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A Case Study of Teachers Implementing The Framework for 21st-Century Learning

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This is to certify that the doctoral study by

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Abstract

Elementary Teachers Implementing *The Framework for 21st-Century Learning*

by

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MA, Otterbein College, 2008

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The Framework for 21st-Century Learning (*The Framework*) is focused on the mastery of core subjects and been found to be essential to student success. Teachers in a suburban school district in Ohio were struggling to address the challenges associated with the implementation of *The Framework*. The purpose of this qualitative case study was to examine how teachers implemented the program in their classrooms. Vygotsky's theory of cognitive development guided the exploration of how elementary teachers were implementing critical elements of *The Framework* to scaffold literacy instruction. A qualitative case study design was used to allow the researcher to examine the ways elementary teachers were addressing the challenges of *The Framework*. Nine elementary teachers (grades K-3) with varying levels of experience from 2 elementary schools similar in demographics in a school district were selected to participate in the study. Each completed a questionnaire pertaining to *The Framework* and was observed in the classroom using a checklist based on *The Framework*, guided by Vygotsky's sociocultural theory of learning, and focused on best-practice literacy principles. Axial coding was used to identify patterns and themes from the questionnaires, observations, and public documents. Results indicated that educators were implementing *The Framework*, but were using outdated terminology, were creating misconceptions and confusion about some literature principles, and were not using student-driven assessment strategies. The findings informed creation of a professional development project that will provide elementary teachers in the district with support while integrating *The Framework.* This study affects positive social change by providing increased understanding of literacy instruction to enhance student learning within *The Framework*.

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Dedication

This study is dedicated to my husband, Jack, whose unyielding support and encouragement always allows me to reach for my dreams. This work is also dedicated to my son, Miles, who inspires me to always ask questions and remain constantly curious. May you both always inspire others through your creativity, determination, and curiosity. Thank you for your love, sacrifice, and inspiration.

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This accomplishment would not be possible without the unwavering encouragement of my family and friends. A special thank you to my mother who taught me how to persevere and work tirelessly to meet my goals. I would also like to thank my husband and son for their encouragement and sacrifice. I love you all dearly and thank you for all the hours you allowed me to work on this project.

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Section 1: The Problem

Introduction

In 2002, a consortium of business leaders, education policy makers, and educators came together to chart a course for the new century of American public education (Partnership for 21st Century Learning, 2010; National Governors Association, 2010). The result of their collaboration was *The Framework for 21st Century Learning* (*The Framework*) (Kivunja, 2014; Tompkins, 2014). *The Framework* initiated an examination of how teachers were preparing students to meet the global, technological, and literacy demands of the 21st century (Drew, 2012; Kingsley & Grabner-Hagen, 2015). The Partnership for 21st Century Learning, a private educational organization, developed a framework that comprised cross-disciplinary literacy, including digital and media literacy; innovation and learning skills, which include collaboration, communication, creativity, and critical thinking; and life and career skills, which include leadership skills, self-motivation, flexibility, adaptability, and global awareness (Crockett, Jukes, & Churches, 2011; Dede, 2009; Wagner, 2012).

The purpose of 21st-century education is to ensure learners are prepared to navigate the dynamic demands of our society, as well as to make a substantial contribution to the workforce (Kist, 2013; Kivunja, 2014; Tompkins, 2014; Wallender, 2014). A powerful paradigm shift occurred in the 21st century as global economies and cultural boundaries began to blend, creating innovative educational trends (Dede, 2009; Hutchison, 2014; Tompkins, 2014; Wagner, 2012). This shift in globalization and the technological landscape has transformed the roles of the teacher and the learner. The age

of skill-based learning is no longer suitable for preparing learners for the 21st century (Drew, 2012; Kingsley & Grabner-Hagen, 2015; Tompkins, 2014). The transformative revolution is transitioning to a pedagogy that requires learners to navigate a variety of new skills beyond recall and memorization, thus challenging educators to design dynamic and innovative learning experiences that enable learners to function in an ever-changing society (Ametepee, Tchinsala, & Agbeh, 2014; Crockett et al., 2011; Kivunja, 2014; Wagner, 2012). The demands and advancements of the 21st century have reshuffled and altered the landscape of literacy instruction. As Greenstein (2012) noted, "Students must develop a complex skill set that prepares them for both the rigor of college and the demands of the workplace. They must master substance and skills in multiple content areas" (p. 37). The educational landscape of the 21st century must be structured to include innovative learning practices that allow the learner to explore, evaluate, and synthesize information across multiple platforms of learning.

In 2009, in response to the demands of the 21st century, governors of 48 states and educational leaders from across the country collaborated to provide a set of common standards (National Governors Association, 2010). With the Common Core State Standards (CCSS), its creators strove to cultivate rigorous learning experiences that are authentic, collaborative, engaging, and purposeful (Greenstein, 2012; Kist, 2013; McClure, Garthwait, & Kristo, 2015; National Governors Association, 2010; Partnership for 21st Century Learning, 2010; Rimes, 2015; Wallender, 2014). Dede (2009) predicted that the reliable tools and knowledge of the 20th century would evolve into what he called contextual skills that are part of global citizenship, which the CCSS initiative

suggests. Drew (2012) described this convergence as an opportunity for new and different teaching and learning. The CCSS recognized that educators must prepare learners to navigate the digital landscape, as well as prepare them to be readers, writers, and communicators (Karchmer-Klein & Shinas, 2012; Rimes, 2015). The CCSS were designed to require learners to utilize higher-order thinking skills to apply their knowledge to new and changing situations (Kingsley & Grabner-Hagen, 2015; Rimes, 2015; Tompkins, 2014). "It is time to make sense of 21st-century literacies and consider ways in which we can meld important literacies of the past, present, and future" (Karchmer-Klein & Shinas, 2012, p. 292). Through blending effective pedagogical practices learners would have dynamic opportunities to gain skills and knowledge needed to utilize inquiry based skills within a multitude of learning experiences.

Education that encourages communication, collaboration, creativity, critical thinking, and problem solving is not a new concept (Drew, 2012; Hutchison, 2014; Tompkins, 2014). The demands of the 21st century, however, have created multifaceted learning challenges that include global awareness and technological advancements (Antonenko, 2014; Brusic & Shearer, 2014). Drew (2012) contended that students will graduate into a world that is connected globally through digital communication and will rely on shared information. Denying the vast changes in literacy and continuing to define it in terms of simply reading and writing is underestimating the literacy needs of the 21st-century learner (Hutchison, 2014; Karchmer-Klein & Shinas, 2012; Young, 2012). "The illiterates of the 21st century are not those that cannot read or write, but those that cannot learn, unlearn and relearn" (Crockett et al., 2011, p. 17). Learning has evolved to include

sophisticated student-centered approaches that harness established learning guidelines, a collaborative balance between teacher and learner, authentic and purposeful experiences, and a universal instructional design focused on personalized learning (Monge & Frisicaro-Pawlowski, 2014; Tompkins, 2014; Young, 2012). Tompkins (2014) cautioned educators to recognize that more than reading and writing are involved in using technology-enhanced learning. Therefore, the integration of technological tools is imperative to the educational growth of the 21st-century learner.

Defining 21st-century literacy skills is a necessary task in an era of transition. Van den Bergh, Ros, and Beijaard (2014) defined 21st-century literacy skills as a multitude of dynamic and malleable skills that allow learners to collaborate with individuals by sharing, interpreting, and considering multiple perspectives. The 21st-century literacies have yet to be concretized, but continue to expand as trends change and evolve (Abbott, 2015; Keir, 2014; Wagner, 2012; Young, 2012).

Twenty-first century literacy skills are defined as those skills that include a cross-disciplinary set of reading, writing, thinking, speaking, and listening skills (Abbott, 2015; Karchmer-Klein & Shinas, 2012). Also required are habits of mind and character traits, such as respect, trustworthiness, fairness, responsibility, caring, and citizenship that enable learners to meet the demands of today's world (Abbott, 2015; Tompkins, 2014; Wagner & Dintersmith, 2015). Hence, 21st-century literacy demands a core set of competencies, such as collaboration, digital literacy, multimodal-communication, critical thinking, and problem solving, which together provide learners a synchronicity between knowledge-based learning and authentic application (Tompkins, 2014; Wagner &

Dintersmith, 2015). Critical pedagogical shifts are essential, as teachers transition from traditional learning approaches that are teacher-centered, skill-based, and focused on high-stakes assessments. Twenty-first-century pedagogy engages the learner in opportunities for authentic, purposeful, creative, innovative, inquiry-based, and collaborative experiences that enhance the learner's ability to problem solve, communicate, evaluate, and synthesize information across multimodal formats (Karchmer-Klein & Shinas, 2012; Kivunja, 2014; Preus, 2012). Creating learners who are intellectual risk takers and who develop a growth mindset requires educators to embrace the 21st-century literacy pedagogical shift to nurture student-centered learning (Brusic & Shearer, 2014; Hung, Lee, & Lim, 2012; Young, 2012).

Definition of the Problem

Teachers were struggling to address the challenges associated with the implementation of *The Framework*, "I am struggling to understand and explain the imperative skills necessary for the successful integration of the CCSS and 21st-century skills into the curriculum" (Teacher, personal communication, July 13, 2016). The challenge of implementing *The Framework* into curriculum design has created a barrier between teachers and learners that is negatively impacting student success in the 21st century.

In writing about 21st-century literacy, Tompkins (2014) clarified the role of the CCSS; the author suggested that teachers use the standards as guidelines for curricular decisions. The standards, however, do not mandate what to teach or how to teach it. The CCSS were a response to the work of many researchers who described the differences

between 20th-century skills and 21st-century skills (Dede, 2009; Hutchison, 2014; Levy & Murnane, 2005; Young, 2012). *The Framework* requires cognitive engagement, critical thinking, decisive problem solving, and fluid literacy skills (Hutchison, 2014; Levy & Murnane, 2005; Van den Bergh et al., 2014). In the Sunny Valley School District (pseudonym), teachers incorporate the ideas of CCSS, but continue to use a 20th-century model of teaching and learning, which focuses on teacher-driven, skill-based practices. The district understands that this model must change and student outcomes must improve. The executive summary for Sunny Valley School District (2010) states,

> Schooling can no longer be looked at as an event; rather it must become an experience in which students think critically and creatively across disciplines, collaborate with others to problem solve, understand the global landscape and their place in it, and use technology inside the classroom as much as they do outside. (p. 3)

Twenty-first-century skills are not an isolated group of benchmarks, but rather a collection of concepts intertwined with core subjects, transdisciplinary themes, and technological tools (Abbott, 2015; Bowman, 2014; Crockett et al., 2011). *The Framework* enables individuals to use literacy skills and technology to solve complex problems and to think critically, creatively, innovatively, and fluently (Bowman, 2014; Tompkins, 2014; Wagner & Dintersmith, 2015). The integration of *The Framework* requires teachers to navigate ever-changing technological tools, critical thinking skills, and multimodal forms of communication across a global platform (Keir, 2014; Rimes, 2015; Uecker, Kelly, & Napierala, 2014; Van den Bergh et al., 2014). The complexity and depth of

21st-century skills require an evolution of instructional techniques that ignite a student-centered environment focused on employing skills defined in the CCSS (Crockett et al., 2011; Lasry, Charles, Whittaker, Dedic, & Rosenfield, 2013; Uecker et al., 2014).

As the superintendent of Sunny Valley Schools stated in his 2016 letter to parents and posted on their website,

> We are four industrial revolutions behind in schools. The time has come to step up and relentlessly pursue growth and innovations in our schools. It can't be about the comfort of the adults; it must be about the preparation of the next generation of Americans.

Effective 21st-century literacy instruction forces teachers to alter traditional instructional techniques through collaborative professional development to gain the knowledge essential for the development of a 21st-century literacy program (Crockett et al., 2011; Kivunja, 2014; Tompkins, 2014). "Education has not kept pace with these changes. Teachers and staff need to not only keep up with the latest technology but to integrate technology into their classrooms" (Sunny Valley School's website). Education must address the growing gap between college and career readiness and the traditional literacy approaches present in today's classroom. Teachers must be attuned to the literacy needs of the 21st-century learner. Thus, pedagogical alterations must occur to ensure students are prepared for the demands of the 21st-century workforce (Uecker et al., 2014; Wooten & Cullinan, 2015; Young, 2012).

Rationale

Sunny Valley School District is passionate and committed to embracing innovative and personalized learning through the implementation of *The Framework*. The district's mission is to ensure students are *ready for tomorrow*. In 2010, the district published the *2020 Strategic Vision,* an executive summary reporting the immediate need for radical and innovative changes that are intentional, purposeful, and grounded in 21st-century learning initiatives. Consequently, the district has launched the *2020 Strategic Vision* to identify the knowledge, skills, and educational experiences students will require to compete globally in the 21st century. The Partnership for 21st Century Learning (2015), as well as Sunny Valley's 2020 strategic task force, identified creativity, innovation, critical thinking, problem solving, collaboration, and communication as six essential skills necessary for success in the 21st century. The challenge for Sunny Valley School District now is to align the core curriculum with *The Framework* to ensure educators are effectively preparing learners for success in the future. Sunny Valley School District has embraced *The Framework* through the implementation of the one-to-one technology initiative focused on ensuring all students have access to relevant technology, as well as continuous professional development for educators. The district has also adopted a culture that embraces innovative pedagogy and personalized learning. The adoption of *The Framework* has challenged educators to transition from 20th-century instructional practices to implementing the recommendations of *The Framework*. As the superintendent of Sunny Valley Schools asserted, "We must embrace the discomfort of change."

Working at the Harvard Innovation Lab, Wagner (2012) expressed a growing concern for the growth of the global achievement gap. Wagner indicated that the competencies necessary for success in the 21st century are in opposition to what students are being taught in schools across the nation. Wagner believed that today's learners are vastly different from learners of the past. As digital natives, learners born within the digital age, many of today's learners access, share, and create information for a vast and global audience across a multitude of platforms and for a multitude of purposes (Kivunja, 2014; Uecker et al., 2014; Wagner & Dintersmith, 2015; Wooten & Cullinan, 2015). As cultures blend and global economies continue to rise, new and advancing technologies and skills are required of our workforce (Bray & McClaskey, 2015; Crockett et al., 2011; Lewis-Spector, 2016). Therefore, education must be transformative, allowing instructional pedagogy to develop learners who are capable of flexibly transferring learning to new and evolving situations. The Partnership for 21st Century Learning (2015), an agency dedicated to serving as a catalyst for 21st-century instruction, believes students must possess the unique and innovative skill sets presented in *The Framework*.

Evidence of the Problem from the Professional Literature

As Levin (2015) expressed, "The U.S. is not doing as well educationally as its economic competitors on measures of educational attainment and academic achievement, and there is no obvious trend towards improvement over time" (p. 136). Studies have indicated that contemporary pedagogical practices continue to focus on the transmission of information through rote learning in teacher-driven learning environments, which interfere with the development of 21st-century learners (Kena et al., 2014; Levin, 2015;

Tompkins, 2014; Young, 2012). Rigid instructional systems of the past have produced content-driven learners who lack the skills necessary for success (Levin, 2015; Sharp, 2015; Uecker et al., 2014). Teachers must produce learners who are capable of flexible and adaptable critical thinking skills, accessing and connecting core content knowledge, collaborative communication across multiple platforms, and capable of developing social and emotional competencies that enable them to navigate rigorous life and work environments (Eng, 2015; Partnership for 21st Century Learning, 2015; Wooten & Cullinan, 2015). According to Sharp (2015), "Success in the 21st century requires mastery of the following critical skills: information literacy, creativity and innovation, collaboration, problem solving, communication, and responsible citizenship" (p. 74). Pedagogy, therefore, must be revolutionized, transforming teacher-driven instruction to learner-driven instruction focused on scaffolding students' learning, both academically and socially. The 21st-century revolution requires pedagogical reform ensuring that educators are preparing students for college and career readiness (Brusic & Shearer, 2014; International Literacy Association, 2016; Kivunja, 2014).

The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning*. The study's findings gave important insight into the effectiveness of the district's 2020 strategic initiative that

led to the adoption of *The Framework*. The data collected initiated essential alterations to professional development, coaching support, and pedagogical shifts.

Definition of Terms

The terminology that defines *The Framework* has yet to be solidified. Consequently, there are many misunderstandings and confusions. For the purpose of this study, the terms are defined to assist in designing common understandings and in minimizing confusion, thus allowing the reader to understand the concepts, characteristics, and traits of effective implementation of *The Framework.*

21st-Century Framework: A set of criteria developed in collaboration with teachers, educational experts, and political leaders to define and identify the competencies and knowledge students require to succeed within the dynamics of college and career readiness within the 21st century (Bowman, 2014). *The Framework* highlights a combination of content knowledge, specific skills, and expertise that includes critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing, creativity, self-direction, and perseverance (Soulé & Warrick, 2015).

21st-century literacy: A set of key competencies necessary for understanding, learning, thinking, and mastering content knowledge (Bowman, 2014; Tompkins, 2014).

21st-century learners: Digital natives connected to a global environment that allows for easy access to information and knowledge (Eng, 2015; Partnership for 21st Century Learning, 2015).

21st-century skills: Innovative learning skills recognized as essential elements that ensure students are ready to meet the demands of an ever-changing and increasingly

complex life, college, and work environment (Eng, 2015; Partnership for 21st Century Learning, 2015). Twenty-first-century skills focus on critical thinking, creativity, communication, and collaboration to ensure students are prepared for the future (Kivunja, 2014; Trybus, 2013).

Authentic application (learning): An assortment of educational and instructional strategies focused on connecting student learning to real-world issues, problems, and applications (Wooten & Cullinan, 2015).

Character traits: An instructional framework that focuses on the six pillars of character education (Sharp, 2015). The pillars are values that encourage cultural kindness and create a positive learning environment. The pillars include respect, trustworthiness, responsibility, caring, fairness, and citizenship (Partnership for 21st Century Learning, 2015; Ricci, 2015).

Collaboration: An instructional strategy that encourages individuals to work together to attain a common goal (Brusic & Shearer, 2014; Tompkins, 2014).

College and career readiness: Skills and knowledge essential to prepare students for success in college and workforce preparation (Greenstein, 2012; Kivunja, 2014; Levin, 2015).

Creativity: Concepts and practices that connect cognitively, intellectually, and socially across all disciplines. Creativity affords learners the opportunity to support, nurture, and enhance their knowledge (Brusic & Shearer, 2014; Partnership for 21st Century Learning, 2015).

Critical thinking: A cognitive process that strives to go beyond mere memorization. Critical thinking allows the learner to use a wide variety of thought processes to analyze, evaluate, interpret, and/or synthesize (International Literacy Association, 2016; Partnership for 21st Century Learning, 2015).

Digital age (information age): A period of history when technology has dynamically impacted society's ability to obtain and transfer information rapidly (Levin, 2015; Sharp, 2015).

Global awareness: The utilization of 21st-century skills to gain an understanding of global issues with the goal of enacting social change (Hutchison, 2014; Wagner, 2012).

Habits of mind: Various skills, attitudes, and experiences influencing patterns of behavior displayed by individuals' responses to various situations. The habits strive to empower people to be cognizant of their behavioral choices based on situational cues and to assist participants in altering their behavioral patterns (Partnership for 21st Century Learning, 2015; Ricci, 2015).

Higher-order thinking: Learning practices based on learning taxonomies (Bloom's Taxonomy). The taxonomies strive to create learning experiences that account for the cognitive processes: recall, understand, apply, analyze, evaluate, synthesize, and create (Lasry et al., 2013; Partnership for 21st Century Learning, 2015).

Innovative learning: Instructional strategies, techniques, and/or tools used to produce strong academic gains in student achievement (Eng, 2015; Partnership for 21st Century Learning, 2015; Wooten & Cullinan, 2015).

Knowledge-based learning: Knowledge that students already possess and knowledge learners are going to gain by doing work (Lasry et al., 2013; Partnership for 21st Century Learning, 2015).

Multimodal literacy: Modes of communication that are textual, linguistic, spatial, and visual (Antonenko, 2014; Brusic & Shearer, 2014; Ricci, 2015).

Personalized learning: A variety of educational approaches, learning experiences, and interventions selected to address the unique interests, learning needs, or cultural backgrounds of individual students (Partnership for 21st Century Learning, 2015; Tompkins, 2014).

Peer debriefer: A disinterested peer who analytically examines the research to uncover biases, perspectives, and assumptions on the researcher's part that might remain only implicit within the researcher's mind (Creswell, 2012; Merriam & Tisdell, 2016).

Professional development: An ongoing learning, practice, and feedback that provides sufficient time and follow-up support (Wooten & Cullinan, 2015). Effective professional development is designed to allow teachers to participate in learning experiences that mirror the learning environments they develop for their students. Professional development also focuses on encouraging teachers to share their experience and expertise systematically (Schleicher, 2012).

Student-centered learning: An educational approach utilizing active student engagement as the teacher structures activities to address each student’s unique learning needs, interests, and/or cultural backgrounds. Educators develop differentiated instruction

based on current assessment data (Partnership for 21st Century Learning, 2015; Tompkins, 2014).

