. Substantial amounts of money were spent to install cameras within each classroom with video reflection noted as one of the beneficial factors. Additionally, significant amounts of time were dedicated to training and equipping teachers with the knowledge to navigate the camera systems and engage in video reflection. Therefore, efforts should be made to ensure implementation of such practices.

Although there was limitation within this study, based on design, number of participants, and accessibility to classroom cameras, future research could be conducted to explore video reflection or similar subject matters by district administrators or instructional coaches who access instructional classrooms. Additional research could substantiate the findings from this study by investigating additional participants or various grade levels including secondary classrooms. Additionally, further research could take into consideration the following questions:

- How can video reflection help teachers establish professional goals and foster self-accountability?

- How can video reflection help leaders distinguish between lesson detail and instructional evidence?

- How can video-reflective practice be implemented with fidelity and replace less effective strategies for improving teacher delivery?

- What resources are necessary to effectively implement video-reflective practices with teachers?

- What are the expectation of the administrators and how do teachers gain the resources?

- What parameters should teachers utilize to implement video-reflective practices with purpose?

- How can teachers and administrators partner to conduct annual evaluations through utilizing video-reflective practices?

- How can administrators set goals for teachers' professional growth by utilizing video-reflective practices while promoting self-management?

- How can instructional coaches be more effective in building capabilities of teachers through implementing video-reflective practices?

- How can PLCs effectively support teachers as they engage in video-reflective practices?

- How can district professional learning be supported through video-reflective practices?

- What professional development tools need to be designed to facilitate video-reflective practices with teachers? Should these tools be assessed? If so, How?

- How can administrators and instructional coaches shift the process of video-reflective practices from being an initiative to a habitual behavior that promotes the capability to self-govern?

Summary

The primary purpose of this collective case study was to understand the influence video-reflective practices have on the professional growth of nine veteran elementary teachers. Utilizing the opinions of veteran teachers was important because the positive and negative components identified in this study can be used to promote self-awareness, instructional preparedness, and professional learning for other elementary teachers. Conclusively, the results proved beneficial to all participants. As a result, I used the data to develop themes and affirmations, based on the veteran teacher's experiences and the influential factors correlating to instructional delivery and student learning. Administrators, instructional coaches, and teachers can use this data to understand why content delivery is important, and how student responses influenced achievement. Additionally, teachers gained a stronger sense of self-awareness and how collaborative learning transformed by conducting self-assessments with common goals. Acknowledging self-awareness allowed teachers to assess personal strengths and weaknesses. Self-assessment in a collaborative learning environment promoted self-directed learning which facilitated desired change. The expected outcome of this study was to understand that resources, strategies, and new initiatives are important elements to promoting professional growth of teachers; however, the missing component was meaningful reflection. Ideally, self-assessment fosters self-awareness; self-awareness promotes self-correction; self-correction enhances student achievement.

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APPENDICES

Appendix A: IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

November 14, 2017

Kasey Clements-Hutchinson
IRB Approval 3013.111417: A Case Study Exploring Cameras in the Classroom and Reflective Practices of Veteran Teachers

Dear Kasey Clements-Hutchinson,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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Appendix B: Site Approval

Superintendent

PHONE

FAX

September 29, 2017

Liberty University
IRB Board
1971 University Blvd.
Lynchburg, VA 24515

To whom it may concern:

Kasey Clements-Hutchinson is authorized to conduct a research study in the ▇▇▇ County School District. She has permission to conduct observations, interviews, and focus groups for purposes of fulfilling research requirements associated with her collective case study. Confidentiality requirements of the ▇▇▇County School System and the university's Institutional Review Board must be followed.

The documents and data collected from teachers during this study will be identified only by an assigned coded number/pseudonym to protect the identity of the participating individuals. At no time will teachers' names or school be associated with the results of the research. At the end of the research, results obtained from the analysis of data will be published without any identifying information of the participating teachers or school. The identity of the schools, as well as educational district, will not be published in relation with the research.

If you have any questions, please contact me at ▇▇▇▇▇▇▇▇▇

Sincerely,

Director of Testing, Research and Evaluation

Appendix C: Informed Consent

Exploring the Influences Classroom Cameras in the Classroom, and Reflective Practices have on
Instruction of Veteran Teachers: A Case Study
Mrs. Kasey Clements-Hutchinson
Liberty University
School of Education

You are invited to be in a research study of video-reflective practices. You are a potential

participant because you are an elementary, school core academic area teacher who competed the

ViewPath training using the Audio Enhancement camera system.

