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## Veteran K–5 Teachers’ Perceptions of Implementing Blended Learning as an Innovation for English Language Art Instruction

Faith LaJoy Roberts-Graham  
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# Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Faith Roberts-Graham

has been found to be complete and satisfactory in all respects,  
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2022

Abstract

Veteran K–5 Teachers' Perceptions of Implementing Blended Learning as an Innovation  
for English Language Art Instruction

by

Faith Roberts-Graham

MA, Nova Southeastern University, 2009

BS, Edward Waters College, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

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August 2022

## Abstract

The phenomenon of interest in this study was veteran K–5 English language arts (ELA) teachers' perceptions of blended learning as an educational innovation setting and how they perceived the implementation of blended learning into their instructional routine. Blended learning is normally used in higher-level education but is now also used in the K–5 setting. Blended learning requires students to learn in a brick-and-mortar class setting and through online instruction using technology. Existing research on blended learning primarily focuses on the technological aspects and not veteran K–5 ELA teachers' implementation of blended learning in public elementary schools. The purpose of this basic qualitative inquiry was to explore veteran K–5 ELA teachers' perceptions of blended learning as an educational innovation. The conceptual framework for this study was Rogers's diffusion of innovation theory. The research question focused on veteran K-5 ELA teachers' perceptions of blended learning as an educational innovation and how specific attributes of blended learning influenced the perceptions of it as an educational innovation. Data were collected through semistructured interviews with 15 veteran K–5 ELA teachers who implement blended learning daily. The interview data were transcribed, coded, and analyzed using the thematic analysis method. This study found that veteran K-5 ELA teachers positively view blended learning as an innovation; however, their perception of the innovation is significantly impacted by the professional development they received. This study contributes to positive social change by increasing understanding of implementing blended learning during the ELA instructional routine, which could lead to greater student engagement and achievement in K-5 settings.

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## Dedication

This dissertation is dedicated to my heartbeats, Eugene, Fabian, and Elijah. To my world, Eugene, over the course of the years, things have not been easy, peachy, or perfect, but you have always made sure that I stayed focused on the task at hand. Your confidence in my abilities and encouragement allowed me to see the light in me when I could not see anything but darkness. I am forever grateful. To my SonShine and SonSet, Fabian and Elijah, thank you for your unconditional love, support, and always believing in me. At times your presence alone gives me the fuel I needed to push forward. You both have witnessed what determination and hard work looks like firsthand. Thank you both for your mercy, during my season. I pray and hope during this time you observed what it means to persevere and know that you can do anything you put your mind to. I would also like to dedicate this dissertation to my queen and her king, Sister Gloria Walker-Jones and Elder Frank Jones, thank you for your prayers which covered me and gave me the fervor needed to maintain this tedious journey. To my brother, Rod, and sister, Damarra, I am honored to be a little/big sister to you both. Rod, I appreciate the self-discipline and determination that you instilled in me growing up. Damarra, although you say I am your motivator, you have motivated me to be better. Thank you for being my cheerleader. Your support is unmatched. To my family, friends, mentors, and colleagues thank you for providing continuous support, words of encouragement, motivation to keep going, prayer, and believing in me. Lastly, I dedicate this journey to myself. With fortitude, I said to myself almost daily, Philippians 4:13 “you can do all

things through Christ Jesus who strengthens me.” I did it. I am Dr. Faith LaJoy Roberts-  
Graham

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## -Chapter 1: Introduction to the Study

Since the beginning of the 21st century, teachers have been introduced to various blended learning models to incorporate into their day-to-day instructional practices. Blended learning is defined as the mixture of technology-based learning with face-to-face learning where students learn concepts while using assistive learning technology (Halverson et al., 2017). Although educators face challenges with implementing various models of blended learning in their classrooms, the use of blended learning has continued to gain momentum, and schools have continued to transform classrooms by moving away from traditional, whole class teaching (Lin et al., 2017). According to Hinkelman (2018), blended learning has grown in popularity with teachers attempting to find student engagement opportunities while using technology. However, not all educators have the necessary skill set to implement blended learning into their instructional practice (Acree et al., 2017). The onset of the COVID-19 pandemic forced teachers to be innovative and creative as they began instructing students in a virtual learning environment.