Teacher-centered learning: An approach to instruction in which the teacher's role is to impart knowledge through lectures, while the student's role is to listen. Students are encouraged to work in isolation and collaboration is discouraged (Eng, 2015; Partnership for 21st Century Learning, 2015).

Transdisciplinary themes (cross-disciplinary): Authentic and relevant learning experiences that relate to real-world phenomena. Transdisciplinary themes are not bound to traditional subjects; the themes strive to support and enrich universal understandings, as well as embrace a variety of content areas (Abbott, 2015; Bowman, 2014; Brusic & Shearer, 2014).

Universal instructional design (UID): A pedagogical framework that develops learning environments focusing on accessible learning for all students. To achieve a successful UID environment, an educator must design instruction that accounts for the needs of all learners and maintains appropriate rigor while eliminating possible learning barriers (Bean & Swan Dagen, 2012; Ricci, 2015; Tompkins, 2014).

Significance

The significance of this study was to gain knowledge about how teachers were addressing the challenges presented by the implementation of *The Framework* and understanding how to best support them as they alter and shift pedagogical practices to align core curriculum with *The Framework* (Drew, 2012; Eng, 2015; Kingsley & Grabner-Hagen, 2015). According to Tompkins (2014), "Meeting challenges for

developing readers and writers has never been more important because new literacies—prompted by advances in technology—are changing what it means to be literate" (p. 1). Being well educated in the 21st century means navigating, formulating, and sharing information in suitable ways based on the communication. Learners must, therefore, be fluent in multiple forms of discourse (Brusic & Shearer, 2014; Partnership for 21st Century Learning, 2015; Trybus, 2013). The alterations, advancements, and global connections in the 21st century have shifted teachers' roles. Teachers are no longer the key holders of knowledge. Teachers are challenged with the task of creating a community of learners who are self-driven, curious, collaborative, flexible, and who strive to be lifelong learners (Eng, 2015; Levin, 2015; Soulé & Warrick, 2015; Tompkins, 2014). As Kivunja (2014) stated,

> Effective teachers in the 21st century require that we make the pedagogical paradigm shift so that we change the way we teach in order to be able to prepare our students, not simply to memorize content and to follow instructions given by others, but to develop skills that are in demand in the 21st-century workplace; be able to think for themselves, solve problems, work in teams and lead others to success in the Knowledge Economy (p. 89).

The significance of this study was to examine the way participants address the challenges associated with the implementation of *The Framework*.

I addressed the gap in pedagogy that exists between current 20th-century instructional practices and the 21st-century literacy skills necessary for college and career readiness. The goal of this study was to illuminate the necessity for pedagogical shifts to

ensure that teachers in the Sunny Valley School District were utilizing *The Framework* to prepare students for the future.

Guiding Research Questions

Learners are being prepared for challenges, technological advancements, and jobs that have yet to be created. Learners who are prepared for the increasingly complex world of the 21st century must acquire learning and innovation skills, such as creativity, critical thinking, communication, and collaboration (Eng, 2015; Partnership for 21st Century Learning, 2015; Tompkins, 2014). *The Framework* ensures students are prepared to flexibly navigate the ever-changing learning landscape. Therefore, the educational landscape must move beyond knowledge-based learning, creating opportunities for learners to become critical thinkers, innovators, and collaborators, as well as self-driven learners. Although the landscape of learning has shifted, and learners are more diverse, the teaching landscape continues to utilize 20th-century pedagogy, creating a divide between teaching and learning (Little, 2013; Partnership for 21st Century Learning, 2015; Tompkins, 2014). The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning.*

Research Question 1 (RQ1): How are elementary teachers in the Sunny Valley School District implementing collaborative and supportive reciprocal teaching and learning to instruct *The Framework for 21st Century Learning*?

Research Question 2 (RQ2): How are teachers in the Sunny Valley School District implementing critical elements (creativity, innovation, technology, and critical thinking skills) of *The Framework for 21st Century Learning* to scaffold literacy instruction?

Research Question 3 (RQ3): How are teachers in the Sunny Valley School District implementing formative assessments and student-driven self-assessments to drive instruction within *The Framework for 21st Century Learning*?

Examining how practitioners were addressing the challenges of aligning *The Framework* with the core curriculum ensured that the assistant superintendent, the principles, and the district leaders had the necessary tools to provide support as educators implement and align *The Framework*. Thus, the results of the study assisted in highlighting what elements of *The Framework* teachers in the Sunny Valley School District were confident implementing and the elements of the 21st century pedagogy that challenged instructional competency. Additionally, the results provided a blueprint for the district to improve professional development in the future.

Conceptual Framework

The theoretical framework for this study relied on the definition of framework as an agent of alignment (Antonenko, 2014). The theoretical framework also provided, as Antonenko (2014) cautioned, a harbor in which assumptions, theories, and knowledge may rest. A qualitative case study requires, as Merriam (2009) suggested, connecting theory between the problem, the purpose, the research question, and the data collected. Merriam insisted, “A theoretical framework underlies all research” (p. 66). Vygotsky’s

(1978) theory of cognitive development provided the conceptual framework that guided this study. Vygotsky (1978) asserted that interdisciplinary and holistic pedagogical practices are required to ensure a child's educational and emotional development (Gredler, 2012; Kozulin, 2011). "Vygotsky positioned education as a 'motor' a driving force of the child's development" (Kozulin, 2011, p. 196). Moreover, Vygotsky's (1978) sociocultural theory of learning theorized that learning transpires through collaborative and supportive occurrences framed within what the learner knows and does not know. Vygotsky's (1978) theory of cognitive development continues to hold true in the 21st century. Vygotsky's (1978) theory of cognitive development is a theory that reminds us that conceptual learning does not arrive in isolation in its "finished form" (Gredler, 2012, p.122); rather, higher mental functions occur over time and with collaboration.

A 21st-century literate learner must acquire a range of competencies within a multitude of literacies. Effective pedagogical practices in the 21st century must continue to address the holistic needs of the child, while adjusting curriculum to meet the changing learning needs of the learner. Hence, effective pedagogical practice must not fail "to create appropriate tasks, advance new demands, or stimulate the intellect through new goals" (Gredler, 2012, p. 114). An effective research design must consider how teachers are utilizing the cognitive development theory to provide learning environments that are rigorous, engaging, developmentally appropriate, and strive to provide holistic instruction ensuring personalized learning (Gredler, 2012: Kozulin, 2011).

Therefore, this study's research design was framed around Vygotsky's (1978) sociocultural theory of learning, with a lens to examine professional learning

collaboration, along with Vygotsky's (1978) cognitive development theory as a lens to understand how teachers in Sunny Valley School District were effectively implementing *The Framework*. Vygotsky (1978) believed that through social interactions and collaborations, learners come to understandings that are dependent on the context. As I observed teachers, I noted the culture and context that was created by each teacher and the students. As I questioned teachers' perceptions of their pedagogy that integrates the concepts of 21st-century literacies, I used the lens Vygotsky's (1978) theory imposes in investigating cognitive changes that propel implementation of *The Framework.* By asking the singular and quintessential qualitative research question *How,* I examined the culture and context using a single case study design that offered replication of data (Yin, 2014).

Review of the Literature

The review of literature established the foundation for this project study by identifying and connecting the broader problem of how teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical features of *The Framework,* and to explore how formative and student-driven self-assessments drive instruction within *The Framework* to the local problem in Sunny Valley School District. In the literature review, after establishing the study's conceptual framework, I demonstrate how the No Child Left Behind Act's (NCLB, 2001) focus on high-stakes assessment transformed pedagogical practices and jump-started the creation of the CCSS. Moreover, I show how the adoption of the CCSS, coupled with the focus on college and career readiness, led to 21st-century initiatives. I demonstrate how the adoption of the CCSS and *The Framework* have

transformed pedagogical practices that comprise cross-disciplinary literacy, including digital and media literacy; innovation and learning skills, which include creativity, critical thinking, communication, and collaboration; and life and career skills, which include leadership skills, self-motivation, flexibility, adaptability, and global awareness. I also address the perceived challenges facing educators as they evolve pedagogical practices to ensure students are prepared to meet the evolving demands of the 21st century. I then discuss the importance of quality professional development, as well as how the challenges posed by the implementation of *The Framework* have forced leadership to reevaluate professional development formats and options.

Prior to submitting the project study proposal for University Research Reviewer (URR) and Instructional Review Board (IRB) approval, I conducted an exhaustive search of current literature using peer-reviewed journals accessed through Walden University's library. I initially identified the keyword search terms, *21st-century learning* and *21st-century literacy*. I then conducted a Boolean search using various combinations of the terms: *21st-century learning*, *college and career readiness, student-centered learning*, *21st-century literacy,* and *21st-century skills*. I targeted sources published within the past 5 years using the following search engines to generate over 1,000 journals and books related to the project study: Education Research Complete, SAGE, EBSCO, ERIC, Thoreau, and Google Scholar. I also searched over 25 online websites, including U.S. Department of Education, Partnership for 21st Century Learning, National Education Association, Common Core State Standard Initiative, and the Sunny Valley School District.

Education is constantly evolving, creating new and unique challenges that impact teaching and learning. The United States strives to ensure quality education through quality instruction, accountability, and evolving educational reform (Ametepee et al., 2014; Brusic & Shearer, 2014; Kelley, 2013; Levin, 2015). Education in the late 20th century, highlighted by the NCLB (2001), focused on high-stakes accountability policies. The NCLB Act required states to develop challenging, coherent, and rigorous curriculum, but allowed states the flexibility to alter standards, assessments, and student educational plans (Ametepee et al., 2014; Miller & Lassmann, 2013; Rimes, 2015; Waks, 2013). Thus, competency-based learning, where learners demonstrate mastery based on standardized assessments, became the normalized educational infrastructure (Bray & McClaskey, 2015; Eng, 2015; Kivunja, 2014). A competency-based learning system regularizes the curriculum based on a standard timeframe in which all learning occurs within the confines of the school during defined hours (Kivunja, 2014; Little, 2013; Rimes, 2015). Curriculum design is based on learner equality in which all learners have access to the same curriculum centered on a standardized benchmark system (Kivunja, 2014; Little, 2013; Woodland & Parsons, 2013). In response to NCLB (2001), pedagogical practices concentrated on developing differentiated reading instruction, which attempted to bridge the gap between literacy and the content areas, ensuring students were prepared for standardized testing (Monge & Frisicaro-Pawlowski, 2014; Wagner & Dintersmith, 2015).

In the 21st century, literacy became a cross-disciplinary concept in which all teachers were held accountable for literacy instruction (Kivunja, 2014; Wagner &

Dintersmith, 2015). Literacy instruction was designed to increase the learner's ability to perform on standardized assessments. The dichotomy between teacher-centered instructional performance created vast learning gaps (Bray & McClaskey, 2015; Kaplan, 2013; Wagner & Dintersmith, 2015). Knowledge-based instruction increased learners' basic skills, but as the demands of the workforce progressed, learners' skills began to fragment and did not transition well into the changing workforce (Ametepee et al., 2014; Gunn & Hollingsworth, 2013; Little, 2013).

Common Core State Standards

Due to the perceived lack of rigor in American schools, as well as the inability to compete in the global workforce, school reformers called for change (Cornett, 2014; Wagner, 2012; Wallander, 2014). Reformers criticized education, stating that there was a lack of quality education for all in addition to lowered academic standards and achievement (Bray & McClaskey, 2015; Rimes, 2015; Wallander, 2014). Therefore, addressing the challenges of inequality, diversity and the skills necessary for the 21st century, the Council of Chief State School Officers and the National Governors Association (2010) worked in collaboration with educators to create the CCSS (Brusic & Shearer, 2014; Kist, 2013; Wallander, 2014). The CCSS are a set of common, well-defined goals and expectations that outline the knowledge and skills that will guarantee our students succeed through rigorous, high-quality educational opportunities for all learners (Kist, 2013; Rimes, 2015; Wallander, 2014).

The transition to CCSS requires a shift in curriculum, instruction, and assessment. Therefore, the CCSS enable students to enter the workforce as competitive candidates

capable of collaborating, problem solving, and utilizing technology (Rimes, 2015; Wallander, 2014). The goal of the CCSS is to enable all learners, no matter their background ability, to develop the skills to compete in college and the 21st-century workforce (Gunn & Hollingsworth, 2013; Hung et al., 2012; Tompkins, 2014). Through the creation of defined goals and clear expectations, educators can enhance each student's knowledge and skills; teachers are ensuring the creation of competitive candidates capable of collaborating, problem solving and utilizing technology (Brusic & Shearer, 2014; Hung et al., 2012; Tompkins, 2014). The CCSS support students to enter college and/or the workforce prepared to navigate diverse environments, the global economy, self-driven learning, and technology. The CCSS empower teachers to focus on developing enduring conceptual concepts and procedures that lead to mastery (Bean & Swan Dagen, 2012; Brusic & Shearer, 2014; Kelley, 2013; Rimes, 2015).

Evolution of Education

Basic lower-order skills, such as memorization, repetition, and basic comprehension, are less relevant in the age of rapid information (Kivunja, 2014; Wallander, 2014). Learners must be able to utilize higher-order thinking skills, such as critical and creative thinking, collaboration, and analysis (Gunn & Hollingsworth, 2013; Kivunja, 2014; Wagner & Dintersmith, 2015). Educational reformers face a plethora of challenges as they attempt to shift pedagogical practices to mirror the skills necessary for success in the 21st century. Due to shifts in technology, global expansion, and blending cultures, schools are now creating diversified learners and unique classroom cultures (Brusic & Shearer, 2014; Huber, Dinham, & Chalk, 2015; Thompson, 2012). As literacy

instruction is shaped by society's common usage, the way the community at large creates, shares, and accesses information, as well as the tools used to communicate, defines the structures prevalent in literacy instruction (Huber et al., 2015; Little, 2013; Tompkins, 2014). As multimodal methods of constructing, navigating, and negotiating information have permeated our literacy landscape, schools are faced with the necessity for ensuring 21st-century literacy skills (Antonenko, 2015; Brusic & Shearer, 2014; Huber et al., 2015).

Little (2013) asserted that the roles of learning and teaching have shifted, encouraging learners to be self-directed and requiring teachers to embrace the role of guide and facilitator. Therefore, it is imperative that educators embrace changing pedagogical practices that are culturally responsive, engaging, purposeful, relevant, and require higher-order thinking skills (Bean & Swan Dagen, 2012; Eng, 2015; Madden et al., 2012). Programs of instruction focused on comprehensive 21st-century learning environments will effectively develop competent learners who can take risks, have a growth mindset, use higher-order thinking skills, communicate, evaluate, and synthesize information across multimodal formats (Brusic & Shearer, 2014; Eng, 2015; Jones, 2015). Effective practitioners of *The Framework* will establish growth-oriented learning environments that focus on student-driven instruction, personalization, and cultural responsiveness (Brusic & Shearer, 2014; Cviko et al., 2014). Twenty-first-century literacy skills are critical to ensure learners are secure in their ability to adapt and flexibly meet the advancing demands of their personal lives, workplace, and global economy (Antonenko, 2015; Cviko, McKenney, & Voogt, 2014).

Shifting Landscapes

Twenty-first-century learners have access to a large amount of information and communication options, which allows them to produce, share, and obtain information in many different formats across a global landscape (Demski, 2012; Jones, 2015; Ornstein & Eng, 2015). Technological tools are the vehicles that enable learners to utilize production and social networking programs, such as Prezi, Blogster, Facebook, Instagram, Twitter, and VoiceThread (Jones, 2015; Kivunja, 2014). These tools enable learners to engage in authentic and purposeful communication (Demski, 2012; Henrkisen, DeSchryver, & Mishra, 2015; Jones, 2014). According to Demski (2012), 21st-century literacy skills reflect the way learners communicate socially and professionally and mirror the learning platforms they use for unified collaboration. Authentic learning experiences reflect the tools utilized in real-world scenarios. Therefore, 21st-century learning must utilize advancing technological tools and multimodal platforms (Kivunja, 2014; Much, Wagener, Breitkreutz, & Hellenbrand, 2014). The integration of technological tools will allow the 21st-century learner to navigate *The Framework* with authentic purpose.

Encouraging socially relevant literacy experiences allows learners to become active participants in the transference of global information and allows for collaboration, ownership, and purposeful learning experiences (Henrkisen et al., 2015; Kong, 2014; Monge & Frisicaro-Pawlowski, 2014). Socially responsive practices encourage educators to view technology tools as a gateway to enhancing 21st-century literacy. Through integrated instruction, students are empowered to collaborate, evaluate, think, and

generate skills essential for the 21st century (Eng, 2015; McAdams & Gentry, 2014; Much et al., 2014; Thompson, 2012). A balanced 21st-century literacy program inspires students to utilize technology for authentic and purposeful learning experiences, thus engaging students in reflective and self-motivated learning opportunities (Jones, 2014; Ornstein & Eng, 2015; Tompkins, 2014). The integration of technological tools and multimodal platforms requires practitioners to shift the landscape of teaching and learning. The shift in pedagogical practices generates opportunities for the social and technological landscape to influence and mold the 21st-century learning process. Twenty-first-century instructional shifts can assist in redefining the role of teaching and learning so that learners engage in authentic learning experiences (Monge & Frisicaro-Pawlowski, 2014; Ornstein & Eng, 2015; Ricci, 2015).

Digital Navigators

Literacy in the 21st century has evolved to include many innovative methods of communication. Therefore, it is imperative that students are prepared to effectively use beliefs, ideas, and information as critical thinkers, fervent readers, skillful researchers, and principled users of information (Eng, 2015; Kong, 2014; McGinnis-Cavanaugh, Huff, Ellis, Ellis, & Rudnitsky, 2015). The digital age has affected every aspect of the social and learning landscape, impacting instruction in multifaceted ways. The new generation of learners is plugged in, digitized, and immersed in technology (Greene, Seung, & Copeland, 2014; Gurung & Rutledge, 2014; Ritzhaupt, Liu, Dawson, & Barron, 2013).

The educational world is in flux as educators attempt to meet the learning needs of the digitized learner. The integration of technology into the curriculum is problematic, as learners are often limited to computer gaming, predetermined teacher-driven activities, and simplified information retrieval (Blackwell, Lauricella, & Wartella, 2014; Gurung & Rutledge, 2014; Kong, 2014). Since the CCSS strive to enable students to access, evaluate, and manage information, educators are increasingly responsible for supporting learners, as they utilize technology as a tool to manage, create, and evaluate information (Cornett, 2014; Greene et al., 2014; Kivunja, 2014; Wallander, 2014). As students navigate myriad forms of digital literacies, teachers must expand students' digital knowledge through experiences with 21st-century literacy. Through the integration of digital literacy, teachers can foster students' authorial responsibility as reviewers and consumers of information (Blackwell et al., 2014; Gurung & Rutledge, 2014; Ricci, 2015). In order to meet every learner's unique needs, the CCSS developers stressed the importance of creating learning experiences that enhance 21st-century skills (Gurung & Rutledge, 2014; Jones, 2015). Such skills will help the students to integrate technology through engaging, purposeful, and authentic learning (Blackwell et al., 2014; Cornett, 2014; Kist, 2013).

According to Ritzhaupt et al. (2013), the digital divide has created multilayered challenges related to technology access, technology usage, and educators' abilities. Many teachers suffer from a deficiency of digital knowledge; thus, educators are ill prepared and unable to integrate current technologies into the curriculum (Blackwell et al., 2014; Ritzhaupt et al., 2013). Furthermore, teachers have limited access to quality professional

development to assist infusing technology into instruction effectively (Gurung & Rutledge, 2014). The dynamic relationship that exists between digital learners and current practices requires educators to increase their ability to access existing technologies and to create opportunities beyond skill and drill applications. Such changes would assist in bridging the digital divide (Blackwell et al., 2014; Gurung & Rutledge, 2014; Ritzhaupt et al., 2013).

21st-Century Innovation

Twenty-first-century learning requires instructors to abandon the concept of literacy as a set of isolated skillsets and acknowledges that literacy varies by context and is influenced and defined by the people and technology involved (Bean & Swan Dagen, 2012; Kong, 2014; Monge & Frisicaro-Pawlowski, 2014). Dynamic and innovative technological alterations have impacted teaching and learning, encouraging integration and empowering learners to utilize student-driven instruction and higher-order thinking skills. Learners are, therefore, able to access, synthesize, and contribute to information literacy (Kim, Kim, Lee, Spector, & DeMeester, 2013; Wagner & Dintersmith, 2015). Consequently, innovation must be at the forefront of educational paradigms, as well as the acceptance of a multitude of communication styles, reflection on past practices, and the integration of technology.