This informed consent outlines the study in detail. I ask that you read this information and ask

any questions you may have before agreeing to be in the study. By signing this document, you

are giving consent to participate in this research study. Kasey Clements-Hutchinson, a doctoral

candidate from Liberty University's School of Education, will conduct this study. Feel free to

email me at khutchinson@liberty.edu with any questions or concerns.

Background Information: The purpose of this collective case study is to understand the

influences classroom cameras have on reflective practices of elementary, school veteran

teachers. This study will investigate how teachers' perceived video-reflective practices influence

teaching practices, professional learning, and instructional preparation.

Procedures: This research will involve the General Self-Efficacy Scale and Demographics data,

Three Self-Reflective Open-Ended Protocol Questionnaires and an interview. If you agree to

participate, you will be asked to do the following:

- Sign and return this form within 7 days consenting to the research
- Complete the General Self-Efficacy Scale and demographics data form
- Attend an onsite visit to discuss Self-Reflective Open-Ended Protocol Questionnaire
  procedures and schedule interviews

- Participate in three 25 minute recording of your instruction during a core academic class in which direct instruction is the mode of delivery and complete three Self Reflective Open-Ended Protocol Questionnaires. Questionnaires will be emailed to the researcher's password protected Liberty University email account within 5 days.
- Participate in one individual audio-recorded 30-minute open-ended interview with the researcher. Interviews will be held in the participant's classrooms after school.
- Review the preliminary text of my data analysis to insure your case was represented accurately.

Risks and Benefits of being in the Study: Participating in this study may involve some positive or negative thoughts, as you will be asked to reflect on your teaching. Additionally you may experience minimal discomforts or stresses bases on daily life, taking time to interview, and answering questionnaires. However, there are no risks to your safety or wellbeing for your participation.

Compensation: You will receive a $10 Starbucks gift card for participating in this study

Confidentiality: All participants will remain anonymous to protect identity. You will be given a pseudonym for the study. All digital documents will be stored on a password-protected computer. I will not share this information with anyone. All documentation will be deleted after three years.

Voluntary Nature: Participating in this study is voluntary. Your participation will not affect your current, further relations with Liberty University, or your school district. If you choose to participate, choosing to not answer questions or withdraw at any time will not affect aforementioned relationships.

Withdrawing from the Study: You may withdraw from the study at any time without penalty by emailing me at khutchinson@liberty.edu. Simply request to be withdrawn from the study. If you withdraw from the study all documents that you may have submitted will be deleted from the Principal Investigator's computer. Additionally, all emails will be deleted and all paper documents will be shredded.

Consent Statement: I have read and understood the description of the study and the document content. I was given an opportunity to ask questions and was given adequate answers. I acknowledge the above and give my voluntary consent to participate in this study. Additionally, I understand should I have any questions about the research, I should contact the researcher listed above. I understand if I have any questions about rights or the content of this form, I should contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email at irb@liberty.edu

_____ Yes, I consent to participating in this study

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Appendix D: School Permission Letters

September 2017

███████████████

Principal

█████ Elementary School

███████████████

Dear Dr. ███████

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for an educational leadership degree. The title of my research project is "Exploring cameras in the classroom and reflective practices of veteran teachers". The purpose of my research is to understand video-reflective practices of elementary school veteran teachers and investigate how teachers' perceived video-reflective practices influence teaching practices, professional learning, and instructional preparation.

I am writing to request your permission to conduct my research at ██████ Elementary School. An administrator and instructional coach will be asked to participate through individual interviews. During the interviews, the administrator and instructional coach will be asked to recommend two teachers to participate based on specific criteria. Teacher participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

 Thank you for considering my request. If you choose to grant permission, please respond by email to khutchinson1@liberty.edu.

Sincerely,

Kasey Clements-Hutchinson
Liberty University Doctoral Candidate

September 2017

Mrs. ██████████████

Principal

███████Elementary School

████████████

Dear Mrs. ████████

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for an educational leadership degree. The title of my research project is "Exploring cameras in the classroom and reflective practices of veteran teachers". The purpose of my research is to understand video-reflective practices of elementary school veteran teachers and investigate how teachers' perceived video-reflective practices influence teaching practices, professional learning, and instructional preparation.