The purpose of this basic qualitative inquiry was to explore veteran K–5 English language arts (ELA) teachers' perceptions of implementing blending learning in their day-to-day instructional practices. Although there are several studies on blended learning (e.g., Fisher et al., 2018; Jonker et al., 2018; Lalima & Dangwal, 2017), very few studies address how veteran K–5 ELA teachers approach implementation of blended learning in schools. Current research on blended learning primarily focuses on the technology that drives the decision-making process rather than how veteran K–5 ELA teachers perceive

the implementation of blended learning and how that relates to teachers' roles in the classroom (Fisher et al., 2018).

Chapter 1 includes a review of the background of the study, problem statement, purpose of the study, research question, conceptual framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance of the study. This chapter concludes with the significance of the study section, where I address implications for how the study findings can be used by district decision makers and how the results can contribute to positive social change.

### **Background of the Study**

Blended learning has been gaining popularity in educational settings in recent years, most recently in elementary schools. In elementary schools, blended learning is commonly implemented in the form of rotation stations (Prescott et al., 2018). Blended learning occurs when students are given an opportunity to learn at least part of the time in a traditional brick-and-mortar environment and the rest of the time using online technology (Lalima & Dangwal, 2017). Traditionally, blended learning involves the use of technology programs that allow students to simultaneously practice and learn while still experiencing differentiation and targeted instruction at their own learning level (Jonker et al., 2018). Prior to integrating blended learning, teachers would show a PowerPoint presentation or play an educational video and consider this sufficient technology implementation (Martin & Carr, 2016). As such, daily implementation of blended learning technology is something that may require significant adjustment from longstanding elementary school teachers.



In earlier studies of blended learning, researchers identified investment in training programs for teachers as the first step toward encouraging them to use online learning strategies (Schechter et al., 2017; Soifer, 2015). Based on the review of the current literature, a gap exists in the research regarding patterns in veteran K–5 teachers’ technology adoption processes and how those processes shape their perceptions of blending learning. A review of the literature confirmed that there is limited research on veteran K–5 teachers’ perception of blended learning as it relates to their stage of adopter category. Additionally, the literature review helped me to identify the need for more research to understand how to individualize and personalize instruction for students using blended learning without discouraging veteran K–5 teachers (see Firdaus et al., 2018; Prescott et al., 2018). The adoption of technology in stages can be used to explore how veteran K–5 teachers implement different blended learning programs in their classroom (see Rogers, 2003).

The results of this study may provide new insight regarding veteran K–5 teachers’ perceptions of blended learning and show how those perceptions influence the use of blended learning in an elementary school setting. The study results may also improve understanding of the best practices districts and schools should use to increase technology integration in the classrooms of veteran K–5 teachers.

### **Problem Statement**

The problem was the lack of research regarding the perceptions of veteran K–5 ELA teachers on the implementation of blended learning in their public school classrooms (see Fisher et al., 2018; Rotermund et al., 2017; Schechter et al., 2017;

Snyder, 2017). Snyder (2017) defined the term “veteran” as a teacher with 20 or more years of service. Blended learning is an innovative instructional approach that combines the benefits of face-to-face instruction and online instruction (Lalima & Dangwal, 2017). Implementation of blended learning allows students to have a more significant degree of control over the content, pace, time, and location of their learning (Powell et al., 2015). Before the widespread implementation of blended learning, teachers regularly set the course of students’ learning, manually scored student work, and disaggregated data (Cavanaugh et al., 2015; Hilliard, 2015). Teachers who use blended learning are better equipped to extract data, monitor student progress through computer-scored assessments, and make better-informed pedagogical decisions to differentiate and personalize instruction (Cavanaugh et al., 2015; Hilliard, 2015).

Since the beginning of the 21st century, K–12 schools have widely adopted blended learning models in their curricula (Jonker et al., 2018). Educators who teach using a blended curriculum encounter an educational context that has changed substantially and has demanded changes to their teacher role (Smits & Voogt, 2017). Through experience and support, veteran teachers can adapt to these changed roles and effectively use blended learning; however, a deeper examination of how the veteran teacher population perceives blended learning is needed (Schechter et al., 2017; Soifer, 2015). Blended learning research primarily focuses on how technology drives educators’ decision-making processes rather than how veteran teachers perceive blended learning and its effect on teacher roles (Fisher et al., 2018).

### **Purpose of Study**

The purpose of this basic qualitative inquiry was to explore veteran K–5 teachers’ perceptions of blended learning as an educational innovation. The focus of the study was on K-5 ELA teachers who have taught for more than 20 years in public schools in the southeastern region of the United States. Veteran K–5 teacher participants implemented blended learning into their daily routine during the ELA instructional reading block.