For innovation and 21st-century learning to occur, educators must identify and recognize the role that literacy plays in the world, and they must understand the manner in which literacy defines an individual's life (Kim at al., 2013; Ritzhaupt et al., 2013). As 21st-century educational initiatives continue to influence instruction, curriculum, and

innovative approaches, educators must reflect upon current and past practices to refine pedagogical practices (Kellems et al., 2015; Monge & Frisicaro-Pawlowski, 2014). As educators move toward broadening their understanding of literacy, they must recognize the manner in which people produce, communicate, and navigate information, as well as how this affects curricular practices (Jones, 2015; Kopcha, 2012; Parker & Lazaros, 2014). As educators transition to being facilitators, they must prepare to meet the demands of a student-driven teaching and learning model (Kopcha, 2012; Ornstein & Eng, 2015).

Creating 21st-century learners begins with developing independent learners that gain a growth disposition that allows them to understand their learning responsibilities and learning dispositions (Kopcha, 2012; Monge & Frisicaro-Pawlowski, 2014; Ornstein & Eng, 2015). Accordingly, technological tools support the development of 21st-century literacy, as well as student-driven instruction, which allows students to access, evaluate, and obtain information (Ametepee et al., 2014; Monge & Frisicaro-Pawlowski, 2014). Through use of technological tools, students can take part in innovative projects, allowing learners to demonstrate knowledge and to develop collaboration, evaluation, and problem solving skills. Students take an active role in their learning when opportunities are authentic, purposeful, and engaging, allowing for student-driven applications, discussions, and products (Bean & Swan Dagen, 2012; Monge & Frisicaro-Pawlowski, 2014).

Challenges Facing Educators in the 21st Century

According to Kereluik, Mishra, Fahnoe, and Terry (2013) "There is a feeling of distinct disjuncture between centuries past and the one into which we are now emerging, and that the educational demands of this new century require new ways of thinking and learning" (p. 127). Educators are required to contemplate instructional practices, personal experiences, and the complexity of the world they are preparing students to enter. The education of digital natives is immensely different when compared to the generations of the past. Therefore, it is imperative for educators to broaden their educational repertoire to include 21st-century skills (Ametepee et al., 2014; Cornett, 2014; Little, 2013; Saavedra & Opfer, 2012).

In working to improve 21st-century skills, educators must realize that although technology and globalization have shifted pedagogy, the core ideas and goals of education have not changed (Bray & McClaskey, 2015; Kereluik et al., 2013). In a sense, educators are experiencing a paradox in which the core ideas of education remain the same, but the rapidly changing educational initiatives, technology, and *The Framework* have created an environment of confusion and misinformation (Blackwell, Lauricella, Wartella, Robb, & Schomburg, 2013; Kellems et al., 2015). For many educators, this paradox has left them in a state of confusion, not knowing how to integrate core educational ideas with new innovative techniques and technological tools. Therefore, disciplinary and domain knowledge are vital to ensure a teacher's ability to provide adequate opportunities for students to think critically, to evaluate information, and to work collaboratively (Ametepee et al., 2014; Blackwell et al., 2013; Tompkins, 2014).

The greatest challenge resides in teachers' attitudes and beliefs toward *The Framework*, in addition to the integration of technology in their classroom, which greatly impacts curricular decisions and the manner in which students engage with instruction (Gibson et al., 2014; Kellems et al., 2015).

As practitioners begin to redefine their roles, they face many challenges while embracing a student-centered approach to learning (Ametepee et al., 2014; Gibson et al., 2014; Monge & Frisicaro-Pawlowski, 2014). Encouraging practitioners to embrace pedagogical practices that are influenced by current cultural phenomena, particularly in the 21st-century disciplines, is of vital importance to ensuring that students are prepared for the evolution of the 21st century and beyond (Leu et al., 2015; Parker & Lazaros, 2014; Sharp, 2015). However, the adoption of *The Framework* appears to be slow and spotty, riddled with broad concepts that are confusing and prone to misinterpretation (Cviko et al., 2014; Kellems et al., 2015; Oleson & Hora, 2014).

One of the essential factors influencing teachers' knowledge, beliefs, and perceptions is job-embedded professional development. Through exploration of different pedagogical techniques, teachers will accumulate a catalogue of knowledge allowing for the development of authentic experiences. Furthermore, the data will allow them to alter practices and develop the skills essential to developing a 21st-century learning environment (Little, 2013; Oleson & Hora, 2014; Parker & Lazaros, 2014; Saavedra & Opfer, 2012).

Professional Development

Contemporary learning perspectives are broad and ever changing, forcing

institutions of learning to reevaluate their current pedagogical practices (Leu et al., 2015; McGinnis-Cavanaugh et al., 2015). To provide our 21st-century learners with quality instructional opportunities, educators must develop their knowledge and ability to collaborate, inquire, problem solve, think critically, and evaluate. The pedagogical shift has prompted dynamic alteration to the classroom learning environment, focusing on personalizing learning for all and empowering educators to make informed decisions utilizing *The Framework* (Ametepee et al., 2014; Desimone, Smith, & Phillips, 2013; Messina & Tabone, 2012; Sharp, 2015). The shift in practice is paramount to learners' success. Therefore, educators must have access to intensive professional development that assists them in effectively employing *The Framework*. As educators transform their practices, it is imperative to maintain a growth mindset, as well as to embrace a culture of continued learning, capacity, and risk taking (McAdams & Gentry, 2014; Sharp, 2015; Wallander, 2014).

Professional development supports teachers and administrators as they incorporate *The Framework* into their school and classroom environments. All systems of professional development should be aligned so that teaching and learning include 21st-century skills, standards, curriculum, instruction, and assessments (Desimone et al., 2013; Lassonde & Tucker, 2014; McAdams & Gentry, 2014; Sharp, 2015). Successful professional development initiatives must guarantee that teachers appreciate and support the usage of *The Framework,* as well as learn how to integrate this framework into the classroom. Educators must encourage collaboration among learners, while utilizing support staff, and technological tools (Lassonde & Tucker, 2014; McAdams & Gentry,

2014; Sharp, 2015).

Based on current literature, it is apparent that the manner in which teachers implement *The Framework* has the potential to gravely impact teaching and learning (Burks et al., 2015; Tompkins, 2014; Trilling & Fadel, 2009). Conceptually, it is essential to enact change. To influence change, however, teachers need to develop an understanding of teaching and learning in the 21st century. Educators must also enhance their perceptions and use of technology, integrated both informally and formally, as well as refine their pedagogical choices. Therefore, Fullan's (2008) concept of second-order change, as well as systems-thinking and Argyris and Schon's (1974) theories of action, are crucial to acquiring goals and converting research into 21st-century practices. Fullan (2008) expressed the importance of investing in capacity building through the establishment of leadership positions and professional learning opportunities. Argyris and Schon (1974) believed that people are responsible for their action through design and are therefore responsible for the outcomes.

Through the adoption of a system of change and action, educators will have the support necessary to influence the changes required to bridge the gap between outdated practices and the *The Framework.* Twenty-first-century learners require a new form of literacy to negotiate, navigate, and communicate across multiple platforms. Twenty-first-century literacies force learners to sift through vast amounts of information to analyze, to evaluate, and to create multiple forms of communication (Brown & van Tryon, 2010; Cornett, 2014; Sharp, 2015; Wallander, 2014). The new notion of literacy shifts the perception of teaching and learning across new learning landscapes.

Implications

The challenges educators face in implementing 21st-century skills are well established within current research (Leu et al., 2015; Little, 2013; Wallander, 2014). Teachers' abilities to implement *The Framework* varies widely, but effective implementation is necessary for learners to be prepared for the demands of the 21st century.

The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning*. Using a qualitative case study methodology, I gathered data from participants through the completion of both a questionnaire and an observation. Based on the findings, the district was able to ascertain how teachers were addressing the challenges presented by the implementation of *The Framework*. The findings provided stakeholders and district administrators the guidance needed for teachers to acquire the essential understandings and knowledge to create programs of literacy instruction. This case study provided the necessary data needed for me to create a professional development project that allowed teachers to implement *The Framework* effectively. The project focused on teachers developing a common language, enhancing innovative practices, and varying assessment strategies, thus ensuring students are prepared to succeed in the 21st century (Little, 2013; McAdams & Gentry, 2014; Oleson & Hora, 2014).

Social Change

The goal of this study was to contribute to the limited research on *The Framework*. Due to globalization and advancements in technology, there is considerable interest in the topic of 21st-century learning, because it has implications related to economic sustainability and preparing learners to meet the demands of the 21st century. *The Framework* became even more relevant with the adoption of the CCSS (Gurung & Rutledge, 2014; McAdams & Gentry, 2014). Therefore, policy makers and district leaders benefited from the descriptive data obtained from the nine teachers in this study. This case study provided the information needed to design a professional development option that enhanced teachers' ability to effectively implement *The Framework*.

Summary

The Framework is essential to the development of core competencies that enable learners to successfully navigate the demands of the future. I identified the necessary skills needed to become college and career ready in the 21st century and defined 21st-century literacies. I also identified the local problem, rationale for choosing the problem, significance of the problem, guiding questions, and a review of the literature. I expounded upon the methodology, participants, data collection, and analysis procedures. I conducted a qualitative case study by selecting participants within the Sunny Valley School District. Based on the findings, the district was able to ascertain how teachers were addressing the challenges presented by the implementation of *The Framework*.

Section 2: The Methodology

Introduction

The purpose of this section is to define the methodological views of this study and to authenticate the methodology approach that structured the study's findings. In this section, I describe the research design used to achieve the primary goal of this study. The purpose of this qualitative study was to explore how three kindergarten teachers, three first-grade teachers, and three second-grade teachers from the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework*. The small sample size allowed me to gather comprehensive and realistic evidence and examine teachers' implementation of *The Framework*.

While the Partnership for 21st Century Learning (2015) has defined and outlined the skills necessary for success in the 21st century and beyond, research has demonstrated educators are continuing to use outdated pedagogical practices (McAdams & Gentry, 2014; Tompkins, 2014; Wagner & Dintersmith, 2015). The Sunny Valley School District is a *Race to the Top* district, having a federal grant that rewards participating districts for establishing innovative and effective educational programing. This program focuses on ensuring students are ready to meet the dynamic demands of the 21st century. The Sunny Valley District is invested in providing quality professional development to ensure that teachers are prepared to implement *The Framework*. The diversity and vast size of the district impacts the consistency and quality of the professional development being offered

and the willingness of teachers to participate in *The Framework* (Smith, 2016). As such, teachers' implementation of *The Framework* varies within grade levels and schools.

Researchers have demonstrated that the needs of the 21st-century learner are immensely different from the 20th-century learner (International Literacy Association, 2016; Leu et al., 2015; McGinnis-Cavanaugh et al., 2015; Wagner, 2012). As the Partnership for 21st Century Learning (2015) indicated, educators who enable students to access, share, and create information for vast global audiences across a multitude of platforms and for a variety of purposes, are effectively preparing students for the demands of the 21st-century workforce. Unfortunately, many of the pedagogical practices today disengage students from core 21st-century skills and focus them on skills-based learning tasks (Dede, 2009; Tompkins, 2014; Wagner & Dintersmith, 2016). This case study allowed me to examine how the participants were addressing the challenges presented by the implementation of *The Framework* (Creswell, 2012; Yin, 2003). The data collected allowed me to provide recommendations for improved district professional development, coaching, and instructional shifts (Creswell, 2012).

Educators are primary agents of change, blending best practices with the core curriculum within *The Framework*. Teachers' instructional knowledge and pedagogical practices are key factors in effectively implementing *The Framework*. This study explored how teachers in Sunny Valley School District were using collaborative and supportive experiences to address the challenges presented by the implementation of *The Framework*. Vygotsky's (1978) theory of cognitive development informed the research design. Vygotsky (1978) asserted that learning occurs through pedagogical practices that

account for holistic understanding of the learner, which allows for personalized learning in collaboration with the sociocultural environment, from the zone of proximal development to mastery of tasks (Gredler, 2013). Therefore, Vygotsky's (1978) theory provided the lens through which I observed the teachers to understand how they were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework,* while identifying the areas of *The Framework* that were not being addressed.

Description of the Qualitative Research Design

Creswell (2012) described qualitative research as an inquiry-based, observational exploration conducted in the natural setting. One primary goal of qualitative research is to obtain an understanding of the problem from the participants' perspectives without bias or assumption (Merriam & Tisdell, 2016). The qualitative researcher uses the data collected to identify themes and trends, resulting in an enhanced perception of the central phenomenon (Creswell, 2012). The researcher is an essential instrument in the data collection process; thus, qualitative researchers use multiple methods rather than one single source. Qualitative researchers analyze data collected from interviews, observations, and public documents to make sense of phenomena by interpreting the views of the participants (Merriam & Tisdell, 2016). Qualitative researchers utilize inductive reasoning skills to build knowledge from the ground up to organize data into patterns, categories, and themes (Creswell, 2012). Therefore, I chose a qualitative research method due to the flexible nature of the data collection process and the ability to

access participants' views (Creswell, 2012; Merriam & Tisdell, 2016). I learned about the problem from the participants and utilized collected data to establish themes and trends, which resulted in an improved understanding of the central phenomenon (Merriam & Tisdell, 2016).

Justification of Qualitative Case Design

Case study research provides a snapshot of the phenomenon in its natural setting (Creswell, 2012). When the researcher's goal is to explore modern, authentic situations and to examine problem-based issues, a qualitative case study is the best choice (Creswell, 2012). Thus, the case study is best selected when the researcher's goal is to create an infrastructure for which future researchers can make comparisons with their own circumstances. A qualitative case study is justified because the goal of this study was to explore how teachers were using collaborative and supportive experiences to address the challenges presented by the implementation of *The Framework*. A case study must take place in a naturalistic setting. Therefore, I collected data from participants in their natural school setting through a questionnaire and in-class observation (Antonenko, 2014; Creswell, 2012). Gathering multiple sources of data from multiple participants enabled me to create a thick description of how teachers in Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework*, thus ensuring findings were credible and trustworthy (Merriam & Tisdell, 2016). The case study provided a type of complete understanding gained through

thick and rich description. Thick description allowed me to interpret the meaning of descriptive data, such as cultural norms, beliefs, values, attitudes, and motives (Merriam & Tisdell, 2016). A case study allowed me to comprehend the phenomenon from the participants' perspectives and use the collected data to establish themes and trends, resulting in an improved understanding.

Questionnaires were an appropriate data collection method for this case study because I gained insight from multiple participants who have knowledge of a common subject (Merriam & Tisdell, 2016). The Sunny Valley District is invested in ensuring that students are prepared for the 21st century and beyond through the integration of *The Framework*. Therefore, the questionnaire (see Appendix C) allowed me to collect specific information related to how the Sunny Valley teachers were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework* (Creswell, 2012).

I also created an observational checklist (see Appendix B) based on the elements within *The Framework*, Vygotsky's (1978) sociocultural theory of learning, and incorporated the effective literacy principles discussed by Tompkins (2014). The literacy principles identify essential elements of an effective 21st-century literacy framework (Tompkins, 2014). According to Tompkins (2014), the areas of literacy that align with *The Framework* include collaboration, digital literacy, critical thinking, and problem solving, which provide learners a synchronicity between knowledge-based learning and

authentic application. I used the observational checklist to conduct an observation of participants' instructional practices. The observation assisted me in observing teachers using collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to utilize formative and student-driven self-assessments to drive instruction within *The Framework*.

Participants

I used a purposive sample from two elementary schools within the Sunny Valley School District. Yin (2014) suggested purposive sampling when the goal is to gather comprehensive data from participants in their natural setting. I selected participants based on grade level and number of years taught. I ensured that there were three participants from each grade level with varied years of experience. Furthermore, participants were employed as teachers in Sunny Valley School District and they agreed to sign the participation consent form. I selected nine elementary classroom teachers (three kindergarten teachers, three first-grade teachers, and three second-grade teachers) to participate in the study. All nine teachers completed the questionnaire and allowed me to conduct an observation in their classroom. I selected the participating schools based on similar demographic characteristics between both the staff and the student populations. Although the selected schools were similar, differences in leadership, professional development, and location may have impacted the teachers' implementation of *The Framework*. Therefore, teachers may have had varied levels of experience, exposure, and knowledge of *The Framework,* creating differences in the implementation.

Justification for Number of Participants

The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework*. To develop a deep understanding of the phenomenon, it is better to purposefully select a few participants within each site (Creswell, 2012; Yin, 2014). I purposefully selected nine teachers to participate in this qualitative inquiry; thus, I obtained detailed information and explored teachers' experiences and attitudes. The small sample size allowed me to obtain comprehensive and realistic evidence to explore how teachers were implementing collaborative and supportive experiences to address the challenges presented by the implementation of *The Framework*.

Procedure for Gaining Access to Participants

To protect the validity and ethical integrity of the study, I secured permission to conduct research from Sunny Valley School District, as well as from Walden University's IRB approval #02-22-17-0428344. I emailed a request letter for participation to the Sunny Valley School District's assistant superintendent (see Appendix B). Once the system provided approval, I contacted the principals of the selected sites to share the study's purpose and outline. I also secured permission from the selected schools' administration teams and worked in collaboration to select participants that met the study criteria. Participants were employed as teachers in the Sunny Valley School District and

agreed to sign the participation consent form. I acquired permission from the site schools and conducted an informational meeting with the teaching and administrative staffs to provide an account of the goal, purpose, and timeline of the study. Candidates interested in participating filled out a participation form in which they provided their name, numbers of years taught, and their current grade level. Participants had the freedom to ask questions pertaining to the provided information. I compared the names of potential candidates against the criteria and selected nine participants, whom I notified of their selection through an email confirmation.

Establishing a Researcher-Participant Relationship

I sought to understand the phenomena from the standpoint of the participants. Therefore, it was imperative that I developed a trusting relationship with participants, thus increasing the likelihood of honest and authentic responses (Merriam & Tisdell, 2016; Yin, 2014). I conducted an initial meeting for selected participants and sent out follow-up emails and letters to assist in establishing relationships. The administration did not have any role in the selection process nor were they invited to meetings. Participants' selection was kept confidential, and the majority of the communication occurred through nondistrict email exchanges. I openly communicated the intent of the study and role of the participants. I provided each participant a consent form that described the study, a list of any potential risks, an explanation of the voluntary nature of the study, and a confidentiality statement. I provided the participants the consent forms at the initial meeting and asked them to review and return them within a 48-hour period. Both paper and email forms were provided. Each participant could choose to return the form to me

through an email exchange using an out-of-district email account or mail the form to me using the prestamped, self-addressed envelope provided. During the initial meeting, I explained the goal of the study, the role of the researcher, and a review of the ethical expectations, namely confidentiality, honesty, and integrity. Each participant and I worked in conjunction to structure the timeline for the questionnaire completion and to set a date for the classroom observation (see Appendix B).

Ethical Treatment of Participants

A qualitative study required me to establish a trusting relationship with each participant to obtain an accurate description of the central phenomena (Creswell, 2012). It was imperative that I protect participants' confidentiality and anonymity throughout the study (Merriam & Tisdell, 2016). For this qualitative case study, I took all necessary steps required by the IRB to protect participants' physical, psychological, and emotional health. All selected participants were 18 years of age or older and signed a consent form before data collection. I provided participants with an electronic and paper copy of the consent form and asked them to review, sign, and return it to me within 48 hours. Participants could return the consent form through a nondistrict email or use the prestamped, self-addressed envelopes. The consent form stated that they were aware of the purpose of the study, procedures, voluntary nature of the study, risks and benefits of participating, confidentiality, and contact information. Additionally, I informed participants that they were free to discontinue participation at any time. I obtained permission from Sunny Valley School District's assistant superintendent and Walden's IRB before beginning the data collection. Participants, their sites, and any identifying

factors were kept confidential. I will keep research data at my home in a locked file, only accessible by me, for a 5-year period following the study.

Data Collection

I set the parameters for this qualitative study, collected data from multiple sources, utilized the observational checklist, and established a protocol for recording information (Creswell, 2012). I purposefully selected two sites and nine participants. I then established a timeline for questionnaire and observation completion within each participant's natural setting. I triangulated questionnaire and observational data with information from the district's *2020 Strategic Vision* document available on the Sunny Valley School District's website. Through triangulation of data, I was able to identify the themes and trends that emerged during data analysis (Merriam & Tisdell, 2016).

Justification for Data Collection Methods

Within the established timeframe, I administered and collected data from the questionnaire and the classroom observation. Participants received the questionnaire via email and were required to complete and return it within a 2-week period. Once the questionnaire was completed and returned, I scheduled a classroom observation. I assigned participants a code that identified their questionnaire and observation. Within a 4-week period, I used the checklist to observe all participants in their natural settings and documented how they were addressing the challenges of *The Framework* (Merriam & Tisdell, 2016). A qualitative study's method of data collection must connect to the central question (Antonenko, 2014; Creswell, 2012). As the goal of the study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative

and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning*, it was imperative that the participants had the opportunity to share their understandings and experiences within their natural setting (Merriam & Tisdell, 2016). I used the questionnaires and observations to compile information about how the participants were using collaborative and supportive experiences to address the challenges presented by the implementation of *The Framework*. I built a thick description from the data collected from the questionnaires, as well as from the observations.