I am writing to request your permission to conduct my research at ███████████Elementary School. An administrator and instructional coach will be asked to participate through individual interviews. During the interviews, the administrator and instructional coach will be asked to recommend two teachers to participate based on specific criteria. Teacher participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

 Thank you for considering my request. If you choose to grant permission, please respond by email to khutchinson1@liberty.edu.

Sincerely,

Kasey Clements-Hutchinson
Liberty University Doctoral Candidate

September 2017

Dr. ████████████
Principal
████████████████████
████████████████████

Dear Dr. Carter:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for an educational leadership degree. The title of my research project is "Exploring cameras in the classroom and reflective practices of veteran teachers". The purpose of my research is to understand video-reflective practices of elementary school veteran teachers and investigate how teachers' perceived video-reflective practices influence teaching practices, professional learning, and instructional preparation.

I am writing to request your permission to conduct my research at ████████Elementary School. An administrator and instructional coach will be asked to participate through individual interviews. During the interviews, the administrator and instructional coach will be asked to recommend two teachers to participate based on specific criteria. Teacher participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

 Thank you for considering my request. If you choose to grant permission, please respond by email to khutchinson1@liberty.edu.

Sincerely,

Kasey Clements-Hutchinson
Liberty University Doctoral Candidate

Appendix E: Invitation Letters

This letter is to inform you that you have the opportunity to participate in a collective case study about video-reflective practices of veteran teachers. This study will investigate how teachers' perceived video-reflective practices influence teaching practices, professional learning, and instructional preparation. I, Kasey Clements-Hutchinson, a doctoral candidate at Liberty University will conduct the study as part of a doctoral dissertation.

This letter is to inform you that you are a potential participant based on specific criteria, as you are a veteran teacher, a core academic teacher, and a county employee who has received Audio Enhancement ViewPath Educam 360 camera system training.   All participants in this study will be given pseudonyms. All information will be confidential. Participants will participate in General Self-Efficacy Scale, demographics data, three Open-Ended Self-Reflection Protocol Questionnaires and an individual interview.

There are no known risks if you decide to participate. There are no costs for participating. However, this study will require your time and diligence. Your perception of video-reflective practices may provide valuable insight and understanding to the field of education.

By signing this form, you are interested in participating in this study and will be given an informed consent outlining the study in detail.

If you have any questions, please contact me via email at khutchinson@liberty.edu.

_____

Signature   Date

Appendix F: Study Timeline

	Study Timeline
Step 1:	Request permission from local school board to conduct research and Submit Research Plan to IRB for approval
Step 2:	Request permission from three schools to participate in study and
Step: 3	Secure piloting participants and conduct interview question pilots
Step: 4	Hand-deliver informed consent to administrator and instructional coach participants (See Appendix C)
Step: 5	Conduct individual interviews with administrators and instructional coaches (See Appendix G) Utilize purposeful sampling to identify participants (See Appendix G)
Step: 6	Week 1: Hand-Deliver invitation letters to participants that will be return to me within 3 day in person or via postal system in a self-addressed stamped envelope that I provide
Step: 7	Week 1: Hand-Deliver informed consent forms to accepting participants that will return to me in person
Step: 8	Week 2: Retrieve all informed consent forms, Make onsite visits to hand-deliver participants The General Self Efficacy Scale and demographics data form. The documents will be returned to me in person
Step: 9	Week 2: During onsite visit discuss Open-Ended Protocol Questionnaire procedures and schedule face to face interviews
Step: 10	Week: 3 Open-Ended Protocol Questionnaire 1 will be sent to participants via personal email and returned within 5 days
Step: 11	Week 4 Open-Ended Protocol Questionnaire 2 will be sent to participants via personal email and returned within 5 days
Step: 12	Week 5 Open-Ended Protocol Questionnaire 3 will be sent to participants via personal email and returned within 5 days
Step: 13	Week 6-7 Conduct face to face interviews utilizing open-ended interview questions
Step:14	Week 8 Begin data analysis: Examining categorizing, transcribing within case analysis, cross- case analysis and assertions.
Step:15	Week 10 Provide preliminary data analysis to participants to insure individual cases were represented.

Appendix G: Administrator and Instructional Coach Interview Questions Protocol and

Teacher Sampling Criteria

Date:

Beginning time:

Ending time:

Place:

Interviewer:

Interviewee's pseudonym:

Description: This interview will utilize standardized open-ended questions.