### **Research Question**

I used one research question and two sub questions to guide this study:

Research Question (RQ): What are veteran K–5 ELA teachers’ perceptions of blended learning as an educational innovation?

Subquestion 1 (SQ1): How do innovation attributes influence the perceptions of veteran K–5 ELA teachers regarding blended learning as an educational innovation?

Subquestion 2 (SQ2): How does the adopter category of veteran K–5 ELA teachers influence their perceptions of blended learning as an educational innovation?

### **Conceptual Framework**

The conceptual framework for this basic qualitative inquiry was grounded in Rogers’s (2003) diffusion of innovation theory (DIT). DIT was relevant to this study because the study was conducted among a population of individuals adopting an innovative practice. The focus of this study was on understanding how the attributes of the innovation and veteran K–5 teachers’ role as innovation adopters related to their perceptions of the implementation of blended learning. Rogers stated that innovation adopters fall into one of five categories: (a) innovators, (b) early adopters, (c) early

majority adopters, (d) late majority adopters, and (e) laggards. Use of DIT helped to explain the how the attributes of blended learning influence veteran K–5 teachers' perceptions of the innovation. Understanding veteran K–5 teachers' perceptions provided information on how to best support successful adoption of this educational innovation in this population.

### **Nature of Study**

In this basic qualitative inquiry, I collected data through semistructured interviews with veteran K–5 ELA teachers to explore how these teachers used blended learning technology. Conducting a basic qualitative inquiry allows the researcher to examine how individuals interpret their experiences and the meaning connected to those experiences (Merriam & Tisdell, 2016). Veteran K–5 teachers in the study site school district located in the southeastern United States were the focus of this study. According to Hagaman and Wutich (2017), 16 or fewer interviews are needed to identify common themes from relatively homogeneous groups. I interviewed 15 veteran K–5 teachers for this study. Participants were recruited for this study using the purposive method. Qualitative researchers use purposive sampling to find participants experienced with the study topic (Marshall & Rossman, 2016).

### **Definitions**

The following terms were used throughout this study:

*Blended learning*: A pedagogical style that is composed of four critical elements:

(a) some learning takes place online, (b) students have some control over their learning,

(c) some learning takes place in a supervised environment away from the student's home, and (d) students are provided an integrated learning experience (Christensen et al., 2013).

*DIT*: A theory used to explain how and why new ideas and practices are adopted, with timelines potentially spread out over long periods (Rogers, 2003).

*K–5 students*: Students who are between the ages of 5 to 11 years old and enrolled in kindergarten through fifth grade, the grades that traditionally comprise an U.S. elementary school (Bautista et al., 2018).

*Educational innovations*: Processes, strategies, products, and approaches that improve student learning and achievement (Cronje, 2020).

*Perception*: A way of regarding, understanding, or interpreting something; a mental impression (Ertmer et al., 2014).

*Veteran teacher*: A teacher in the latter part of their career, with 20 or more years of service (Snyder, 2017).

### **Assumptions**

For this research study, I identified two assumptions. The first assumption was that the participants would be honest and answer interview questions truthfully. I made sure to reiterate that all responses were voluntary and confidential to increase the level of comfort among participants. The participants being honest and transparent allowed me to capture their true experiences. The second assumption was that the participants in this study had implemented i-Ready into their daily reading block. i-Ready is an online platform that uses diagnostic data to create individualized, online learning pathways and lessons for students in reading (Curriculum Associates, 2020).

### **Scope and Delimitations**

The purpose of this research study was to explore the perceptions of veteran K–5 teachers regarding blended learning using an educational innovation. Rogers’s (2003) DIT was used to frame the study. The participants for this study were K–5 ELA teachers. The scope of this research study was to identify veteran K–5 teacher’s stage of adoption and determine if that related to their perceptions of blended learning. Because veteran teachers attended professional development (PD) on blended learning and ways to implement it, there is potential transferability for future research.

### **Limitations**

According to Simon (2018), limitations are elements of a study that are outside of the researcher’s control and could have affected the study’s outcome. The nature of this study included several limitations. One limitation was ensuring participants understood my role as a researcher and not as an administrator. To prevent bias, I conducted interviews among participants within the district where I work but who do not work directly with me. During this research, I served as an elementary level administrator in the study site school district; this was my fifth year serving as an administrator. Participants may have provided answers to the interview questions that they thought I would like to have heard instead of the truth. Using participants who did not work with or for me helped mitigate any bias.