Data Collection Procedures

I ensured qualitative credibility and trustworthiness by employing systematic procedures in data collection and analysis (Creswell, 2016). This case study was conducted over a period of 2 months during the months of March and April. Conducting the study during the months of March and April ensured participants had established routines, class structures, and systems of collaboration and support that allowed instruction to occur. The peer debriefer assisted in establishing credibility and trustworthiness by examining all the data for logical development of themes, results, conclusions, and recommendations.

Selected participants completed the questionnaire before the classroom observation. I collaborated with each participant to schedule a classroom observation. I observed all participants during their scheduled time in their natural setting. Each observation lasted approximately 35 to 45 minutes. I used field notes, an observational

checklist, and voice record to ensure accuracy of the data collection. Additionally, I transcribed all observational notes to minimize confusion between multiple participants' responses. At the conclusion of the observations, I confirmed participants' email addresses and asked permission to contact them as needed to ensure my interpretations reflected the participants' experiences (Creswell, 2012). To ensure the research findings properly portrayed the participants' implementation of *The Framework*, I provided a summation of the data and conclusions to each participant at the end of the research phase (Creswell, 2016). I asked that participants examine the draft of the findings to ensure that I maintained confidentiality and accurately portrayed participants' implementation of *The Framework.*

Systems for Keeping Track of Data

I collected the data utilizing the Observational Survey and Questionnaire to construct patterns, categories, and themes (Creswell, 2016). I used Computer Aided Textual Markup and Analysis (CATMA), a Computer Assisted Qualitative Data Analysis Software (CAQDAS), to organize and categorize the data. To protect the confidentiality of the participants, I removed all identifying information from the questionnaires and observational field notes, as well as kept all documents in a sealed envelope. I also transcribed all field notes into a Word document, which I saved and filed under a passcode for which only I have access (Creswell, 2012; Yin, 2014).

Data Analysis

Procedures

Qualitative data analysis is an inductive process that requires the researcher to reflect, revise, question, and interpret study data (Merriam & Tisdell, 2016). Utilizing Creswell's six-step qualitative approach, I organized and prepared the data for analysis; read through all the data; coded for how teachers were using collaborative and supportive experiences to address the challenges presented by the implementation of *The Framework;* generated a description of the settings, participants, and themes; developed a narrative to describe and connect themes; and interpreted the meaning of the data (Creswell, 2012). The analysis processes encompass documenting, uncovering, and describing characteristics of a small group (Creswell, 2012).

I developed the case study through systematic research, analysis, and a final description from collected and analyzed data. I organized the data by typing up field notes and reflective journal entries immediately following the classroom observations, as well as by using a CAQDAS, such as CATMA, to transcribe observational checklist notes and questionnaire responses. I recorded general thoughts about the data that enabled me to gain a general understanding of the overall meaning (Merriam & Tisdell, 2016). I compared information from the observations with the information collected from the questionnaires to locate common ideas, comments, or themes (Creswell, 2016). I broke down the reoccurring themes into chunks and grouped them into categories (Merriam & Tisdell, 2016). I utilized coding to construct categories that demonstrated reoccurring patterns focused on how teachers were using collaborative and supportive

experiences to address the challenges presented by the implementation of *The Framework*, which allowed me to use thematic data analyses to sort, categorize, and code data (Antonenko, 2014; Creswell, 2012). I combined the categories to create generalized themes that allowed a descriptive narrative to emerge, which provided a detailed discussion of several themes and sub-themes. Lastly, I analyzed the data using multiple sources of information, such as the literature review, classroom observations, and the questionnaire responses (Merriam & Tisdell, 2016). The peer debriefer also reviewed data analysis for logical development of coding and themes, as well as for findings and recommendations. The peer debriefer was required to sign a confidentiality agreement to ensure the confidentiality of the data.

Qualitative Credibility and Trustworthiness

I incorporated validity strategies to ensure the credibility and trustworthiness of the study and confirmed that the findings aligned with the study's purpose. Effectiveness of the data is determined by the credibility, trustworthiness, and transferability of the instrument. Validity is determined by the extent that the researcher can extract accurate conclusions from the data (Creswell, 2012). I implemented several strategies to ensure validity throughout this study. I used triangulation (defined as multiple sources of data) to ensure validity (Merriam & Tisdell, 2016). I used an auto-recording device during classroom observations, triangulated data to justify findings, peer debriefing to ensure study findings were credible and trustworthy, and reflective narrative to clarify bias and demonstrate how my findings were influenced by my views and opinions (Creswell, 2016). I provided each participant with a summary of the findings and instructed them to

read the summary and verify the accuracy of the descriptions. I safeguarded qualitative reliability by checking transcripts for accuracy, by writing and maintaining clear code definitions, and by constantly comparing data to the code definitions (Creswell, 2012). External validity is not a threat, as the results can be transferred to other populations.

To ensure transferability, I provided a clear description of the context so that the reader might transfer results to similar settings. The participants had the opportunity to read a draft of the findings, including their own data used in the analysis, to check for accuracy. I limited contact with the selected participants before, during, and after the timeframe of the study to ensure credibility. I kept the participants informed through each phase of the study. Furthermore, I continuously informed the participants that the purpose of the study was not to establish a generalization, but to establish transferable evidence based on the exploration of specific contexts and selected participants (Creswell, 2012). Credibility is established by ensuring confidence in the findings. As the researcher is the instrument in the qualitative research, I established conformability by maintaining neutrality (Guba & Lincoln, 1994; Merriam & Tisdell, 2016).

Discrepant cases could occur when a participant's ideas differ from the overall body of evidence if the researcher encounters unexpected or contradictory data (Creswell, 2012). While these data could reveal my subjectivity or biases, they add depth and complexity to the study by broadening the views and adding complexity to my findings. If a discrepant case is found I would further explore contradictory perception, report the findings, and then follow up with member checking to clarify possibly misunderstood

responses. I will also examine any of the discrepant cases to determine if they could lead to new perspectives (Merriam & Tisdell, 2016).

Conclusion

The goal of this study was to promote the acquisition of pedagogical practices that prepare students for the demands of the 21st century. Therefore, the selected methodology allowed me to gather the necessary data to determine how teachers were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework.* The data collection process required me to use questionnaire and observational data to create a thick description of the findings. I purposefully selected nine teachers from two sites within the Sunny Valley School District. Teachers completed a questionnaire and were observed in their natural setting. I transcribed and submitted the data to a CAQDAS, which allowed me to identify and code themes, chunks, and categories. Based on the themes, categories, and ideas, I created generalized themes that allowed for a descriptive narrative to emerge.

Findings

The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning.* The primary form of

data collection was generated from the forty-two item questionnaire and a classroom observation. The data collection process required selected participants to complete the questionnaire, as well as agree to allow me to observe a lesson during a scheduled time in their natural setting. Each observation took approximately 35 to 45 minutes. During each observation session, I took field notes, completed an observational checklist, and recorded audio to ensure the accuracy of the data collection. According to Saldana (2013), the process of descriptive analysis allowed me to extract a textured narrative of the participants' experiences and ideas. Utilizing this analysis technique, I described how each participant experienced and viewed the implementation of *The Framework* through ideas, context, and situations (Saldana, 2013). Moreover, the texturized description of the themes provided a clear picture each participant's experiences, understandings, and ideas (Creswell, 2016).

The descriptive thematic analysis provided an in-depth understanding of the teachers' perceptions regarding *The Framework* (see Appendix D). Through thematic analysis, I was able to organize the research findings to reveal the broader themes and capture the observable experience of the participants. Moreover, I conducted the data through the lens of Vygotsky's (1978) sociocultural theory of learning, along with Vygotsky's (1978) cognitive development theory, to understand how educators in Sunny Valley Schools were effectively implementing *The Framework*. As I observed each teacher, Vygotsky's (1978) theories created the framework for investigating cognitive changes, contextual learning, and environmental structures that allowed for successful implementation of *The Framework*. The remainder of this section will summarize the

findings based on the themes and sub-themes that emerged during analysis (see Appendix D).

Findings for RQ1

RQ1 asked, "How are elementary teachers in the Sunny Valley School District implementing collaborative and supportive reciprocal teaching and learning to instruct *The Framework for 21st-Century Learning*?" *The Framework* encompasses a set criteria, which includes digital and media literacy; learning and innovation skills, which include creativity, critical thinking, communication, and collaboration; and life and career skills, which include leadership skills, self-motivation, flexibility, adaptability, and global awareness. These 21st-century skills are important to a student's future performance and success.

Theme One: Problem-Based Learning (PBL). Sunny Valley City School District strives to empower, inspire, and embrace students to ensure they are ready for tomorrow. The district created a culture that encouraged their educators to collaborate, pursue excellence, and make a difference. The *2020 Strategic Vision* was set in motion in 2010 with the goal of encouraging educators to reflect on prior and current practices. Additionally, the plan involved allocation of resources, support staff, and professional development options, which provided educators with the knowledge and skills to update pedagogical practices through purposeful and authentic design.

Based on the questionnaire data, each of the teachers provided a learning environment that focused on inquiry-based learning opportunities. Teacher J described the ideal environment as one in which risks are taken and one in which mistakes are

opportunities for learning and celebration. Building on the theme of learning environments, Teacher F indicated that choices are critical for the learning environment, especially in areas of representing student work as a display of learning. Teacher F suggested that the school environment should include PBL, one of *The Framework's* fundamentals. Problem-based learning is a student-centered pedagogical practice in which educators design learning experiences that encourage knowledge acquisitions through inquiry, collaboration, and communication (Bean & Swan Dagen, 2012). Teacher A shared several examples of a PBL designed to encourage students to question, research, and utilize technological tools/resources to solve teacher-posed open-ended questions.

The PBL design was a theme that was constant and consistent across the majority of the teachers. Teacher B highlighted PBL as the avenue in which she "encouraged students to find evidence to support their ideas and to prove their thinking." Eight of the nine teachers designed and implemented PBL to empower students to utilize creativity, critical thinking, communication, and collaboration skills in order to complete assigned tasks and/or solve presented problems. Concurrently, the observational data demonstrated that the teachers structured the learning environments, lessons, and questioning techniques to support essential components of *The Framework*. Teacher C described PBL as learning that occurs through the utilization of prompts, questions, collaboration, voice and choice, and open-ended assessments. Teacher C's classroom was abuzz with ideas, peer feedback, and discussion. Learners were highly engaged and invested in the process. It was evident that the learners were guiding the learning through self-paced learning

options. The students were collaborating on self-selected reading responses. The utilization of voice and choice, key features of *The Framework*, allowed Teacher C's students to work collaboratively to select what they were going to read and how they were going to respond and share the information.

Theme Two: Perceived Lack of 21st-Century Integration. Based on the questionnaire data, most of the teachers indicated that they had "not yet" incorporated problem solving options and/or opportunities for students to work collaboratively to solve problems with no set solutions. Four teachers shared that they have not yet designed lessons to integrate open-ended problem solving options. Seven of the nine teachers indicated that the areas of critical thinking and creativity were not yet included in the learning experiences or that support staff, such as Creativity Lab teacher, provided options for creativity and critical thinking. Most of the teachers indicated that they were not utilizing essential features of *The Framework.*

Observational data. The observational data, however, identified many elements of *The Framework* that were not noted on the participants' questionnaires. Teacher F indicated on the questionnaire that collaborative learning opportunities "have yet to be integrated into the learning environment." I observed Teacher F structuring lessons that provided an opportunity for authentic collaborative research and sharing, as well as students engaging in rich and dynamic discussions. These were facilitated by teacher F's use of tailored questions designed to spark new ideas and further conversation. Moreover, Teacher A's students embarked on an authentic learning experience in which they worked collaboratively to develop questions based on the concept of motion to

create a "Putt-Putt Course." The students were challenged to utilize resources to access the needed information and work flexibly to design and redesign their course, as well as adapt to issues or ideas that occurred during the development process. Teacher D created a learning environment in which the students led the learning process. The learning options in this classroom varied based on student ideas, passions, and interests. The teacher facilitated learning through purposeful questioning, allowing the students opportunities for productive struggle. By maintaining clear expectations and routines, this teacher has developed a personalized learning environment. Teacher C structured a lesson that provided the learners with an avenue to work collaboratively to develop a shared product. This required the learners to share ideas, listen, and use feedback to assist them in making improvements on their creation. Students were afforded the opportunity to solve complex problems, work collaboratively, share ideas, and gain feedback through the creation process. The observational data identified that each of the nine teachers were not only utilizing PBL, but were also integrating collaborative and supportive reciprocal teaching into their instructional practices.

Findings for RQ2

RQ2 asked, "How are teachers in the Sunny Valley School District implementing critical elements (creativity, innovation, technology, and critical thinking skills) of *The Framework for 21st-Century Learning* to scaffold literacy instruction?" Themes emerged based on elements within *The Framework*, Vygotsky's sociocultural theory of learning, as well as the effective literacy principles discussed by Tompkins (2014), which she considered to be the key elements of an effective 21st-century framework (Griffith,

Massey, & Atkinson, 2013; Guskey, 2014; Tompkins, 2014). Tompkins (2014) highlighted the areas of collaboration, digital literacy, critical thinking, and problem solving as key elements of a success 21st-century literacy framework.

Theme One: Scaffolding within a Workshop Driven Environment. As the Sunny Valley District moved forward with the *2020 Strategic Vision*, professional development options focused on ensuring students received personalized learning experiences. The district superintendent was committed to developing a culture of growth by encouraging staff and students to follow their passion, strive for innovation, and embrace change. The data analysis process determined that workshop design was a clear theme. Teachers utilized the workshop structure to encourage learners to take charge of their learning and to become actively engaged in their work to develop understanding. The workshop model also enabled educators to actively engage in the learning experiences with the students through individual or small group instruction, providing needed individualized support.

Based on the questionnaire data, all nine teachers indicated that individualized learning, creativity, problem solving, and critical thinking skills occurred during collaborative learning experiences taking place during workshops. The format of the workshops varied based on the teacher, but common workshop titles included reading, writing, and math. During the workshops, eight of the nine teachers indicated that students had time to work independently or collaboratively to complete tasks designed or assigned by the teacher. As Teacher C explained, “During workshops, the students work together or independently to complete assigned work, solve problems, share ideas,

present information, and/or practice a concept." Teacher G utilized a math workshop structure to integrate essential features of *The Framework* that allowed learners to collaborate with a range of individuals by sharing, interpreting, and considering multiple perspectives. Teacher G indicated that the math workshop provided opportunities for the development of core literacy skills utilizing independent practice, guided learning, and share time through games, apps, Dittos, and math problems. Teacher G stated, "While students are working together, I can meet with small groups and/or individuals to provide more individualized instruction." Teacher B explained, "Workshops allow students the time to work collaboratively to solve problems presented to them in a variety of formats across multiple levels and content." Teacher H also indicated that Math Workstations, Workboard and Creativity Class provided the structure for learners to work collaboratively and independently to communicate, to develop teamwork skills, and to solve complex problems with creative solutions.

Sub-theme: Student-Driven Learning. One teacher utilized the workshop structure to provide learners with the opportunity to explore their passions, interests, and ponderings. Teacher D explained that students were encouraged to utilize the time during Reader's Workshop and/or Math Workshop to enhance their understanding on a self-selected topic, problem, and/or passion. The students generated ideas from readings and introduced concepts, interests, wonders, and/or creative solutions to self-selected problems. Teacher D shared an example of a student-developed project in which a group of learners utilized math and literacy concepts to develop a basketball game. The group of learners making the game worked in collaboration to design a court, a scoring system,

and refined rules. The utilization of the workshop structure enabled the teachers to design learning experiences that focused on key elements of *The Framework.*

Observational data. The observational data also indicated that the workshop structures were the norm for each of the nine teachers. I observed all nine teachers during a workshop. Although the age level, grade level, and the ability level of the students varied, as well as the variance present in each teacher's years of experience and purpose or tasks within the workshop, there were several common threads. Each teacher's workshop included clear goals, routines, modeled expectations, anchor charts, tiered learning options, collaboration, technology, and creativity, as well as teacher and peer support. Moreover, all nine teachers ensured that the structure of the workshop allowed for collecting, creating, and adapting instructional resources to personalize instruction for students. The teachers demonstrated the use of whole group, small group, and individual instructional practices, as well as guided students' learning based on individual levels.

As I observed Teacher H, I noted, the teacher transitioned students to literacy centers and met with a small reading group. The teacher prompted and scaffolded learning during guided reading based on student actions by flexibly asking questions and providing feedback, as well as promoted learners to adjust their thinking. The other students were working at literacy centers completing tasks designed by the teacher. The center choices included Imagine Learning (a computerized literacy program), a writing center in which students were working on writing a story of their choice, a poetry center in which students read poems, and an ABC Center in which students completed a phonic page (Ditto). All students were engaged as they worked to complete their center tasks.

Teacher J was observed transitioning students to Reader's Workshop. The students were independently working around the room and completing center tasks. Each child followed the Center Board, which indicated the activity he/she was to complete next. Centers included Imagine Learning, St Math, several high-frequency word pages (Dittos), and reading quietly (silent reading). Once students completed all assigned center tasks, they finished any incomplete work collected from previous days. Meanwhile, the teacher met with individuals to discuss writing (stories). The teacher provided direct feedback to assist learners in editing their writing by adding details and/or correcting spelling.

Theme Two: Perceived Struggle with Technology Integration. According to the questionnaire data, the vast majority of the teachers sought high levels of "support" or indicated they " have yet" to utilize technology to manage student learning, analyze and/or evaluate information, or produce products that demonstrate learned concepts. Teacher B stated, "Based on the maturity of the students in this grade, this would be very difficult – a LOT of teacher support and parameters are essential." Moreover, Teacher J remarked, "I do rely heavily on our Tech teacher and teammates to help with technology." Teacher E shared that she was "currently working to improve on this." Additionally, Teachers A, B, E, G, H, and J indicated that technology tools are modeled and used through guided practice to build skills and that learners use apps, such as St Math and Imagine Learning.

Sub-theme: Comfortable with Technology Integration. Teachers C, D, and F indicated that students use Canvas (a learning management system) to complete,

collaborate, and submit work. As Teacher C stated, “My students use a variety of apps, as well as paper pencil/whiteboard, to solve math equations, to solve story problems, or to complete assigned work which they submit to Canvas.” Teacher D utilized Canvas to allow learners to share their work, to receive feedback, and to keep track of assignments. Canvas was a new experience for this teacher, which created a sense of worry and concern. Teacher F commented, “The students use technology to share information each day using KidBlog, Padlet, and sometimes Canvas. We also screen shoot our work and upload it to an app or use AirPlay to discuss their strategies.” Teacher F has utilized iPads to allow for Voice and Choice and to enable learners to demonstrate their understanding. The students are encouraged to select an app that will help them solve a problem, demonstrate their learning, share information, and/or collaborate on shared projects.

Observational data. According to the observational data, teachers were using elements of technology integration that they did not indicate in their questionnaire responses. Teacher J, who stated, “I rely on the Tech Teacher,” was observed encouraging learners to enhance literacy skills through the use of an interactive app-based learning program in which the learners interacted with the iPad to develop phonetic and literacy skills. Moreover, Teacher J utilized Padlet, a web-based program, which allowed learners to share their knowledge, providing feedback to peers through web-based discussion and response. Teacher G, who indicated the need for “high levels of support,” encouraged the students to use various apps to create a digital story during Writer’s Workshop. Additionally, Teacher G assisted students in gathering information using the iPad to refine their stories and develop details. Teacher H was observed using the Airplay

feature on the iPad to capture student work, spark discussion, and provide peer, as well as teacher, feedback. I observed Teacher E using various apps during a guided reading lesson to assist in individualizing instruction for students. Teacher E used a whiteboard app to model word segmentation. Teacher E also used an alphabet app to allow students to practice word segmentation independently. During this lesson, each of the four students worked on her iPad, in which the teacher provided a set of individualized words based on the student's needs. I observed all nine teachers making iPads available for students for learning. Teachers A, B, and J allowed students to access iPads for Reader's Workshop, St Math (a visual math instruction program), Imagine Learning (a literacy-based instructional program), and Epic (an online children's eBook program). Teachers C, D, and F encouraged students to utilize the iPads at any point during the learning experience based on the students' needs. Teacher C's class used iPad technology to create an eBook in which pairs worked collaboratively to illustrate, type, and record the eBook. The students then used Airdrop to share their creation with other groups for critique. Teacher F structured a lesson in which students had the option to work with a partner or independently to create a final product. Students had access to multiple types of resources books, the internet, and/or video clips to gather information about their topics. The learners then selected the manner in which they reported their information. Options chosen were individual visual representations, digital displays, photographs, and written reports. Learners were then able to share their creations on Padlet, a web-based bulletin board, which served as a discussion board for sharing comments, feedback, and questions. Based on the observational data, teachers were using technology to bolster, to

support, and to refine each student's learning experience. It was evident that although many of the teachers felt challenged in the area of technology integration, they were utilizing technological tools to assist in integrating *The Framework*.