<div align="center">Interview Questions:</div>

1. Explain your vision for video-reflective practices in your school?

1. When did you implement video-reflective practices?

1. Why do you prioritize video-reflective practices for teachers?

1. Can you recommend two veteran teachers to participate in this study?

1. Please share any other thought or opinions you have about video-reflective practices.

Appendix H: General Self-Efficacy Scale

		General Self Efficacy Scale	
	1	I can always manage to solve difficult problems if I try hard enough.	
	2	If someone opposes me, I can find the means and ways to get what I want.	
	3	It is easy for me to stick to my aims and accomplish my goals.	
	4	I am confident that I could deal efficiently with unexpected events.	
	5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	
	6	I can solve most problems if I invest the necessary effort.	
	7	I can remain calm when facing difficulties because I can rely on my coping abilities.	
	8	When I am confronted with a problem, I can usually find several solutions.	
	9	If I am in trouble, I can usually think of a solution.	
	10	I can usually handle whatever comes my way.	

Response Format:

1 = Not at all true
2 = Hardly true
3 = Moderately true
4 = Exactly true

Appendix I: Demographics

Demographics	
Age	
Ethnicity	
Gender	
Years of Teaching Experience	
Highest Degree	
Additional Certifications	
Varied teaching experiences (Eg: grades, subjects, higher education)	
Professional Information you would like to share:	

Appendix J: Open-Ended Self-Reflective Protocol Questionnaire One

Date:

Beginning time:

Ending time:

Subject:

Lesson description:

1. Is this lesson delivery going as planned? Explain why or why not?

2. What are you learning regarding your students' strengths and weaknesses from this lesson?

3. What are your perceived instructional strengths during this lesson?

4. Please tell me any other thoughts you are having about your students.

5. Please tell me any other thoughts or opinions you are having as you view your teaching and reflect simultaneously.

Appendix K: Open-Ended Self-Reflective Protocol Questionnaire Two

Date:

Beginning time:

Ending time:

Subject:

Lesson description:

1. What challenging if any are you observing regarding instructional content, delivery, or reinforcement?

1. What if any were challenges are you observing regarding students?

1. Why did you choose to the content delivery method for this skill focus? Are the finding your method is clear?

1. Please tell me any other thoughts you are having about your students.

1. Please tell me any other thoughts or opinions you are having as you view your teaching and reflect simultaneously.

Appendix L: Open-Ended Self-Reflective Protocol Questionnaire Three

Date:

Beginning time:

Ending time:

Subject:

Lesson description:

1. Describe how your lesson planning is facilitating your deliver. Are you deviating?

2. Describe your thoughts regarding time management in your video.

3. Based on what you are viewing, what are your next steps for your students regarding this content lesson?

4. Please tell me any other thoughts you are having about your students.

5. Please tell me any other thoughts or opinions you are having as you view your teaching and reflect simultaneously.

Appendix M: Interview Questions Protocol

Date:

Beginning time:

Ending time:

Place:

Interviewer:

Interviewee's pseudonym:

Description: This interview will utilize standardized open-ended questions.

Interview Questions:

1. Explain your experience of reviewing your teaching sessions via video.

2. How did these video reflections compared to what you expected?

3. Can your personal professional growth be influenced through video-reflective practices?

4. Describe the feelings and perceptions you had regarding personal strengths and weaknesses when implementing video reflection practices.

5. Explain how video-reflective practices will influence future lesson planning.

6. Explain how professional growth can be influenced during PLCs through video-reflective practices.

7. Please share any other thought or opinions you have about video-reflective practices.

Appendix N: GSE Permission

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wissenschaft und Psychologie
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Permission granted

to use the General Self-Efficacy Scale for non-commercial reseach and
development purposes. The scale may be shortened and/or modified to meet the
particular requirements of the research context.

http://userpage.fu-berlin.de/~health/selfscal.htm

You may print an unlimited number of copies on paper for distribution to research
participants. Or the scale may be used in online survey research if the user group
is limited to certified users who enter the website with a password.

There is no permission to publish the scale in the Internet, or to print it in
publications (except 1 sample item).

The source needs to be cited, the URL mentioned above as well as the book
publication:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman,
S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and
control beliefs* (pp.35-37). Windsor, UK: NFER-NELSON.

Professor Dr. Ralf Schwarzer
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