A second limitation of this study was that it only pertained to veteran teachers who teach K–5 ELA. Limiting the study to veteran K–5 ELA teachers limited the applicability of the study to other grade levels. Another limitation of this study was that

the participants were required to provide blended learning during ELA instruction. Because blended learning was a requirement in all elementary schools in the study site school district, this might have motivated the veteran teachers to answer differently.

### **Significance**

The findings of this study may contribute to filling the gap in literature on this topic by providing insight into the perceptions of veteran K–5 ELA teachers regarding blended learning as an educational innovation through the lens of Rogers’s DIT. The information obtained from this study may allow district decision makers to understand how to utilize PD and professional support structures targeted towards the successful implementation of blended learning among veteran K–5 teachers. This study has the potential to bridge veteran K-5 teachers’ perceptions of blended learning and district decision makers’ visions for blended learning implementation. Decision makers could use the findings of this study to accommodate veteran K–5 teachers, thereby positively affecting their instructional practice, which could lead to increased student engagement and student achievement, contributing to positive social change, such as improved student-teacher and student-student interactions.

### **Summary**

In this chapter, I presented the research problem, purpose of the study, nature of study, and other crucial elements to this research study. Chapter 2 is comprised of a literature review that supported and set the foundation for this research study. Chapter 2 will begin with an introduction, followed by a literature review and in-depth exploration

into the conceptual framework of Rogers's (2003) DIT. The literature review supports and validates the need to conduct more research on this topic.



## Chapter 2: Literature Review

The purpose of this basic qualitative inquiry was to explore veteran K–5 teachers’ perceptions of blended learning as an educational innovation. The conceptual framework for the study was Rogers’s (2003) DIT. Based on a review of literature, a gap exists in the research regarding veteran K–5 teachers’ stages as adopters and how that shapes their perceptions of blended learning. Current research on blended learning primarily focuses on the technology that drives the decision-making process rather than how veteran teachers perceive the implementation of blended learning and how that relates to teacher roles in the classroom (Fisher et al., 2018; Rotermund et al., 2017; Schechter et al., 2017; Snyder, 2017). This study has the potential to bring social change to the field of education among veteran K–5 teachers by exploring how their experiences and understanding of blended learning as an educational innovation can influence teaching and learning. This increased understanding of veteran K-5 teachers’ perceptions of blended learning may be used to create strategies for improving the quality of reading instruction at K–5 elementary schools.

This chapter includes an overview of the strategies used to locate recent literature for this study, a definition of study variables, and a description of how the conceptual framework of Rogers’s (2003) DIT was used to guide this study. In this chapter, I also discuss the types of adopters, the characteristics of various adopters, and the diffusion process as they relate to veteran K–5 teachers’ perceptions of blended learning.

### **Literature Search Strategy**

I used the following electronic databases, accessible through the Walden University Library, to identify dissertation papers, journal websites, and current reference lists that were relevant to the articles that were used in this study: ProQuest Central, Science Direct, Sage Premier Journals, Education Resource Information Center, and EBSCO Host Academic Search Complete. While using these databases, I limited my search options to articles published between 2017 and 2022 that were peer reviewed. I also narrowed the search to only include full PDFs and articles.

The primary keywords search terms used in the different databases were *blended learning, blended learning implementation, veteran teachers, experienced teachers, innovation adoption, K-5, perception, teachers, technology, DIT, and adopters*. While reading the different articles related to the conceptual framework, I focused on the abstracts to assist with the correlation between the stages of the adopters and the implementation of blended learning among veteran K–5 teachers. Through these abstracts and articles, I found several common themes that were relevant for contextualizing the study. The main topics of the literature review were narrowed down to the following: (a) Rogers’s DIT, (b) type of adopters, (c) teacher perceptions, and (d) blended learning.

### **Conceptual Framework**

A conceptual framework provides a structure to support and inform research (Merriam, 2009). Rogers’s (2003) DIT served as the conceptual framework for this study. This theory is rooted in anthropology, sociology, and epidemiology and uses the premise that new practices and ideas spread through interpersonal communication (Valente &

Davis, 1999). Rogers presented DIT as a process by which an innovation is communicated through certain channels over time among the members of a social system known as adopters. More specifically, DIT is defined as the process through which innovative ideas, practices, or technologies are introduced to a social system (Rogers, 2003). Researchers use DIT concepts to explain how individuals adapt to the innovative changes in their workplace. According to Medlin (2001) and Parisot (1995), Rogers's DIT is the most appropriate theory for investigating the adoption of technology in higher education and educational environments.