Findings for RQ3

RQ3 was, "How are teachers in the Sunny Valley School District implementing formative assessments and student-driven self-assessments to drive instruction within *The Framework for 21st-Century Learning*?" Themes emerged based on elements within *The Framework*, Vygotsky's sociocultural theory of learning, as well as effective assessment elements discussed by Tompkins (2014). Tompkins reported that 21st-century assessments include responsive, flexible, informative feedback integrated to illicit knowledge and drive growth. Themes emerged based on the essential elements within *The Framework*.

Theme One: Assessment Tools. Based on the questionnaire data, the majority of the teachers utilized teacher-driven assessment tools to gauge a learner's understanding. Teacher J indicated, "Students use rubrics and checklists to ensure quality work and the data are used to guide my next steps." Teacher A used "anchor charts, checklists, rubrics, and teacher-led conference to gather assessment information." According to Teacher B, "Checklist, rubrics, and checkpoints assist determining student understanding." Teacher D also indicated that "rubrics are used for formal self-assessments." Teacher G remarked, "Modeling, data sheets, rubrics, and checklists collect the data needed to assess student achievement." Teacher H explained, "We use KWL charts to determine student knowledge … peer or expert feedback is used minimally as the teacher provides the

feedback." All nine of the teachers utilized teacher-driven assessment tools, which were used to provide feedback, collect assessment information, drive instruction, and refine learning experiences. It was clear that the majority of the teachers sought out tools, such as rubrics and anchor charts, to gather assessment data. The teachers indicated that assessments were teacher-driven and used to guide instruction and support student growth.

Sub-theme: Student-Driven Assessment. A few teachers, based on their questionnaire data, also utilized student-driven assessment tools, such as rubrics, checklists, and/or anchor charts, created in collaboration with the learners. Teacher F stated that students used collaborative rubrics to determine completion and quality work, as well as to document peer feedback. The students were required to complete the rubric, which included meeting with a peer for feedback. The peers used a scoring system that was created collaboratively with the students at the start of the year. At the beginning of the year, the teacher established routines and worked with students to set clear expectations. The routines, expectations, and scoring systems helped students to self-assess, as well as held students accountable for their work. Teacher C worked with the class to develop The Chart of Understanding. The teacher and learners created a rubric, which enabled the learners to determine their personal level of understanding. Based on the 1 to 4 scoring system, students rated their level of understanding. The teacher then conferenced with students who indicated a low level of understanding and assisted them in setting learning goals and/or provided direct feedback designed to ensure growth. Teacher C was adamant about the importance of providing opportunities for students to

self-reflect, set goals, and discuss their own learning. Teacher C stated, "Student learning occurs through reflection, feedback, and conferencing."

Observational data. Observational data confirmed the questionnaire data. I observed all nine of the teachers utilizing various assessment tools to monitor student progress. The observational data, however, also indicated that the majority of the teachers worked in collaboration with students to create the rubrics and anchor charts, as well as allowed for peer feedback. Teacher C noted, "Offering questions, prompts, as well as feedback to help the students move forward in their learning." Participants A, F, and J were observed utilizing anchor charts, open-ended questioning techniques, prompting, and observational data to monitor instructional progress and to develop individualized instruction. Teacher G also used anchor charts, prompts, and open-ended questioning techniques, but also "tailored her prompts, questions, and feedback to each individual child." In Teacher H's room, I observed students working in tandem to peer edit each other's writing samples based on a rubric created prior to the project. Teacher D was observed prompting learners to provide feedback to each other in the form of questions, advice, and/or compliments. Teacher D encouraged students to take over learning time, but prompted them with questions or reminders to maintain a fluid pace and to assess learning. I observed Teacher C "roaming the room checking in with groups, asking questions, and providing feedback to encourage groups to refine their work." Teacher C also prompted group members to provide feedback, ask questions, and give ideas to their teammates. A few teachers embraced the core assessment elements within *The*

Framework and have motivated learners through the integration of self-assessment, reflection, and peer feedback.

Discussion

The data collection process was influential in identifying how teachers were implementing *The Framework* as well as identify what they need to become more adept at infusing *The Framework* into the core literacy curriculum. The participants seemed comfortable with the observation and completing the questionnaire honestly. Therefore, I trusted that their comments and suggestions were relevant and honest. The teachers were not opposed to integrating *The Framework* within their literacy curriculum. The majority of the teachers did not feel prepared to effectively integrate the many components of *The Framework* into their literacy curriculum. In addition, many of the teachers expressed that they did not understand many of the elements of *The Framework*. The majority of the teachers indicated that they lacked professional development in the area of *The Framework*, and therefore, did not possess the knowledge to effectively implement *The Framework*. I did not find this to be the case based on the observations; I observed the majority of the teachers implementing elements of *The Framework* organically. Based on the comparison between the observational and questionnaire data (Appendix D), the majority of the teachers lack an understanding of the verbiage used within *The Framework*. The most common need identified and expressed by the participants was time to collaborate and professional development that allowed them to share expertise and obtain ideas from other colleagues. Consequently, providing effective professional development is paramount to ensuring teachers are prepared to improve instructional

practices and alter learning (Tour, 2017; Varghese, Garwood, Bratsch-Hines & Vernon-Feagans, 2016). The majority of the participants indicated that they sought information pertaining to *The Framework* but the information was inconsistent, confusing, and/or too vast. As Vangrieken, Dochy, Raes, and Kyndt (2015) indicated, teachers typically life long learners who enjoy trying new things but require relevant learning experiences that strive for collaboration and self-initiated learning. Therefore, based on the data, participant's comments, and the vast body of research, I have created a professional development session.

Discrepant Cases

The data identified that all the teachers implemented *The Framework w*ith various degrees of comfort and integration. The only variation in data appeared in the manner in which teachers implemented and understood *The Framework*. Based on the questionnaire and observational analysis, teachers were not fully aware of all the elements of *The Framework* and often used obsolete terminology to explain their instructional practices. The disconnect between current terminology and outdated terminology distorted educators' understanding of *The Framework*. Hence, when completing the questionnaire, the teachers lacked the updated vernacular to completely comprehend the questions. The teachers, therefore, misinterpreted a few of the questions. Several teachers did not understand the prompt, "create an original product or performance to express their ideas," "analyze how different stakeholder groups or community members view an issue," and "respond to a question or task in a way that weighs the concerns of different community members or groups." In the future, I will add some extra details to the questions to ensure

teachers are able to fully comprehend the questions. Based on the observational data, the participants utilized many of the 21st-century elements they indicated were "too hard," "not yet tried," and/or with "high support." A professional development session was created to address the development of a common language for teachers to use to address 21st-century integration, enhancing innovative practices through student-driven instruction and refining assessment systems to bolster reflection and self-assessment.

Evidence of Quality

I accomplished the data collection for this qualitative study through questionnaire and observational data. I selected this design to obtain an understanding of how teachers were addressing the challenges presented by the implementation of *The Framework*. The goal of the study was to develop an understanding of how to best support teachers as they alter and shift pedagogical practices to align core curriculum with *The Framework.* According to Saldana (2013), an essential feature of qualitative research is the idea that a person's reality is based on their individual experiences and relationships. Thus, the data collection focused on gathering and analyzing data to enable me to provide a detailed description. Additionally, I used member checking and peer debriefing to ensure the credibility and trustworthiness of the research findings.

Upon completion of the data collection, I transcribed my field note data, de-identified, and coded the questionnaire and observation checklists. I then analyzed the data for trend and themes. Once the data analysis was complete, I met with my peer debriefer and submitted the questionnaires, observations, field note transcripts, and analysis for review. The peer debriefer examined each participant's questionnaire

responses, as well as the observational data. Then the peer debriefer read my field notes, reflection logs, and findings. The peer debriefer provided insight into credibility and trustworthiness of the, as well as monitored for biases and assumptions. The peer debriefer suggested that I provide clear insights and supporting details in several of the themes. Additionally, the peer debriefer suggested that I remove a few statements that included assumptions.

Summary

The data collection process for this study included a questionnaire and observational data. I also referenced the district's *2020 Strategic Vision* to determine the district goals. Gathered data proved that the teachers utilized elements of *The Framework*. Each of the nine teachers demonstrated that their instruction supported collaborative and supportive reciprocal practices. All of the teachers, however, referred to collaborative and supportive reciprocal learning as PBL in their questionnaire data. It was evident, based on the data, that teachers were communicating their practices using outdated pedagogical verbiage. Based on the questionnaire findings for RQ2, the majority of the teachers did not use *The Frameworks* of technology, critical thinking, and/or creativity without high support or in some cases not at all. In contrast, the observational data noted that all nine teachers utilized technology to support learning opportunities with various degrees of comfort and integration. Most of the teachers ensured that their lessons were engaging, authentic, and provided opportunities that encouraged flexible, creative thinking skills. Lastly, the data indicated that all nine teachers utilized various tools and resources to elicit student understanding. The teachers gathered assessment data through

use of formative tools and, in a few cases, student generated self-assessment tools. Each teacher focused on utilizing assessment data to drive instruction, as well as to individualize learning to ensure student growth.

In section three, I will explain the project I designed to address the teachers' perceived lack of 21st-century integration, enhancing student-driven instruction, and refining assessment systems to bolster reflection and self-assessment. Tompkin's (2014) balanced literacy approach assisted in highlighting specific elements of *The Framework*, which included voice and choice to encourage learners to take the lead in the learning process. Ritchhart, Church, and Morrison (2011) laid the groundwork for amplifying assessment structures to ensure teachers are utilizing not only teacher-driven assessments but also providing opportunities for student-driven assessments. Wagner and Dintersmith (2015) provided the framework to assist teachers in developing the common vernacular to communicate the elements of *The Framework*.

Section 3: The Project

Introduction

The purpose of this study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework*. The findings of this study indicated that professional development is key to the enhancement of teachers' understanding of *The Framework*, thus ensuring learners are able to problem solve, communicate, evaluate, and synthesize information across multimodal formats. Furthermore, teachers need professional development that focuses on their perceived lack of 21st-century integration, enhancing student-driven instruction and refining assessment systems to bolster reflection and self-assessment to ensure the effective implementation of *The Framework*. In this section, I present a description of the project goals, project rationale, project content rationale, review of the literature, project implementation, project evaluation, and implications including social change.

Description and Goals

Educators' pedagogical shifts were documented, as they moved from traditional 20th-century instructional practices to 21st-century practices through the implementation of *The Framework* (Kivunja, 2014; Sharp, 2015; Tompkins, 2014). The challenges and issues of implementing *The Framework* were addressed as a means of supporting teachers in transitioning to instructional practices that ensure students will be successful.

To understand why teachers were having difficulty clarifying the role of *The Framework* within the curriculum was essential to ascertain how teachers were successfully implementing *The Framework.* I selected nine teachers based on their grade level and years of experience to develop a clear understanding of how to support teachers in implementing *The Framework*. Gaining insight into how educators were receiving support, working collaboratively, and adjusting instructional practices was vital to ensuring appropriate professional development, resources, and collaborative time.

Based on Section 3's literature review and the study's findings, teachers require flexible, purposeful, and authentic professional development that focuses on the development of a common language to address their perceived lack of 21st-century integration, enhancing innovative practices through student-driven instruction and refining assessment systems to bolster reflection and self-assessment (Griffith et al., 2013; Guskey, 2014). Therefore, the goal of this project was to support teachers in the Sunny Valley School District as they refine and/or redesign their pedagogical practices to ensure successful implementation of collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, utilizing formative and student-driven self-assessments to drive instruction within *The Framework.*

The project was designed to provide a professional development option that addresses the areas of need through a supportive platform that is job-embedded, collaborative, and accessible, thus ensuring educators feel more committed, comfortable, and confident integrating *The Framework* (Fisher & Frey, 2014; Griffith et al., 2013).

The flexibility of the project allows teachers to attend a 3-day professional development session offered during district professional development days that occur during the schools year as well as offering the session over the summer. Teachers will work collaboratively to build their understanding of the elements and verbiage pertaining to *The Framework*. During the sessions, teachers will take part in interactive tasks designed to enhance their repertoire of innovative practices through discussions, video clips, and collaborative creation. The session also allows teachers to work in tandem to define and explore alternative student-driven assessments and reflection strategies.

Rationale

Being literate in the 21st century requires more than traditional reading and writing (Dede, 2009; Hutchison, 2014; Tompkins, 2014; Wagner, 2012). Effective communicators must be able to navigate a hybrid of literacy options that diversifies the way students gather, share, and produce information (Monge & Frisicaro-Pawlowski, 2014; Tompkins, 2014). As educators are working to transition practices from a traditional approach, it is essential they are supported as they infuse 21st-century skills, such as problem solving, critical thinking, effective communication, and creativity (Kopcha, 2012; Monge & Frisicaro-Pawlowski, 2014; Ornstein & Eng, 2015). The intention of this study was to glean what aspects of *The Framework* teachers were implementing successfully and in which areas they needed further support, resources, and/or professional development to integrate effectively. Successful implementation of *The Framework* requires understanding how to best support teachers as they alter and shift pedagogical practices to align core curriculum. Therefore, based on the study's

findings, teachers in the Sunny Valley School District needed to develop a common language to address their perceived lack of 21st-century integration to enhance their innovative practices and to refine assessment systems to bolster reflection and self-assessment strategies.

Review of the Literature

I relied on peer-reviewed journals, educational journals, academic journals, and textbooks made available by Walden University to gather the articles for this literature review. I also searched for articles using databases from Walden's library through ProQuest and EBSCO. I used the following databases: Sage, Education Research Compiles, and ERIC. The key phrases used to conduct the searches and locate articles included *21st-century learning, 21st-century framework, Common Core State Standards, The Framework for 21st-century Learning, professional development, personal learning communities, teacher learning,* and *teacher collaboration*.

Transformational change within the realm of the educational system is required to ensure all learners are ready to meet the demands of the 21st century (Sharif & Cho, 2015; Young, 2012). Implementation of the CCSS, the rearrangement of assessments, and the shift in the role of educators has created resistance to shifting pedagogical advancements (Bayar, 2014; Young, 2012). When considering the implementation of *The Framework*, it must be noted that teachers are the key holders to success. Student achievement is directly related to the preparation, growth, and skill of the instructor (Bayar, 2014; Monge & Frisicaro-Pawlowski, 2013). As Bayar (2014) stated, "We cannot improve schools without improving the skills and abilities of the teachers within them"

(p. 319). Successful implementation of *The Framework* requires teachers to embrace change and stakeholders to support the process of evolution.

Trends in the workforce have dramatically altered the manner in which districts implement *The Framework.* Education systems that are strong and relevant account for workforce and demographic trends, which infuse *The Framework* with core curriculum, better preparing learners for the 21st century (Bayar, 2014; Bowman, 2014). Changing demographics and workforce, in addition to increased science and technology-based economies, has greatly influenced the way pedagogical practices have evolved. This era of innovation and global shifts has transformed learning from a knowledge-based focus, creating the need for pedagogical shifts (Bayar, 2014; Wagner, 2015).

In order to prepare the next generation, a connection between pedagogical practices and shifting trends must be established (Bowman, 2014; Trilling & Fadel, 2009). "A 21st-century education for every child is the first challenge—the one that will enable all our other challenges to be met" (Trilling & Fadel, 2009, p. 4). As research has demonstrated, workforce patterns and technological advancements have altered the landscape of education, redefining pedagogical practices that prepare students for college and career readiness (Bowman, 2014; Trilling & Fadel, 2009). Reinventing pedagogical practices begins with aligning curriculum with altering demographic, science, and technological trends.

Changing demographic patterns have altered the landscape of the workforce, as well as the face of education (Bayar, 2014; Bowman, 2014; Wagner, 2015). As demographics have shifted, schools are now experiencing increasingly diverse

populations of learners. The workforce also contains multiple generational workers, including aging baby boomers, Generation X, and millennials, and includes more immigrants and women (Monge & Frisicaro-Pawlowski, 2013; Trilling & Fadel, 2009). The generational divide creates unique challenges, such as limited transferable skills, varied communication methods, and generational gaps (Bowman, 2014). As the economy continues to transition to an era of technology and innovation, different skills are required to navigate the changing workforce (Monge & Frisicaro-Pawlowski, 2013; Trilling & Fadel, 2009). Historically, a solid knowledge-based education guaranteed that learners were prepared for a successful career path (Bowman, 2014; Trilling & Fadel, 2009). The changing demographic, workforce, and innovation patterns require an emphasis on lifelong learning, communication, collaboration, and flexibility (Kopcha, 2012; Monge & Frisicaro-Pawlowski, 2014; Ornstein & Eng, 2015). Educational systems, therefore, must reconsider current systems of student preparation (Monge & Frisicaro-Pawlowski, 2014; Tompkins, 2014; Young, 2012).

Developing Partnerships for *The Framework for 21st-Century Learning*

To bridge the divide between instructional practices and trends that are altering the learning landscape, the Partnership for 21st Century Learning assembled a framework designed to foster instructional practices that prepare learners for successful entrance into the 21st century (Fisher & Frey, 2014; Hernandez, 2017). Global expansion, technology advancements, and altering demands upon the workforce within the 21st century have created opportunities for advancements in learning, as well as created the need for pedagogical shifts (Cassidy, Ortlieb & Grote-Garcia, 2016; Hernandez, 2017).

Understanding *The Framework* requires educators to comprehend fundamental learning skills, such as communication, critical thinking, collaboration, and creativity, to prepare learners to meet the demands of the 21st century (Cassidy et al., 2016; Fisher & Frey, 2014; Hernandez, 2017). The rate of change is dependent upon the perspectives and willingness of the teachers implementing the pedagogical shifts. Effective teacher preparation, professional development, and support are essential to ensure that pedagogical transformation occurs rapidly (McMillan, McConnell, & O'Sullivan, 2016; Sharif & Cho, 2015). According to the Partnership for 21st Century Learning (2010), "The challenge facing schools is not to do a better job at what they are already doing, but to do a fundamentally different job" (p. 12). Adequately preparing educators to face the challenges and demands of ensuring that students obtain the necessary 21st-century skills means strengthening and reinvigorating professional development (Hernandez, 2017; Partnership for 21st Century Learning, 2015; McMillan et al., 2016). Fundamental alterations to professional development must occur to ensure educators are supported, inspired, challenged, and nurtured as they align their practice with current pedagogical practice (Fisher & Frey, 2014; Sharif & Cho, 2015). Aligning professional development with elements of *The Framework* and core curriculum, while accounting for teachers' current knowledge, are essential in ensuring transformative practice.

The Framework for 21st-Century Learning

Designing a robust professional development program that empowers teachers to take an active role in altering and refining pedagogical practices requires a concise understanding of *The Framework* (Twining, Raffaghelli, Albion, & Knezek, 2013). *The*

Framework, created by The Partnership for the 21st Century Learning, is a set of benchmarks that require innovative, dynamic, and inquiry-based literacy skills to navigate, communicate, and collaborate across a multimodal platform (Campbell, Saltmarsh, Chapman, & Drew, 2013; Griffith et al., 2013; Twining et al., 2013). *The Framework* is designed to require students to problem solve, communicate, evaluate, and synthesize information across multimodal formats (Fisher & Frey, 2014; Trilling & Fadel, 2009). Learners can then analyze, evaluate, and synthesize to produce new products. Therefore, learners must demonstrate a variety of purposeful, authentic, and critical thinking skills utilizing digital literacies, technological tools, and multimodal platforms (Fisher & Frey, 2014; Twining et al., 2013; Wagner, 2015). *The Framework* encompasses the curricular revisions necessary to successfully implement effective 21st-century pedagogical practices (Fisher & Frey, 2014; Griffith et al., 2013). As pedagogical practices shift and redefine, professional development must ensure teachers have a clear and concise vision (McMillan et al., 2016; Sharif & Cho, 2015). It is imperative that transformative innovation is met with support, guidance, and encouragement.

Ineffective Professional Development

Ensuring effective 21st-century practices begins with districts and stakeholders recognizing the importance of quality professional development (Grierson & Woloshyn, 2013). To ensure the continued development of quality educators, it is essential that focused and continuous professional development take the place of the disjointed momentary sessions of the past (Grierson & Woloshyn, 2013; Guskey, 2014). Unfortunately, researchers in the field of education learned that professional development

remains ineffective and that 20th-century instructional practices continue to remain the hallmark of instructional pedagogy (Griffith et al., 2013; Guskey, 2014). Current professional development employs a one-size-fits-all structure in which the content is a generic canned program that does not consider the knowledge of the individuals in attendance (Cox, 2015; Grierson & Woloshyn, 2013; Meissel, Parr, & Timperley, 2016). Cox (2015) indicated that stakeholders and district leadership teams have designed and implemented professional development without an established purpose, vision, and/or plan. The lack of purposeful planning and disregard for teachers' current knowledge and/or skill base creates disjointed, disengaging, and ineffective programs that focus on activities and canned programs (Grierson & Woloshyn, 2013; Meissel et al., 2016).

As the idea of best practices continues to evolve and change, researchers have found that the professional development sessions designed to bolster pedagogy often lack commonality, leading to misunderstandings and confused concepts (Fisher & Frey, 2014; Meissel et al., 2016). Professional development designers fail to design rigorous programs focused on inquiry-based learning, capacity development, and curriculum coherence, thus failing to empower educators to fully explore the elements of *The Framework* (Grierson & Woloshyn, 2013; Guskey, 2014; Meissel et al., 2016). Consequently, educators fail to develop the skills and understandings essential to address pedagogical shifts, therefore encouraging the continuation of outdated pedagogical practices centered on knowledge-based learning options (Grierson & Woloshyn, 2013; Meissel et al., 2016; Twining et al., 2013). If the primary goal of professional development is to promote self-reflection, skill development, pedagogical shifts, and

collaboration, changes must occur (Cox, 2015; Grierson & Woloshyn, 2013). Effective professional development should allow educators to expand their knowledge and pedagogical practices though authentic and engaging experiences.

Leveraging Learning through Purposeful Professional Development

The 21st century has altered the face of learning, creating pedagogical challenges for educators. Since the adoption of the CCSS and the development of *The Framework*, preparing teachers for this pedagogical shift is paramount to ensuring student success (Fuentes, Switzer, & Jimerson, 2015; Jenkins & Agamba, 2013). It is vital to the alteration of pedagogical practices, content knowledge, and skills that educators are provided sustainable, authentic, and continuous professional development (Jenkins & Agamba, 2013; Whitworth & Chiu, 2015). Stakeholders must recognize that teachers need authentic, scaffolded professional development to effectively transform knowledge into practice (Jenkins & Agamba, 2013; Parker, Bush, & Yendol-Hoppey, 2016). Parker et al. (2016) suggested that educators' understandings of 21st-century learning framework differ greatly, creating a variance of expertise. Providing adequate professional development begins with providing differentiated opportunities that allow for collaboration, authentic knowledge development, transference, and sustainability (Jenkins & Agamba, 2013; Whitworth & Chiu, 2015). Promoting change requires participant engagement and reflection, as well as perceiving themselves as learners. Professional development facilitators must account for each participant's prior experience, knowledge level, and willingness to participate (Fuentes et al., 2015; Parker et al. 2016).

It is a difficult undertaking to translate professional development initiatives into instructional practices focused on a participant's prior knowledge, beliefs, and practices (Covay Minor, Desimone, Caines Lee, & Hochberg, 2016; Schulte, 2016). The fundamental goal of professional development is to promote autonomy and advocacy focused on enhancing student learning through differentiated and collaborative experiences with peers (Covay Minor et al., 2016; Schulte, 2016). Traditional forms of professional development workshops, conferences, and seminars are failing to meet the differing needs of educators (Jenkins & Agamba, 2013; Parker et al., 2016). Pella (2015) contended that reform implementation lacks updated practices, sufficient goals, and direction. Schulte (2016) argued that to facilitate authentic professional development, developers must consider educator experience, context, and purpose. Developers must restructure the way professional development is designed and delivered to enhance and expand the knowledge of its participants (Pella, 2015; Schulte, 2016). The success of any professional development experience relies on planning authentic content, sustainability, and differentiated formatting (Jenkins & Agamba, 2013; Parker et al., 2016; Pella, 2015).

Effective Professional Development

Contemporary perspectives are broad and ever changing, creating challenges for professional development developers. As communication continues to evolve, developers must utilize current pedagogical practices to enhance student learning. Therefore, it is imperative that educators maintain continued growth, as well as maintain a culture of continued learning, capacity building, and risk taking (Kornhaber, Griffith, & Tyler, 2014). Hence, successful professional development begins with teachers' current

successes in mind, connects to the environment in which they are teaching, and bridges the gap between professional development and instructional practices (Kornhaber et al., 2014; Sharif & Cho, 2015).

Districts have instituted alterations that reflect the shift in education from instructor-directed to self-directed and independent learning; professional development needs to make the same change (Jenkins & Agamba, 2013; Kornhaber et al., 2014). Through focusing on educational strengths instead of weaknesses, professional development promotes professional autonomy, allowing teachers to take ownership of their learning (Fuentes et al., 2015). Professional development facilitators, therefore, must consider alternate methods of distribution to ensure educator participation, capacity building, and transference (Fuentes et al., 2015; Kornhaber et al., 2014).

Evolving Professional Development

Orchestrating effective professional development in the 21st century means keeping pace with pedagogical practices, thus utilizing media platforms for collaboration. A social media avenue allows professional development experiences to move from stationary meetings to a global collaboration, where educators have access to professional development at any time, from any location (Jenkins & Agamba, 2013; Pella, 2015; Soebari & Aldridge, 2015). The utilization of multi-media as a vehicle for professional development allows educators to continuously connect and collaborate with others to enhance instructional practices (Griffith, & Tyler, 2014; Pella, 2015).

The challenge of the information age is paramount; moreover, the need for continued, sustainable professional development that meets the varied needs of each

educator is pertinent to successful creation of a 21st-century learning environment (Pella, 2015; Svendsen, 2016). Utilization of multi-factored professional development options provides optimal and meaningful contexts for professional growth. Multi-media outlets allow for personalization, a learner-centered approach focused on enhancing the participants' current strengths and skills (Collins & Liang, 2015; Pella, 2015; Svendsen, 2016). In an engaging, learner-centered, and accessible professional development setting, participants can explore multiple perspectives and can exchange and share information, allowing for the attainment of new knowledge and/or deepening of current understandings (Jenkins & Agamba, 2013; Pella, 2015; Soebari & Aldridge, 2015). As participants work toward the development of a learning community, it is imperative that the support is provided to ensure success navigation and utilization of multi-factored professional development opportunities (Jenkins & Agamba, 2013; Whitworth & Chiu, 2015).

Summary

The element of time is paramount to empowering teachers to make the necessary pedagogical shifts to ensure *The Framework* is implemented successfully (Covay Minor et al., 2016; Schulte, 2016). Providing authentic, differentiated, engaging, and collaborative professional development is essential to guaranteeing that educators have the knowledge and skills needed to infuse *The Framework* into current practice (Cox, 2015; Grierson & Woloshyn, 2013). Unfortunately, many school districts provide professional development during hour long monthly meetings, which are typically packed with other agenda items. Characteristically, one-hour training sessions do not provide

sufficient time for educators to fully grasp concepts, collaborate, and/or reflect upon the concepts presented (Fisher & Frey, 2014; Hernandez, 2017). Furthermore, the lack of continued support creates gaps and misunderstandings in concept knowledge, as well as creates challenges for teachers as they attempt to incorporate new practices into the classroom settings, instructional designs, and student interactions. Continuous, job-embedded professional development needs to account for educators' varying levels of knowledge and comfort (Jenkins & Agamba, 2013; Pella, 2015; Soebari & Aldridge, 2015). It is paramount that time is provided for collaboration, practical application, and reflection. Professional development designers must consider the broad range of platforms and needs of educators to ensure capacity, knowledge transference, and transformative instruction. Professional development must strive to design options that entice educators to engage in ongoing learning, reflection, and collaboration. Therefore, job-embedded, self-paced options are essential (Griffith, & Tyler, 2014; Pella, 2015).

Project Implementation

Potential Resources and Existing Supports

The district assistant superintendent and the school principals gave permission for the study. The district created the *2020 Strategic Vision* to assist in developing an action plan for implementing *The Framework* across the district. The *2020 Strategic Vision* outlines a plan of action that provides educators support through ongoing professional development, resources, and building-wide initiatives. Thus, the assistant superintendent and principals provided permission with the hope of obtaining information about how the *2020 Strategic Vision* was supporting educators as they shifted pedagogical practices.

District leaders recognized the vital importance of transitioning educator practices to ensure student success in the 21st century. Fortunately, the district leadership team supported the study, as well as supported *The Framework*.

Prior to conducting the project, I sought permission from the assistant superintendent, principals, and the district leadership team to conduct the *Bridging the 21st Century Gap* session during Sunny Valley U (district professional development days in which staff attend professional development courses) and during Sunny Valley Academy (district provided professional development during the summer) and to add the course to the professional development Canvas courses (a district management system that provides online professional development courses).

Potential Barriers

Although the district provides ongoing professional development, attendance is not mandatory. Potential barriers could include educator resistance to change, as well as the lack of professional development attendance. My intention is to provide professional development during Sunny Valley U and Sunny Valley Academy sessions, as well as place the session in Canvas. As educators are free to self-select professional development sessions, there may be some difficulty encouraging teachers to select specific courses. Since my intent is to utilize job-embedded district professional development days, this should help encourage teacher participation. Moreover, utilizing the district Canvas course management system will allow teachers the opportunity to access professional development options at any time, which will provide additional support.

Proposal for Implementation and Timetable

I sill share the findings of this study with the Sunny Valley staff through the creation of a Canvas course, which is available for staff members anytime, as well as during a three-day professional development session during Sunny Valley U and Sunny Valley Academy (See Appendix A). Educators will have access to the *Bridging the 21st Century Gap* session at Sunny Valley U or Sunny Valley Academy during the scheduled dates, as well as the Canvas course at any time. Members will be provided with job-embedded professional development and collaboration time to assist in the completion of the course during the Sunny Valley U or the Sunny Valley Academy session. The professional development Express platform will serve as the enrollment and resource center to assist educators in collaboration, submission, and completion. The Sunny Valley U, Sunny Valley Academy, Canvas course, and Padlet discussion board will include teachers' comments, ideas, and discussions. The Express platform allows teachers continual opportunities to communicate successful strategies, ideas, and/or questions with colleagues.

The goal of this project is to utilize the findings to provide professional development opportunities that increase instructions within *The Framework*. Educators will be encouraged to participate in the *Bridging the 21st Century Gap* session during the Sunny Valley U or Sunny Valley Academy offerings, as well as through access to the course on Canvas to enhance their knowledge and implementation of *The Framework*. Upon completion of the *Bridging the 21st Century Gap* session, educators will be asked to complete a session evaluation. The evaluation will collect the participants' comments,

suggestions, and ideas gained from the course, as well as identify areas needing further support in the future.

Roles and Responsibilities

My role as researcher will be to share the findings of this study with the district assistant superintendent, the district leadership team, and school administration. My presentation will effectively communicate the findings as well as pose suggestions and respond to any questions or concerns. Once the project study is accepted by the district, I will meet with the literacy leadership team to schedule dates for the implementation of the professional development session. Once the dates have been confirmed, my responsibilities include sending out invitations through MyPD, an in-district professional development portal and assisting teachers in registering for all three sessions. I will conduct the sessions during scheduled professional development days in March, April, and May. Lastly, when the workshops conclude, I will modify or update materials from the teachers' and administrators' feedback in the evaluation forms.

Project Evaluation

The evaluation will be outcome-based and grounded on the central tenets of the constructivist approach. The first criterion addressed in the assessment will be building new knowledge based on previous learning. I will check for this based on reflections from the 3-days of the workshop. At the end of each day, participants will give feedback on what they have learned, and the participants will also be sharing their experiences during the workshop as a way to build new forms of action. The second assessment criterion is that participants' learning is active, not passive. This will be

evident from the setting of the workshop, based on the determination of how well the participants take part in the discussions and formulate new responses to identified problems. The workshop setting allows participants to identify challenges and then work together on probable solutions. The third consideration in evaluation will be whether the workshop was learner centered, as constructivism encourages the development of a learning environment that responds to the learner. The participants will fill out an evaluation form that will be useful in determining how well the workshop responded to their expectations as well as the established goals of the workshop.

The evaluation will be formative, as it will involve the consideration of ongoing feedback from the participants in the 3 days. Based on the feedback, it will be possible to make updates to the materials to make them more effective in professional development.

Implications Including Social Change

Local Community

The findings of this study could enhance educator's ability to implement *The Framework* effective ensuring learners are prepared to think critically, self-reflect, and navigate a technology rich workforce. This pedagogical transition is essential for learners in the local community as teachers prepare students for success in the 21st century. The demands and advancements of the 21st century require an ever-evolving set of skills in which teachers must be comfortable navigating. Based on the shift in instructional practices, teachers, students, families, and administrators could notice a significant alteration to the classroom dynamic. Flexible professional development options can allow for collaborative learning among teachers and students, as well as an increased ability for

learners to think critically, problem solve, utilize technological tools, and find creative and innovative solutions to authentic problems or learning experiences.

Far-Reaching

Student success begins with effective teachers; therefore, it is imperative that educators are receiving the proper professional development to ensure they are prepared to implement *The Framework*. This study's results could also contribute to the larger community through the creation of effective and targeted professional development. The *Bridging the 21st Century Gap* session could serve as a template for the creation of other professional development opportunities across the district. Educators could collaborate with others, share how they have integrated *The Framework* within their instruction, and describe the adjustments and changes they have made to this instruction. As Canvas is an online management system, the session could be made public and could serve as an online session, allowing for collaboration and discussion among teachers across the nation. Therefore, this project could have an impact on schools throughout the country.

Conclusion

I created the project based on the data collected from teacher questionnaire responses and teacher observations concerning how educators were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning*. I designed the project based on current research regarding effective professional development, thus ensuring the session was authentic, purposeful, and

sustainable. I designed a three-day professional development session to address the development of a common language for teachers to use to address 21st-century integration, enhancing innovative practices through student-driven instruction and refining assessment systems to bolster reflection and self-assessment. Section 4 will be a series of reflections on the strengths and limitations of the project and my analysis as a scholar, practitioner, and project developer. I will address recommendations as to how I might have approached the project differently. Section 4 will also include an analysis section on scholarship, project development and evaluation, and leadership and change.

Section 4: Reflections and Conclusions

Introduction

The purpose of this case study was to explore how elementary teachers in the Sunny Valley School District were implementing collaborative and supportive reciprocal teaching and learning to instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student self-assessments drive instruction within *The Framework*. Section 4 reflects on the study and addresses leadership, as well as the project's strengths and limitations. I will address my role as a scholar, practitioner, and developer. Finally, I will discuss areas for future research.

Project Strengths

The findings provided several positive outcomes. Throughout the study, it was evident that teachers were implementing *The Framework,* albeit at various levels and varied strengths. Through observation and questionnaire data, it became evident that the participants did not always recognize when they were implementing elements of *The Framework* (Saldana, 2015). It was quite evident that each of the participants welcomed collaboration, sought out opportunities for growth, developed reciprocal teaching habits, and reflected on his/her own practice. Based on the questionnaire, observation, and research data, I developed a project that will help transition educators' understanding of *The Framework* (Creswell, 2016; Saldana, 2015). This study may assist school administrators, leadership teams, and educators with collaborative professional development that is job-embedded and self-paced, while allowing for reflection. In this project, I will offer educators a platform for sharing ideas, questions, and reflections. I

will also provide them with the chance to develop their knowledge to continually improve their practice (Creswell, 2012; Merriam & Tisdell, 2016). I will implement a professional development program that prompts collaboration, discussion, and revision of pedagogical practices. The project has the potential to expand teachers' knowledge of collaborative and supportive reciprocal teaching through 21st-century integration, enhancing student-driven instruction and refining assessment systems to bolster reflection and self-assessment (Monge & Frisicaro-Pawlowski, 2013; Trilling & Fadel, 2009).

Recommendations for Remediation of Limitations

I designed the project to assist Sunny Valley School District teachers in enhancing their understanding and ability to implement *The Framework*. Teachers are the key to ensuring change (Cassidy et al., 2017); therefore, the success of the project depends on their willingness to participate. As teachers are feeling overwhelmed with new initiatives, balancing core curriculum, and differentiating instruction, their willingness to take part in professional development is minimized (Fisher & Frey, 2014; Hernandez, 2017). The success of the project was dependent upon educator participation; therefore, the limitation of the project focuses on participation. If educators are unwilling to seek opportunities for growth in their implementation and understanding of *The Framework,* they will continue to struggle when needing to alter and refine their practices (Twining et al., 2013). As my sample was limited to three kindergarten, three first-grade, and three second-grade teacher participants and their implementation of *The Framework*; further research may include an increased number of participants across a greater grade level span (Antonenko, 2014; Creswell, 2012). For future research, I recommend exploring participants' views on

professional development formats and options. Examining teachers' ideas, opinions, suggestions, and needs regarding professional development could provide the information necessary to design a more successful professional development (Bayar, 2014; Bowman, 2014; Wagner, 2015).

Scholarship

Throughout this study, I developed a deeper understanding of evolving pedagogical practices and initiatives. I developed a keen awareness and appreciation for the challenges educators face as they attempt to adjust pedagogical practices and understandings of *The Framework* (Ametepee et al., 2014; Desimone et al., 2013). Although I had observed teachers facing the challenge of shifting pedagogical practices, I did not fully understand the importance of the issue nor how to address the problem. This study allowed me to conduct research related to the implementation of *The Framework* and enhanced my understanding of what fundamental skills learners require to be successful in the 21st-century global economy. I then applied this knowledge to the project (Cassidy et al., 2016; Hernandez, 2017).

The research process heightened my awareness of the importance of shifting pedagogical practices so that educators are prepared to implement *The Framework,* thus ensuring students are ready to meet the demands of the 21st century (Twining et al., 2013). Through investigation and research, I determined that educators are already utilizing many aspects of *The Framework,* but lack the in-depth knowledge of key terminology to describe and discuss the implementation of *The Framework* appropriately (Campbell et al., 2013).

Project Development and Evaluation

Teachers' ability to address the challenges presented by the implementation of *The Framework* and understanding how to best support them as they alter and shift pedagogical practices has been a focus of school districts for many years (Hutchison, 2014; Levy & Murnane, 2005; Van den Bergh et al., 2014). The Sunny Valley School District has been proactive in dealing with the introduction of *The Framework*. The district created the *2020 Strategic Plan*, which outlined the changes needed to adopt and implement *The Framework*. The school district then began providing optional professional development to staff, encouraging educators to begin the implementation and adoption of *The Framework*. However, with the influx of technology, many viewed *The Framework* as technology-based (Brusic & Shearer, 2014; Hung et al., 2012; Young, 2012). Teachers struggled to comprehend the depth of *The Framework* beyond the surface level integration of technology.

Throughout data collection, it was evident that the majority of the participants were utilizing and implementing many aspects of *The Framework,* but continued to struggle with recognizing, verbalizing, and/or discussing its elements (Karchmer-Klein & Shinas, 2012; Kivunja, 2014; Preus, 2012). Implementing this project will assist educators in attaining authentic and meaningful professional development, which is necessary to refine their understanding of *The Framework* through collaboration and differentiated professional development, while providing time for reflection and discussion (Creswell, 2012; Yin, 2003).

Leadership and Change

I have enhanced my abilities as an educational leader, as well as advocated for effective change within pedagogical practices. This project study increased my leadership ability by further developing my communication and collaborative skills. It allowed me an opportunity to encourage a positive change in the educational setting (Wagner & Dintersmith, 2015). Throughout the data collection and research process, I practiced communication skills through corresponding, collaborating, and listening to the ideas and needs of educators. Furthermore, I designed a professional development option that addressed the concerns and needs discovered from the findings of the study. The professional development option allowed for individualized development, thus offering individual growth and opportunities for organizational growth through collaboration (Jenkins & Agamba, 2013; Whitworth & Chiu, 2015). Through personal and professional growth, I was able to identify a problem that reaches far beyond my local community, investigate reasons for the problem, and design a plan of action to address the issues (Pella, 2015; Svendsen, 2016).

Analysis of Self as Scholar

As a result of this study, I have grown as a scholar. Through investigation, evaluation, research, and collaboration, I gained a more in-depth understanding of the source of the problem and the importance of addressing the problem. Because educating students with 21st-century skills is imperative to their success in the global community, this project study was relevant and important at the local level and beyond (Pella, 2015; Soebari & Aldridge, 2015).

Analysis of Self as Practitioner

My role as a practitioner is to understand the importance of continued growth within education and the commitment needed to promote positive change. This study has allowed me the opportunity to bolster my understanding of current teaching practices as they relate to the evolving profession (Griffith, & Tyler, 2014). This experience has afforded me the opportunity to empower myself to continue growing as a learner, embrace the challenge of growth, and take ownership of successful change (Soebari & Aldridge, 2015).

Analysis of Self as Project Developer

Implementing positive change is crucial to the growth of an educational environment; therefore, it requires the development of an authentic and purposeful project. The journey I have taken developing this project has taught me a lot about myself as an educator, as well as a project developer (Jenkins & Agamba, 2013; Parker et al., 2016). I have gained insight into my strengths and weaknesses as a project developer. I recognize that I need to continue to enhance my ability to accept the opinions and ideas of others without comment, assumption, and/or judgment (Grierson & Woloshyn, 2013). Furthermore, I am aware of my ability to explain and discuss the topic of *The Framework*. I now have an increased passion for positive social change and for encouraging educators to refine their practices to ensure they are effective in implementing *The Framework* (Griffith et al., 2013; Guskey, 2014).