### **Innovation Stages**

Rogers (2003) proposed that the process of adopting an innovation occurs in five stages: (a) knowledge, (b) persuasion, (c) decision, (d) implementation, and (e) confirmation. The knowledge stage occurs when individuals become aware of an innovation and are exposed to its existence. During this stage, they have a general understanding of the innovation and how it will operate in the workplace context. Once the knowledge stage is completed, adopters enter the persuasion stage where they develop a favorable or unfavorable attitude based upon their decision to experiment with the innovation. Adopters in this stage may begin to advocate for the innovation by disseminating information regarding the positive attributes of the innovations. Then comes the decision stage, which occurs when an individual or stakeholders decide to adopt or reject the innovation. This is followed by the implementation stage, when change agents and workers begin to use the innovation for its intended purpose. Rogers describes the implementation stage as the period in which individuals choose to realize

the innovation and understand its true incorporation within the organization, even if the innovation is not used. The final stage is the confirmation stage, in which change agents, stakeholders, and adopters analyze the impact of the innovation and actively reinforce the decision to implement the innovation. Rogers explains that this final stage may last for months or even years as an individual decides to incorporate the innovation into daily practice or reverse their decision as a result of encountering conflicting information (Rogers, 2003).

Along with analyzing these stages in relation to this study, I used the DIT framework to determine how veteran teachers perceive the attributes of blended learning as an innovation. Rogers (2003) proposed that there are five perceived attributes of any innovation that determine the diffusion process: relative advantage, compatibility, complexity, trialability, and observability. The attributes are based on the needs of the social system in which the innovation is used. The relative advantage attribute is the perception that the innovation is better than what is already being used to fulfill a given goal. Rogers explained that the second attribute, compatibility, allows the adopter to determine if the innovation is in alignment with their perceived needs. Next, complexity is the level of difficulty the adopter will encounter during the learning phase. The fourth attribute of trialability refers to the ability of the adopter to explore the innovation as well as see it in action. The final attribute, observability, allows the adopter to understand how the innovation will be beneficial. Together, these different attributes create a comprehensive model of the process of innovation adoption (Rogers, 2003).

## Adopter Categories

Rogers (2003) described adopter categories as “the classifications of members of a social system on the basis of innovativeness” (p. 22). The five adopter categories are divided into percentages on a bell curve: innovators (2.5%), early adopters (13.5%), early majority adopters (34%), late majority (34%), and laggards (16%; as shown in Figure 1). Each category can be explained as it relates to the adoption rate. Adoption rate is measured by relative time and is different for everyone. For example, innovators help introduce the innovation in from the outside (Rogers, 2003). Innovators are venturesome and willing to experience new ideas. Innovators are prepared for unsuccessfulness and unprofitability and usually find a way to work around glitches in technology. Although the percentage on the bell curve is low, innovators play a very important role in the DIT.

**Figure 1**

*Rogers's Innovation-Decision Process*



*Note.* Adapted from *Diffusion of Innovations*, by E. M. Rogers, 2003, Simon & Schuster.

Compared to innovators, early adopters seek networks in the social system.

Individuals in this category of adopters are likely to be found in leadership roles within

the social system and are individuals from whom other members seek advice or information about the innovation (Rogers, 2003). The early adopter's attitude towards the innovation is important because their subjective evaluation of the innovation influences other members of the social system. Rogers (2003) explains that once the early adopters adopt the innovation, the larger group's uncertainty decreases in the diffusion process.

Following the early adopters are the early majority. These individuals often have good interactions with other members of the social system; however, they lack the leadership skills to proactively adopt new practices (Rogers, 2003). Early majority interpersonal networks are still important in the innovation-diffusion process. Rogers (2003) stated that early majority adopters are deliberate in adopting an innovation and might seek advice from the innovators and early adopters. Late majority adopters, on the other hand, wait until most of their peers adopt the innovation. Late majority adopters are skeptical and usually deliberate before experimenting new ideas. This category of adopters makes up about one third of all members of the social system. Late majority adopters generally adopt an innovation after being informed of the outcome, recognizing its economic necessity, and witnessing interpersonal networks of close peers adopting it before them (Rogers, 2003).