The Project's Potential Impact on Social Change

In reflection, the project could impact social change at the local level and beyond by expounding upon the limited research on *The Framework*. The contribution of further research could allow district leaders, policymakers, and educators within and beyond the district to enhance their understanding of *The Framework* and to assist with their implementation of *The Framework*. Due to vast global, technological, and economical changes, learning in the 21st century is evolving. New and dynamic challenges are created for the educational community (Partnership for 21st Century Learning, 2015; McMillan et al., 2016).

My goal was to provide a conduit for change in thinking, pedagogical practices, and teacher roles. It is my hope that upon the conclusion of the project, participants are enlightened, inspired, and prepared to alter instructional practices to prepare learners to better meet the challenges of the 21st century (Bayar, 2014; Bowman, 2014; Wagner, 2015). Hence, this study provided the educational community with the information needed to design dynamic learning environments and experiences that give learners engaging authentic tasks, which allow for creativity, inquiry, collaboration, varied communication styles, and opportunities for self-reflection and assessment (Bayar, 2014; Bowman, 2014).

Implications, Applications, and Directions for Future Research

As I only focused on two elementary schools within one school district, there is ample opportunity for further research. There has been limited research on how teachers are implementing collaborative and supportive reciprocal teaching and learning to

instruct, utilizing critical elements of *The Framework* to scaffold literacy instruction, and to explore how formative and student-driven self-assessments drive instruction within *The Framework for 21st-Century Learning* (Merriam & Tisdell, 2016). Future research should encompass how teacher preparation programs prepare preservice teachers to implement *The Framework,* as well as continuing education programs and/or professional development options that enhance and refine teaches' ability to implement *The Framework* (Twining et al., 2013). Research focusing on preparation and professional development will provide insight on how educational programs are preparing educators to implement *The Framework,* as well as what shifts need to occur to better prepare teachers (Hernandez, 2017). This particular study may provide the information needed to design professional development options that will enhance teachers' ability to implement *The Framework* effectively (Cassidy et al., 2016).

Conclusion

I have gained knowledge throughout the process of conducting the research, analyzing the findings, and designing a project. This study allowed me to acquire the information necessary to refine my understanding of how to successfully implement *The Framework*. I am now capable of defining, explaining, and recognizing successful implementation of *The Framework*. As a member of the educational profession, I am better prepared to encourage positive shifts in educational pedagogical practices to meet the needs of today's learners. My abilities as a leader have also been enhanced throughout this study by further developing my critical thinking and problem solving skills. I have considered and recognized the strengths and limitations of the project, and I

have provided information about future research to enhance the current research. I have gained great insight about myself as a researcher, through my journey at Walden University. I discovered that I do have the ability, skill, and knowledge to be an agent of change within my local setting.

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Appendix A: The Project- Bridging the 21st-Century Gap

A.1 – The Agenda

Day 1: Outline for Professional Development Session

8:30 a.m. – 9:00 a.m.	Meet and Greet/Sign-in/Light Snack
9:00 a.m. – 9:15 a.m.	Presenter Introduction
9:15 a.m. – 9:45 a.m.	Our Professional Challenge-Presenting the Objectives
9:45 a.m. – 11:35 a.m.	The Great Debate- Comparing the 20th and 21st centuries
11:35 a.m. – 12:00 p.m.	The Future- Exploration of Evolving Pedagogical Practices
12:00 p.m. -1:00 p.m.	Lunch- Discussion and Reflection time
1:00 p.m. – 1:45 p.m.	Pondering- Table Top Discussion
1:45 p.m. – 2:45 p.m.	What is *The Framework for 21st-Century Learning*?
2:45 p.m. – 3:30 p.m.	Pondering- Table Top Discussion/ Sign-out

Day 2: Outline for Professional Development Session

8:30 a.m. – 8:45 a.m.	Meet and Greet/Sign-in/Light Snack
9:45 a.m. – 10:30 a.m.	Exploring Inspiration/ Develop a Plan for Change
10:30 a.m. – 11:30 a.m.	21st-century Assessments
11:30 a.m. – 12:30 p.m.	Lunch- Discussion and Reflection time
12:30 p.m. – 2:30 p.m.	Jigsaw- Exploring 21st-century Assessments
2:30 p.m. – 3:30 p.m.	Where do we go from here?/Table Top Discussion/Sign-out

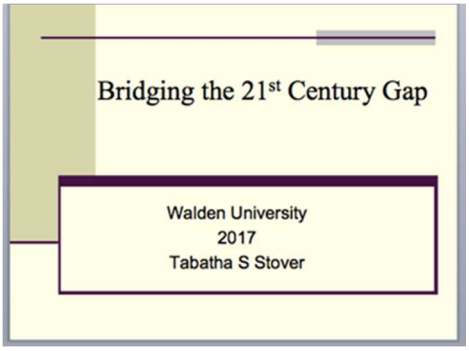
Day 3: Outline for Professional Development Session

8:30 a.m. – 8:45 a.m.	Meet and Greet/Sign-in/Light Snack
8:45 a.m. – 9:00 a.m.	Presentation of Todays Goals
9:00 a.m. – 11:00 a.m.	New Horizons- Share Time
11:00 a.m. – 11:30 a.m.	Iggy Peck, Architect- Setting up the Design Challenge
11:30 a.m. – 12:00 p.m.	Lunch- Discussion and Reflection time
12:00 p.m. – 1:20 p.m.	Design Challenge
1:20 p.m. – 1:50 p.m.	Putting it all Together- *The Framework* in Action
1:50 p.m. – 3:15 p.m.	Design Challenge- Plan of Action
3:15 p.m. – 3:30 p.m.	Exit Ticket/Sign-out

Detailed Outline for Professional Development Session

Bridging the 21st-Century Gap

Day 1



Slide 1: Introduction

Presenter: Tabatha S Stover

My name is Tabatha S Stover, I am a first-grade teacher in the Sunny Valley School District. My passion for learning and education led me to enhancing my understanding of *The Framework for 21st-Century Learning*. I am excited to assist other teachers in refining their pedagogical practices.

Note: 15 minutes

This three-day presentation will be offered during "Summer Academy" and "Sunny Day U." The presentation will begin at 8:30 am and conclude at 3:30 pm each day.

Slide 2: Our Professional Challenge (Objectives)

The goal of this presentation is to encourage teachers to embrace growth and change, empower teachers to embrace *The Framework*, inspire educators to enhance their

understanding of *The Framework*, develop innovative practices through student-driven instruction, and refine assessment systems to bolster student reflection and self-assessment.

Content Objective: Teachers will explore the purpose and importance of effective pedagogical shifts focused on the implementation of *The Framework for 21st-Century Learning*.

Learning Objective: Teachers will gain a common language and knowledge base pertaining to *The Framework*. Teachers will also gain an awareness of 21st century assessment strategies as well as continue to develop their innovative practices.

Note: 15 minutes

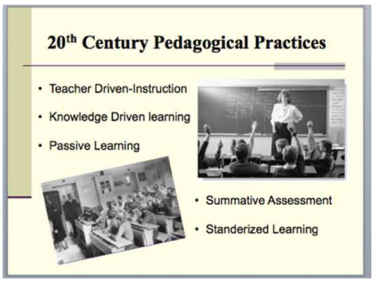
Slide 3: Great Debate

In order for teachers to develop a common language, they must have a clear and concise understanding of the characteristics and differences between 20th-century and 21st-century instruction. Key features of 20th-century instruction include knowledge-based learning, isolated activities, teacher-driven instruction and assessment, and memorization. In contrast, key features of 21st-century instruction include outcome-based learning, multimodal formats for gathering, creating, and sharing information, student-driven instruction and assessment, technology integration, and inquiry-based assessment.

Note: 40 minutes

How has teaching and learning shifted over the years? What changes have occurred in the educational setting? What is a 20th-century teacher? What is a 21st-century teacher? Teachers will watch the video clip, *21st Century vs 20th Century* by Jimaxx13 (August 9, 2011).

Teachers will reflect on their personal practice. They will describe their current practice notating specific examples. They will be free to use blank paper and/or a notetaking application. Teachers will be asked to first share their description with their table groups and then with the larger groups.

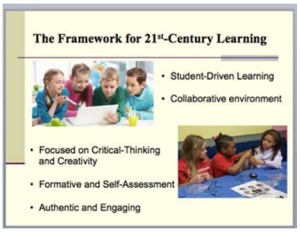


Slide 4: 20th-Century Pedagogical Practices

Education in the 20th century focused on the teacher. The teacher was the gatekeeper of knowledge. Furthermore, instruction and assessment were driven and designed by the teacher. Students were required to memorize and recall information to demonstrate knowledge. The student's role was to sit and get (Davis, 2010; Fuentes, Switzer, & Jimerson, 2015; Parker, Bush, & Yendol-Hoppey, 2016).

Note: 25 minutes

Teachers will discuss past practices, experiences, and observations of 20th-century instruction.



Slide 5: The Framework for 21st-Century Learning

In the 21st-Century Learning Framework, the teacher's role is to provide learning experiences that engage learners in challenging tasks that are authentic, purposeful, creative, innovative, inquiry-based, and collaborative. Learners must gain the ability to problem solve, communicate, evaluate, and synthesize information across multimodal formats to be successful in the 21st century (Tompkins, 2014).

Teachers will develop a common language and knowledge of *The Framework for 21st-*

Century Learning. We must be able to ensure students are able "to flourish in a dynamic, global economy, every student deserves an education that culminates in 21st century readiness for college, careers and civic participation" (P21, 2015, p. 4).

Note: 20 minutes

Teachers will discuss the differences between the 20th-century and 21st-century instruction. The teachers will be encouraged to share ideas, comments, and/or questions.

*Q and A will be encouraged at this point. Teachers will be invited to ask questions. Teachers can ask questions out loud, or they can write their question(s) on one of the Parking Lots (charts positioned around the room) located around the room. I will address each question as well as encourage teachers to assist in answering questions.

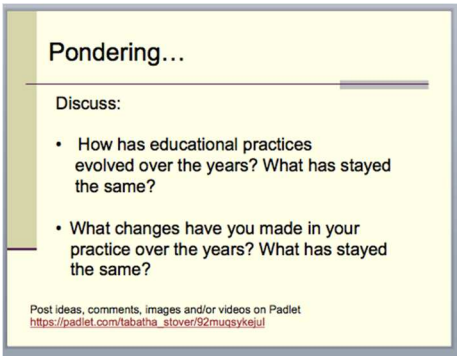
Slide 6: The Future…

Educators will always be important but the role of the educator must evolve to ensure that innovative, authentic, and engaging learning environments flourish. The role of the 21st-century educator is to facilitate learning. Learners require educators to provide environments that diversify learning options while ensuring this learning is personalized. Moreover, learning experiences should be authentic and inquiry-based as well as designed to challenge learners to think flexibly. Teachers must also empower students to take ownership of their learning through self-assessment, goal setting, and reflection (Henny, 2016)

Note: 25 minutes

Teachers will view the video clip *21st Century Teaching* by EOI Teacher. Teachers will focus on the question: How can we update our pedagogical practice? Based on the question, teachers will Turn and Talk focusing on the changes needed for the future as well as sharing their insights and ideas with the group.

Lunch Break: 60 minutes



Slide 7: Pondering… (Table Top Discussion)

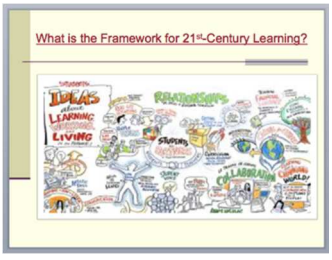
Teachers will share their current practices at their tables. They will answer the following questions:

- How has educational practices evolved over the years? What has stayed the same?
- What changes have I made in my practice over the years? What has stayed the same?

Note: 30 minutes

Table groups will work together to answer the bulleted questions. Teachers will create a Padlet post to share their table's answers to the bulleted questions. Groups may use images, text, and/or video clips to answer the bulleted questions.

Post comments, ideas, images, and/or video clips to Padlet and read through and comment on other tables' posts https://padlet.com/tabatha_stover/92muqsykejul



Slide 8: What is *The Framework for 21st-Century Learning*?

The Framework for 21st-Century Learning is a set of key skills necessary for

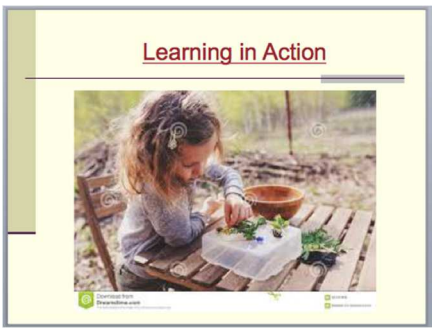
understanding, learning, thinking, and mastering content knowledge. In the 21st century learners must be able to fluently utilize technological tools and be willing to consider multiple perspectives to design and manage information across multiple platforms. They must also manage, analyze, and synthesize multiple streams and forms of information and utilize creative, innovative, and flexible thinking skills (Leu et al., 2015).

Note: 35 minutes

Teachers will view the video clip *Dana Elementary: A P21st Century Learning Exemplar* by Partnership for 21st Century Skills (November 21, 2013). Teachers will then Turn and Talk at their tables focusing on the bulleted questions:

- What elements of *The Framework* did I observe?
- What is the teacher's and student's role within the classroom environment?

Teachers will be asked to share out key points from their table discussions.



Slide 9: Learning in Action (Promoted Q and A)

Student-centered learning inspires active engagement as the teacher works in collaboration with learners to structure activities that address unique learning needs, interests, or cultural backgrounds (Tompkins, 2014). In a student-driven learning environment, learners are encouraged to construct knowledge through experiences that are authentic, inquiry-based, and project oriented.

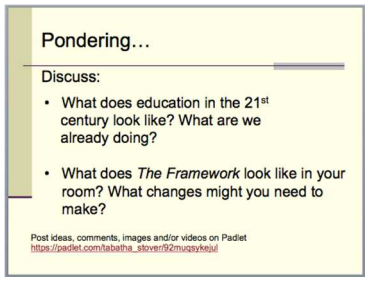
Note: 30 minutes

Teachers will view the video clip Dana Elementary: *A P21st Century Learning Exemplar* by Partnership for 21st Century Skills (November 21, 2013). The teachers will be encouraged to share their ideas, comments, and/or examples based on the question

prompts. Teachers will be encouraged to ask questions and expand on each others' answers.

- What elements of *The Framework* did I observe?
- What is the teacher's and student's role within the classroom environment?
- How do I implement *The Framework* in my classroom? Or How do I envision implementing *The Framework* in my classroom?

*Q and A will be encouraged at this point. Teachers will be invited to ask questions and share answers. Teachers can ask questions out loud or they can write their question(s) on one of the Parking Lots (charts positioned around the room) located around the room. I will promote discussions with the bulleted questions as well as encourage teachers to ask their own questions.



Slide 10: Pondering… (Table Top Discussion)

Note: 35 minutes

Teachers will share their current practices at their tables. They will answer the following questions:

- What does education in the 21st century look like? What am I already doing?
- What does *The Framework* look like in my room? What changes might I need to make?

Table groups will work together to answer the bulleted questions. Teachers will create a Padlet post to share their tables' answers to the bulleted questions. Groups may use images, text, and/or video clips to answer the bulleted questions.

- Post comments, ideas, images, and/or video clips to Padlet and read through and comment on other tables' posts https://padlet.com/tabatha_stover/92muqsykejul

Day 2

Outline for Professional Development Session

Bridging the 21st-Century Gap

Slide 11: What inspires change?

Caine's Arcade is the creation of 9-year-old Caine Monroy. Caine spent his summer vacation creating an elaborate cardboard arcade in his father's auto parts shop. Caine's innovative solution to boredom has inspired many, including me. This video clip demonstrates the authentic and amazing creation a learner can create when given the opportunity.

Note: 40 minutes

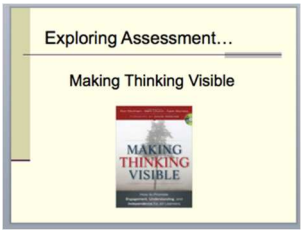
Teachers will watch the *Caine's Arcade* clip by Mullick (April 9, 2012). I will share how this clip inspired me to alter my approach to teaching. Participants will share what inspires them to alter practices. Table groups will be asked to discuss how innovation, inspiration, and creativity can be translated into the classroom setting.

Slide 12: Be the Change! (Gallery Walk)

How can I be the change? Teachers will be asked to reflect on their current practices in order to develop an understanding of *The Framework* in action.

Note: Step 1: 30 minutes, Step 2: 20 minutes, and Step 3: 20 minutes

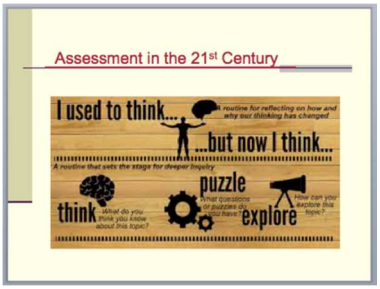
- Step 1: Teachers will work collaboratively to design a display (poster, collage, etc.) to demonstrate what creative, innovative, technology, and/or critical thinking skills look like in action).
- Step 2: Upon completion, displays will be positioned around the room. Once all groups are complete, participants will be given five Post-it notes. Teachers will move around the room exploring the different displays. Teachers will use the Post-it notes to add comments, expand on ideas, and/or ask questions.
- Step 3: The group will come together and discuss each display. The discussion will focus on the implementation of essential elements of *The Framework*.



Slide 13: Exploring Assessment…Making Thinking Visible

Making Thinking Visible allows educators to create classroom environments that encourage intellectual stimulation by empowering learners to think, plan, create, question, and engage independently. "Assessment, evaluation, and documentation are essential to any teaching and learning process. The way learning is documented and assessed directly influences what gets taught" (Project Zero, 2017, para. 1). We must, therefore, strive to create a culture of thinkers and doers.

Note: 30 Minutes



Slide 14: Assessment in the 21st-Century

As instructional practices change, so must assessments. Assessments in the 21st century focus on both formative and summative tools but must also provide opportunities for learners to develop self-assessment and reflection skills. Project Zero (2010) noted,

As teachers strive to create cultures of thinking in their classrooms, they can use a variety of methods, including making time for thinking, developing and using a language of thinking, making the classroom environment rich with the documents of thinking processes, and making their own thinking visible…

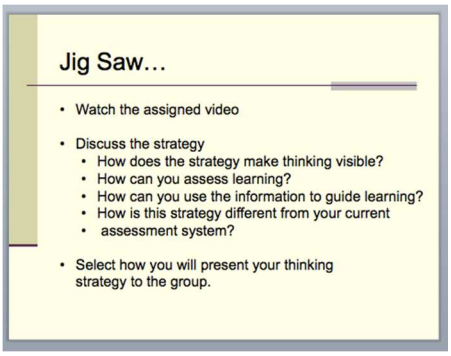
Note: 45 minutes

Teachers will view the video clip *Thinking Routines by Project Zero*. Teachers will then Turn and Talk at their tables focusing on the bulleted questions:

- What is the role of assessment in the 21st century?
- How does 21st century assessment strategies mirror my current assessment process?
- What might need to be altered to utilize 21st century assessment strategies?

Post comments, ideas, images, and/or video clips to Padlet and read through and comment on other tables' posts https://padlet.com/tabatha_stover/92muqsykejul

Lunch Break: 60 minutes



Slide 15: JigSaw…

Thinking routines capture student thinking and allow for reflective goal oriented learning to occur. Thinking routines provide educators with the strategies to glean meaningful insights into a student's understanding during authentic learning experiences.

Step 1: Teachers will work collaboratively to view assigned Thinking Routine video clip.

Groups will view clip focusing on the following questions:

How does the strategy make thinking visible?

How can I assess learning?

How can I use the information to guide learning?

How is this strategy different from my current assessment system?

Step 2: Group members will work together to develop a product that will allow the group to share the Thinking Strategy with the rest of the class.

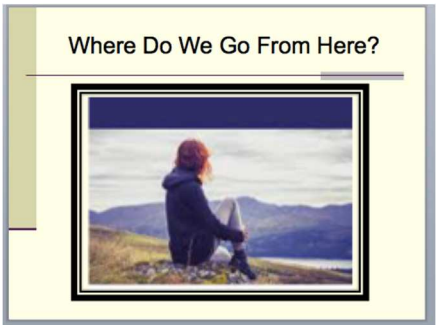
Step 3: Upon completion, displays will be positioned around the room. Once all groups are complete participants will be given three Post-it notes. Teachers will move around the room exploring the different displays. Teachers will use the Post-it notes to add comments, expand on ideas, and/or ask questions.

Step 4: The group will come together and discuss each display. The discussion will focus on how the strategy could be used to assess thinking, how one might implement the strategy in the classroom, and how the strategy might guide instruction.

Note: Step 1: 30 minutes, Step 2: 30 minutes, Step 3: 30 minutes, and Step 4: 30 minutes

Clips are located at the link below (6 video clips):

https://www.youtube.com/watch?v=oKV_S5NpDdc&index=2&list=PLw02tZ1F4zEDxJTB9U64rFJcnqDgBAHMc



Slide 16: Where do we go from here?