Finally, laggards are the localized group of the social system and are most resistant to change (Rogers, 2003). They are the last group of the social system to adopt the innovation, and their interpersonal networks mainly consist of other laggards. Frequently, laggards have conservative values and often lack leadership qualities. Laggards' innovation-decision period is relatively long due to their risk aversion. Further,

laggards' deliberation normally takes place after the entire social system has fully adopted an innovation. Once they know the innovation works, they will consider joining and experimenting with an innovation. When laggards have observed the innovation's successful adoption by earlier adopters (i.e., innovators, early adopters, early majority, and late majority), they will adopt the innovation. It is worth mentioning that members within a social system may pose different degrees of "innovativeness" or have different thresholds for the amount of risk they are willing to take on before adopting an innovation relative to others within the same social system; for example, an upwardly mobile individual who is working in a middle-managerial role may have more to gain from appearing to be an "innovator" than an individual who is very low in the organizational hierarchy and may have less job security (Rogers, 2003).

### **Literature Review Related to Key Concepts**

This basic qualitative inquiry focuses on veteran K–5 teachers' perceptions of their adoption category and the implementation of blended learning in a K–5 elementary school setting. The key concepts discussed in this section include teaching blended learning, models of blended learning, teacher blended learning perceptions, and veteran teachers.

When beginning this literature review, it was important to note the toll that the COVID-19 pandemic has taken on research relevant to blended learning and hybrid teaching. School closures and social distancing restrictions imposed in response to global COVID-19 outbreaks caused significant interruption to in-person educational research during the period of 2019–2022. Consequently, some of the research outlined in this

literature review may be older than would be the case under other circumstances. Though blended learning and hybrid teaching research has suffered during this period, online learning research has flourished due to the mass move of public school instruction online. While the gap in research viability for blended learning and hybrid teaching has hindered the field's growth, the increased interest in online-only scholarship may give researchers a better idea of successful online pedagogy strategies that may ultimately be used to improve hybrid learning. Though these historical circumstances have made certain aspects of education research difficult, taking advantage of the research-related opportunities that have been created as a result of these circumstances is also extremely important.

### **Blended Learning**

Blended learning has evolved over time. The introduction of blended learning in the 1990s opened the possibilities of both online and face-to-face learning. The term blended learning has been used ambiguously without a clear definition. The most accepted definition of blended learning is the purposeful integration of face-to-face instruction and online learning (Lai et al., 2016). Although, Nortvig et al. (2018) stated that there has not been complete agreement among researchers about the precise definition or meaning of the term blended learning. Blended learning is a collection of innovative learning techniques that involve both online procedures and methodologies along with traditional learning methods (Das, 2021). Blended learning has also been referred to as hybrid learning or mixed-mode learning (Cronje, 2020). To standardize a definition of blended learning in the context of this study, I defined it as an innovative



educational program in which students are exposed to both online and face-to-face delivery of content in an educational setting.

Moreover, blended learning has become increasingly available at institutions of higher education and is emerging in K–12 settings (Dziuban et al., 2018). According to Blaine (2019) and Whiteside et al. (2016), the use of blended learning in K–12 education is rapidly expanding. Blended learning generally involves a pedagogical approach that includes a mix of face-to-face and one-to-one instruction (Pandit, 2018). Face-to-face instruction typically involves instruction in a traditional brick-and-mortar school setting where the teacher and the student are both present in the classroom and there is interaction between them (Pandit, 2018). In contrast, blended learning involves instruction using computer technology that includes online and offline materials (Hockley, 2018). As of 2013, blended learning included an integration between the student’s online and offline learning path (Christensen et al., 2013). Das (2021) explained that blended learning consists of new measures like incorporating computers in the traditional classrooms, including projectors for animated teaching classes, voice recorded lectures, one-on-one interaction-based teaching methods, and much more. Prescott et al. (2018) described blended learning as a practice where students can control the pace and location of their learning.

There are several reasons why higher education institutions and, more recently, K–12 institutions have opted to implement blended learning instruction. One significant reason is that the cost savings provided by use of a blended learning model versus the traditional face-to-face instruction are significant (Hockley, 2018). Another major reason

is the unprecedented access to information that the internet provides. The true goal of blended learning is to find a balance between online access to knowledge and the face-to-face human interaction that comes with traditional delivery of curriculum (Osguthorpe & Graham, 2003). Blended learning is an innovative concept that embraces advantages of both traditional teaching and online learning (Lalim & Dangwal, 2017). Ensuring a successful implementation of blended learning requires highly motivated students and teachers, a rigorous effort, a budget to support technology and instructional needs, and a positive attitude.

### **Models of Blended Learning**

Washington (2016) stated that various companies started satellite-based training sites, which fostered the infancy stage of blended learning. Within the term of blended learning are various models that define how blended learning looks within the classroom. This allows teachers to implement blended learning in a variety of ways. The Christensen Institute (2016, as cited in Acree et al., 2017) characterized blended learning implementation into four widely accepted models: station rotation model, flex model, a la carte model (self-blended), and enriched virtual model.

#### ***Station Rotation Model***

The first blended learning model is the station rotation model. The station rotation model is characterized by students being divided into groups and then rotating between traditional face-to-face instruction and online learning stations. Traditional face-to-face instruction consists of class instruction, small group instruction, group projects, or individual methods with human interaction. Online learning stations usually occur on an

individual basis using technology such as computers. When using the station rotation model, the teachers establish a set schedule to make sure that all students have an opportunity to rotate (Horn & Fisher, 2017). With this model, students are exposed to a variety of learning activities and learning styles. For this study, depending on the veteran teacher's adopter stage for the implementation of blended learning, the online station may or may not be within the brick-and-mortar school building (Truitt & Ku, 2018).

### ***Flex Model***

The second model is the flex model. In a flex model, the majority of the student learning takes place online and is based on student needs and understanding. Online learning normally occurs during the school day and the teacher provides support as needed to individual students or to groups of students. Maxwell and White (2017) stated that the flex model of learning allows flexibility; the model also permits students to move fluidly through numerous online programs and offline activities with individualized support from the teacher. Additionally, the flex model gives students control over their success and more ownership of their learning (Horn & Fisher, 2017). Individual student schedules for face-to-face time are flexible based on student needs (Craciun & Bunoiu, 2015). As it relates to this study, a veteran K-5 teacher's adopter stage determined the amount of assistance with the blended learning platform.

### ***À La Carte Model (Self-Blended)***

The third model is the à la carte model. In an à la carte (self-blended) model, students can take an online course that compliments what they are learning in their traditional brick-and-mortar class (Horn & Fisher, 2017). Students attend most courses

within the brick-and-mortar school and supplement their learning through enrollment in online courses. Students can take the online course at home or at school. In the à la carte model, the teacher provides content for the course, but the students work at their own pace to complete the course curriculum. The à la carte model is beneficial when a course is unavailable at the school. In relation to this study, a veteran K-5 teacher's adopter stage provides information about their understanding of the importance of creating content to implement.

### ***Enriched Virtual Model***

The fourth model is the enriched virtual model. An enriched virtual model was once solely online learning at schools before blended learning programs were adopted (Staker & Horn, 2012). The Christensen Institute, as explained in Staker and Horn (2012), stated that during this model most of the learning takes place online with only a few face-to-face meetings. The present-day enriched virtual model is designed to have students attend at least one face-to-face meeting while completing the remainder of the course online at their pace (Halverson et al., 2017). The enriched virtual model is not typically used in a K-12 setting according to researchers. The face-to-face meeting is normally on school campus (Pandit, 2018). For this study, veteran teachers currently teaching at the elementary level experienced this model during the global pandemic.

The level of comfort a veteran teacher has with blended learning using different models may influence how their instructional practice is integrated into the classroom (Bicer & Capraro, 2017; Yaghmour, 2016). Blended learning models should be used to meet student needs and to help them achieve their goals. Planning, organizing, and front-

loading of lessons and information, as well as assessing the contents of the lessons must be completed when developing a blended learning model.

### **Adoption and Implementation of Blended Learning**

Implementing new technology in a school setting can be very challenging because teachers have diverse backgrounds in teaching and in technology. Venkatesh et al. (2003) noted that one of the main influences on the adoption of new technology is the perception of users. These researchers formulated a model created to explain the variance in organization members' adoption of new organizationally sanctioned technology, called the Unified theory of acceptance and use of technology (Venkatesh et al., 2003). The model drew on existing models of behavioral control, technological acceptance, planned behavior, and social cognition to create a comprehensive tool which predicted organization member behavior. Through developing this theory, the researchers found that user perception was a significant predictor of whether an individual was willing to incorporate new technology into their work