Encouraging teachers to transfer learned concepts is a difficult task. It requires reflection and inspiration (Soebari & Aldridge, 2015). Teachers will be asked to complete a reflection ticket (an exit ticket) designed to assist in reflecting and planning transitional action. Teachers will also be challenged to refine, alter, or change their practice.

- What inspired I today?
- How will I alter my practice after today?
- What small/big changes will I put in place?

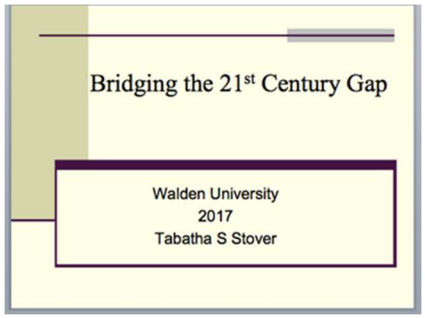
Note: 45 minutes

I challenge each of you to alter at least one aspect of your practice to include an element of *The Framework* that is new to you. You could try a thinking routine or provide a learning experience that encourages critical thinking. Please be prepared to share your experiences, successes, and/or challenges with the group during day three. I encourage you to bring in artifacts such as work samples, thinking routine charts, pictures, and/or video clips to share with the group. Our goal is to reflect on the transitional experience and how the new approaches impacted student learning.

Day 3

Outline for Professional Development Session

Bridging the 21st-Century Gap



Slide 17:

Welcome to day three! Our goal today is to explore, refine, and design with *The Framework* in mind. We will explore innovative classrooms looking for and identifying elements of *The Framework* in action. We will also work together to complete a design challenge as well as develop our own Framework Challenge that can be used in the classroom.

Note: 20 minutes

Slide 18: New Horizons (Share time)

Teachers will have the opportunity to share their experiences, successes, and challenges. During day one teachers were challenged to return to their classrooms to utilize a key element of *The Framework*. Teachers were asked to collect artifacts such as pictures, work samples, and/or video clips to share with the class during day three. Sharing will focus on:

- How did I alter my instruction?
- What new concept/strategy did I try?
- What was successful? Challenging?
- How did the learners respond?
- What changed within the learning environment? How did that change alter the tone of the environment?

Step 1: Teachers will begin sharing at their tables focused on the bulleted questions. They will each share their ideas, comments, and artifacts. (30 minutes)

Step 2: Teachers will be rotated to new tables in order to share with a new group. Teachers will share at their new tables. (30 minutes).

Step 3: Teachers will come back as a whole group. Teachers will be encouraged to share their experiences with the whole group (20 minutes)

*Q and A will be encouraged at this point. Teachers will be invited to ask questions. Teachers can ask questions out loud, or they can write their question(s) on one of the Parking Lots (charts positioned around the room) located around the room. I will promote discussions with the bulleted questions and teachers' shared experiences as well as encourage teachers to ask their own questions. (30 minutes).

Note: 110 minutes

Slide 19: Iggy Peck, Architect

"Iggy has one passion: building. When his second-grade teacher declares her dislike of architecture, Iggy faces a challenge. He loves building too much to give it up!" (Jackson, 2016, para. 1).

Note: 30 minutes

Teachers will watch the video clip *Iggy Peck, Architect* to prepare for the design challenge. The video clip will provide a reference for the challenge. The purpose of this challenge is to model a learning experience that integrates *The Framework* allowing teachers to observe *Framework* elements in action.

Lunch Break: 60 minutes

Slide 20: Design Challenge

Design Challenge allows educators to integrate *The Framework* into an educational experience. Authentic challenges provide learners with the opportunity to engage in tasks that are purposeful, creative, innovative, inquiry-based, and collaborative. This enhances the learner's ability to problem solve, communicate, evaluate, and synthesize information across multimodal formats.

Note: Step 1: 40 minutes, Step 2: 20 minutes, and Step 3: 20 minutes

Step 1: Present Challenge

Challenge: Work as a team to design a tree house using recyclable materials such as paper towel rolls, paper, bottles, and cardboard. Your team will need to create a design

plan (architectural drawing and description of your tree house) and create a model. The team will also be expected to present its design plan and model to the class. The group must be able to describe and discuss the features of the tree house design.

Teachers will work in teams to use various materials (provided) and resources (books and technology) to create their tree house design and model and to present their creations to the group.

Step 2: Gallery Walk

Half of the teams will remain with their creations and the other half will take a gallery walk. During the gallery walk presenters will be expected to share their design plan and tree house creation as well as describe and discuss the features of the tree house design. Audience members (people roaming around viewing the creations) will be expected to actively listen to each team's presentation and offer feedback as well as ask clarifying questions. Groups will switch roles at the 20-minute mark.

Step 3: *Q and A will be encouraged at this point. Teachers will be invited to ask questions. Teachers can ask questions out loud, or they can write their question(s) on one of the Parking Lots (charts positioned around the room) located around the room. I will promote discussions as well as encourage teachers to ask their own questions.

Slide 21: Putting it all Together - Room 19

The teachers will examine *The Framework* in action. The goal is to ensure educators are able to identify effective integration of *The Framework.* The overarching question is how does Room 19's learning environment mirror the task we just completed?

Note: 30 minutes

Teachers will view the video clip *Putting it all Together-Room 19*. Teachers will then

Turn and Talk at their tables focusing on the bulleted questions:

- What elements of *The Framework* did I observe?
- What is the teacher's and student's role within the classroom environment?
- How did the teacher ensure students were engaged in the learning experience?
- How did the teacher assess for student understanding?
- How was the teacher able to personalize instruction?

Post comments, ideas, images, and/or video clips to Padlet and read through and comment on other tables' posts https://padlet.com/tabatha_stover/92muqsykejul

Slide 22: Design Challenge

Note: 45 minutes

The Framework Design Challenge will provide teachers with the opportunity to work collaboratively or independently to develop a Design Challenge which infuses the elements of *The Framework for 2st-Century Learning*. The teachers will be encouraged to create a Design Challenge that they intend to implement in their classrooms. A large selection of picture books, materials, and technology will be at hand for teachers to explore, utilize, and/or glean inspiration. Teachers will be expected to present their Design Challenge to the class. They will be expected to explain how the Design Challenge demonstrates elements of *The Framework* as well as address comments and answer any questions during the Show and Tell.

Slide 23: Show and Tell

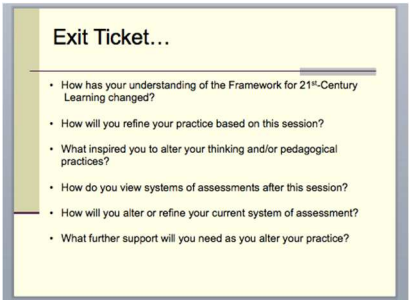
The Show and Tell portion provides teachers the opportunity to share their Design Challenge as well as receive peer feedback. The teachers will be encouraged to post their Design Challenge on the class Padlet page for others to access.

Note: 30 minutes

The teachers will be asked to share their Design Challenge with the class highlighting *Framework* elements. Upon completion, teachers will post their Design Challenge on our class Padlet page for others to access. Teachers will be encouraged to provide feedback and ask clarifying questions.

Post comments, ideas, images, and/or video clips to Padlet and read through and comment on other teachers' posts https://padlet.com/tabatha_stover/92muqsykejul

*Please note that the class Padlet page will remain accessible to the class in order to encourage continued collaboration, sharing, and reflections.



Slide 24: Exit Ticket and Course Evaluation

Teachers will complete the Exit Ticket and the Course Evaluation before leaving. They will place both the Exit Ticket and the Course Evaluation in a tray by the door.

Note: 15 minutes

Slides 24-26: References

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program. *Learning Environments Research*, *18*(2), 163-178. doi:10.1016/j.tate.2016.04.009

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Course Evaluation Form

Session Title: _____ Session Date: _____

Course Facilitator: _____

The purpose of this form is to provide you with an opportunity to provide valuable feedback on the session you have attended. The information you provide is important to the further refinement and development of the professional development session.

1. To what extent do you feel the goals/objectives for this session were accomplished?
(circle the appropriate number)

   NOT AT ALL < 1 2 3 4 5 6 7 > COMPLETELY

   Comments:

2. How would you rate the overall effectiveness of the facilitator ‘s—preparation, style, methods, rapport? (circle the appropriate number)

   INEFFECTIVE < 1 2 3 4 5 6 7 > VERY EFFECTIVE

   Comments:

3. To what extent did this session provide you with useful ideas which you expect to apply to your own professional/personal situation? (circle appropriate number)

   NO USEFUL IDEAS < 1 2 3 4 5 6 7 > SEVERAL USEFUL IDEAS

   Comments:

4. What suggestions do you have for improving this session?

5. In retrospect, would you still choose to attend this session? (circle one response)
YES NO MAYBE

6. What, if any, suggestions do you have for additional session which might be organized in the future?

7. Other comments?

Appendix B: Observational Checklist

Teacher's Name _____ Observation Date _____

Observation Start Time _____ Observation Finish Time _____

Grade Level of Students _____ Number of Students _____

Description of Classroom Environment:

Teacher's Behaviors	**Notes (additional area on the back)**
Principle 1: Teachers Understand How Students Learn.	
1. How are teachers setting informed goals for their students, providing meaningful learning experiences, and interacting effectively with students?	
2. How are teachers collecting, creating, and adapting instructional resources, involving students in creating resources, and inviting community members to enrich the instructional program?	
Principle 2: Effective Teachers Support Students' Use of the Cueing Systems.	
1. How are teachers using their knowledge of the reading process, types of texts, and instructional procedures to develop strategic, lifelong readers?	
2. How are teachers applying their knowledge of the writing process, writer's craft, and instructional procedures to develop writers who can write for a variety of purposes and audiences?	
3. How are teachers teaching listening and speaking as essential components of literacy and providing opportunities for students to use oral language for a variety of purposes and audiences?	
Principle 3: Effective Teachers Create a Community of Learners.	
1. How are teachers providing equal access to learning, capitalizing on diversity, and encouraging all students to respect themselves and their classmates?	
2. How are teachers establishing a community of learners in their classroom that is safe, supportive, inclusive, and democratic?	
Principle 4: Effective Teachers Adopt a Balanced Approach	

to Instruction.	
1. How are teachers working collaboratively to understand current research and theories about literacy instruction and applying their knowledge to their teaching?	
2. How are teachers working collaboratively to understand the reciprocal nature of reading and writing and integrating written language with oral and visual language?	
Principle 5: Effective Teachers Scaffold Students' Reading and Writing.	
1. How are teachers locating supportive and collaborative experiences to bolster their knowledge of learning theories to inform their teaching?	
Principle 6: Effective Teachers Organize for Literacy Instruction.	
1. How are teachers using the reading processes—prereading, reading, responding, exploring, and applying—to ensure that students comprehend texts they read?	
Principle 7: Effective Teachers Differentiate Instruction.	
1. How are teachers linking assessment with instruction through planning, monitoring, evaluating, and reflecting?	
2. How are teachers integrating reading and writing because they're reciprocal meaning-making processes?	
Principle 8: Effective Teachers Link Instruction and Assessment.	
1. How are teachers using a range of assessment tools to monitor instructional progress, evaluate students' learning, and making instructional decisions?	
2. How are teachers using diagnostic assessments to identify students' strengths and weaknesses and then providing instruction to address problem areas.	
3. How are teachers having students document their learning?	

Description of Observed Behaviors	Personal Reflection

Appendix C: Literacy Questionnaire

Teacher's Name _____ Questionnaire Date _____

Grade Level of Students _____ Number of Years Taught _____

Important Notes

This is only part of a survey and part of a larger study. For a full report and a complete copy of the instrument, please see:

Hixson, N., Ravitz, J. & Whisman, A. (2012). *Extended professional development in project-based learning: Impacts on 21st century teaching and student achievement*. Charleston, WV: West Virginia Department of Education. Retrieved from https://www.academia.edu/1999374.

This work was undertaken at the Buck Institute for Education in partnership with the West Virginia Department of Education (WVDE) Offices of Instruction and Research.

You have permission to use and revise, with attribution to Hixson, Ravitz & Whisman (2012) or this document.

Instructions

This survey asks about your implementations of *The Framework for 21st-Century Learning*; Critical Thinking, Collaboration, Communication, Creativity and Innovation, Self-Direction, Local Connections, and Using Technology as a Tool for Learning.

For each of the below you will be asked to comment and/or add examples representing how you use collaborative and supportive experiences to address the challenges in the utilization of the skill within your teaching practice. There are no correct or incorrect answers and all responses will be kept confidential.

Critical Thinking Skills refers to learners being able to analyze problems, investigate questions, evaluate information and various points of view, and draw conclusions based on evidence and reasoning.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill
1. Compare information from different sources before completing a task or assignment.	
2. Draw their own conclusions based on analysis of numbers, facts, or relevant information.	
3. Summarize or create their own interpretation of	

what they have read or been taught.	
4. Analyze competing arguments, perspectives, or solutions to a problem.	
5. Develop a persuasive argument based on supporting evidence or reasoning.	
6. Try to solve complex problems or answer questions that have no single correct solution or answer.	

Collaboration Skills refers to learners being able to work together to solve problems or answer questions, to work effectively and respectfully in teams to accomplish a common goal, and to assume shared responsibility for completing a task.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Work in pairs or small groups to complete a task together.	
2. Work with other students to set goals and create a plan for their team.	
3. Create joint products using contributions from each student.	
4. Present their group work to the class, teacher, or others.	
5. Work as a team to incorporate feedback on group tasks or products.	
6. Give feedback to peers or assess other students' work.	

Communication Skills refers to learners being able to organize their thoughts, data, and findings and share these effectively through a variety of media, as well as orally and in writing.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Structure data for use in written products or oral presentations.	

2. Convey their ideas using media other than a written paper.	
3. Prepare and deliver an oral presentation to the teacher or others.	
4. Answer questions in front of an audience.	
5. Decide how they will present their work or demonstrate their learning.	

Creativity and Innovation Skills refers to learners being able to generate and refine solutions to complex problems or tasks based on synthesis, and/or analysis and then combining or presenting what they have learned in new and original ways.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Use idea creation techniques such as brainstorming or concept mapping.	
2. Generate their own ideas about how to confront a problem or question.	
3. Test out different ideas and work to improve them.	
4. Invent a solution to a complex, open-ended question or problem.	
5. Create an original product or performance to express their ideas.	

Self-Direction Skills refers to learners being able to take responsibility for their learning by identifying topics to pursue and processes for their own learning, and being able to review their own work and respond to feedback.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Take initiative when confronted with a difficult problem or question.	
2. Choose their own topics of learning or questions to pursue.	
3. Plan the steps they will take to accomplish a complex task.	

4. Choose for themselves what examples to study or resources to use.	
5. Monitor their own progress towards completion of a complex task and modify their work accordingly.	
6. Use specific criteria to assess the quality of their work before it is completed.	
7. Use peer, teacher, or expert feedback to revise their work.	

Local Connections refers to learners being able to apply what they have learned to local contexts and community issues.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Investigate topics or issues that are relevant to their family or community.	
2. Apply what they are learning to local situations, issues or problems.	
3. Talk to one or more members of the community about a class project or activity.	
4. Analyze how different stakeholder groups or community members view an issue.	
5. Respond to a question or task in a way that weighs the concerns of different community members or groups.	

USING TECHNOLOGY AS A TOOL FOR LEARNING refers to students being able to manage their learning and produce products using appropriate information and communication technologies.	Add comments, examples of these skills in practice, as well as how you use collaborative and supportive experiences to bolster your effectiveness with the skill.
1. Use technology or the Internet for self-instruction.	
2. Select appropriate technology tools or resources for completing a task.	
3. Evaluate the credibility and relevance of online resources.	

4. Use technology to analyze information.	
5. Use technology to help them share information.	
6. Use technology to support collaboration.	
7. Use technology to interact directly with experts or members of local/global communities.	
8. Use technology to keep track of their work on extended tasks or assignments.	

Appendix D: Questionnaire and Observation Comparison Chart

Elements of *The Framework*	Teachers	Questionnaire Responses	Teachers	Observations
Collaboration Skills – refers to learners being able to work together to solve problems or answer questions, to work effectively, and respectfully in teams to accomplish a common goal and to assume shared responsibility for completing a task.	Teacher C	"…students to work collaboratively to select what they were going to read and how they were going to respond and share the information."	Teacher C	Students worked collaboratively to develop a Reader's Theater iMovie.
			Teacher D	Students collaborated on a shared project. They worked together to design, share, and refine the final product.
	Teacher D	"This happens daily in Readers and Math Workshop. Students are encouraged to work in pairs or small groups on projects they come up with."		
			Teacher A	Designed a learning experience which create an opportunity for students to work together to design a Putt-Putt course.
& Communication Skills – refers to learners being able to organize their thoughts, data, and findings and share these effectively through a variety of media, as well as orally and in writing.	Teachers A, B, E, F, G, H, and J	"I haven't done a lot of these at this point in the year." "not yet" included in the learning experiences	Teacher E	Students work in tandem to complete assigned center tasks which included literacy and math games, phonetic sorts, and writing projects.
			Teacher F	Structured lessons that provided an opportunity for authentic collaborative research and sharing as well as students engaging in rich and dynamic discussions.
			Teacher G	During a Writer's Workshop Students worked in pairs to provide feedback to improve their stories.
			Teacher H	Created centers based options which prompted learners to work in groups and/or pairs.
			Teacher J	Students worked in pairs to complete assigned literacy center tasks.
Creativity, Innovation, & Critical Thinking	Teachers A, C, D, E, F, H, and J	"PBL design is used to create learning options that allow for problem solving."	Teacher A	The students were challenged to utilize resources to access the needed information, work flexibly

Skills – refers to learners being able to analyze problems, investigate questions, evaluate information, and various point of view, and draw conclusions based on evidence and reasoning.	Teacher G	"Fundamental skills are taught through open-ended PBL design."		to design and redesign their course as well as adapt to issues or ideas that occurred during the development process.
	Teacher B	"Haven't done a lot of these at this point in the year."	Teacher B	Utilized open-ended questioning techniques to guide discussion and enhance student learning.
			Teacher C	Students worked to design Reader's Theater iMovies. Learners self-selected stories, shared ideas, and solved problems as they arose.
			Teacher D	Students developed a product based on a passion, interest, and/or wonder. Students chose to work independently or in pairs. Students also selected how to present their knowledge.
			Teacher E	Structured authentic writing experiences that allowed the students to write for a purpose and allowed for open-ended responses.
			Teacher F	Students researched a self-selected 'leader'. The students were prompted to utilize varied resources to gather information as well as share their findings.
			Teacher G	Utilized open-ended questioning techniques to enhance and guide discussion.
			Teachers H	Created centers that were structured around tasks that prompt students to solve open-ended problems.
Using Technology as a Tool for Learning – refers to students being able to manage their learning and produce products using appropriate information and	Teachers A, E, G, and H	"Sought high levels of support" or "Stated they had yet to integrate technology"	Teacher C	Students used iPad technology to create an eBook in which pairs worked collaboratively to illustrate, type and record the eBook. The students then used Airdrop to share their creation with other groups for critique.
	Teacher B	"based on the maturity of the students in this grade, this would be very difficult – a LOT of teacher support and		

communication technologies.		parameters are essential."	Teacher E	Students used various apps during a guided reading lesson to assist in individualizing instruction for students.
	Teacher E	"Currently working to improve on this."	Teacher G	Encouraged the students to use various apps to create a digital story during Writer's Workshop as well as assisted students in gathering information using the iPad to refine their stories and develop details.
	Teacher J	"I do rely heavily on our Tech teacher and teammates to help with technology."		
	Teachers C, D, and F	"Students use various apps to assist in the learning process as well as Canvas to store, share, and manage learning."	Teacher H	Used the Airplay feature on the iPad to capture student work, spark discussion, and provide peer as well as teacher feedback.
			Teacher J	Learners utilized Padlet, a web-based program, which allowed learners to share their knowledge, provide feedback to peers through web-based discussion and response.
Self-Direction Skills & Self-Assessment – refers to learners being able to take responsibility for their learning by identifying topics to pursue and processes for their own learning, and being able to review their own work and respond to feedback.	Teachers A, B, D, E, G, H, and J	"Utilized teacher-driven assessment tools, which were used to provide feedback, collect assessment information, drive instruction, and refine learning experiences."	Teachers A, B, C, D, E, F, G, H, and J	Designed assessment tools such as anchor charts and rubrics to assist in providing supportive feedback.
	Teacher C	"Worked with the class to develop what was called The Chart of Understanding. We created a rubric, which enabled the learners to determine their personal level of understanding."	Teachers A, B, C, D, E, F, G, H, and J	Provided clear and concise feedback to learners based on student performance with the purpose of student growth.
			Teacher C	Encouraged and provided students with reflection/ peer-feedback time. Students shared ideas, comments, an suggestions with each other.
	Teacher F	"Students used collaborative rubrics to determine completion, quality work as well as receive peer feedback. The students are required to complete the rubric, which included meeting with a peer for feedback."	Teacher D	Challenged learners to create personalized learning goals. Students focused learning based on their learning goals.