Admiraal et al. (2017) surveyed 1,602 teachers on their feelings toward the incorporation of technology in secondary schools; specifically, the researchers sought to identify how comfortable teachers felt with learner-driven online education, how confident teachers felt with technology, and how teachers generally felt about the incorporation of technology in school. Researchers found that five common teacher archetypes were identified through their responses to the online survey: teachers comfortable with technology, teachers who have significant reservations concerning technology use in schools, teachers wholly uncomfortable with technology, teachers who

are skeptical of the student-directed nature of technology, and teachers who did not have a firm stance on technological adoption in schools (Admiraal et al., 2017). Findings indicated that teachers who were uncomfortable with technology were older (51+) and had more years of experience teaching (over 11 years) than other groups designated. Study findings also indicated that teachers who felt more comfortable with the use of technology were middle-aged (36-45) and had between 6-20 years of teaching experience. Younger teachers tended to be more uncomfortable with incorporating technology in the classroom, not owing to unfamiliarity with technology but rather with discomfort surrounding how much student independence technology fostered. Drawing on Rogers (2003), the result of this study suggested that regarding new technology adoption, established teachers in the prime of their careers fell into the early adopter category whereas new teachers fell into the middle adopter category which is opposite from what would be expected. Additionally, Admiraal et al. suggested that older more seasoned teachers may be later adopters -- or perhaps laggards -- in the arc of innovation in schools (Rogers, 2003).

Urgency for incorporating technology in schools has been keenly felt in recent years. The COVID-19 pandemic resulted in many school districts moving their operations wholly online, requiring teachers to simultaneously learn how to provide high-quality virtual instruction to students while dealing with the often-devastating impacts of the pandemic on students (Kraft & Simon, 2020). Kraft and Simon (2020) conducted a survey of over 7,000 teachers; the results revealed that veteran teachers were nearly three times as likely to be uncomfortable with using online teaching methods than younger

teachers. Some of the literature suggested that after COVID-19, online learning may continue to remain an integrated part of the academic curriculum to a greater degree than pre-pandemic (Goh & Sandars, 2020; Scully et al., 2021). One way to help prepare teachers to meet the needs of online students is to implement blended learning. During COVID-19, for example, an existing background in blended learning would have provided teachers with a more robust ability to address the demands of online teaching.

There are several barriers to pedagogical efficacy beyond the lack of experience with technology discussed by Kraft and Simon (2020) and Admiraaal et al. (2017). Underfunding of schools can lead to significant gaps in technological resources available to students, which can in turn create significant equity-based gaps. Truitt and Ku (2018) indicated there is a level of frustration among elementary teachers and students because technology does not always work properly in schools; this can become more pronounced in schools with inadequate funding which may have outdated or malfunctioning technology. Some teachers struggle with the initial implementation of blended learning because of the lack of technology devices available to them in their context (Varier et al., 2017).

### **Teaching in a Blended Learning Environment**

Gurley (2018) conducted a mixed method convergent parallel study to explore educators' preparation to teach, perceived teaching presence, and perceived teaching presence behaviors in blended and online learning environments. The research study includes four dependent variables: overall perceived teaching presence, perceived teaching presence of design and organization, perceived teaching presence of facilitation,

and perceived teaching presence of direct instruction (Gurley, 2018). Researchers used a Community of Inquiry Survey Instrument to measure faculty perceptions of teaching presence. The study's results supported the importance of challenging traditional pedagogical beliefs and practices and of exploring best practices for preparing and supporting faculty to teach in the online learning environment. The literature addressed how educators are prepared for teaching in blended settings and how online learning environments require different types of training and different types of pedagogical skills from primary and secondary education settings (Luo et al., 2017; Shepherd et al., 2016). Studies by Vongkulluksn et al. (2018) and Scherer et al. (2019) suggested that teachers' perceptions and beliefs affect classroom technology integration for blended learning.

Some blended learning formats have lacked teacher support for implementation causing teachers to struggle. According to Ramadan (2017), elementary teachers implementing a distance learning approach to literacy struggled with providing students with differentiated reading strategies taught for traditional reading and online reading. Ramadan also discussed that teachers had little to no support from the district on blending learning content, training, planning time, PD, and knowledge of the district blended learning visions or expectations.

Osakwe et al. (2017) conducted a mixed-method study examining teachers' perception of online learning and found that teachers' perceptions of technology's usefulness significantly impact technology implementation. The researchers explored both teacher and learner perceptions of the incorporation of technology into pedagogy with the expressed interest of determining which circumstantial contributions lead to the



incorporation of online resources in an academic setting (Osakwe et al., 2017). The researchers used a series of Likert-style questions to assess teachers' understanding of how to perform certain tasks critical for online pedagogy, including effectively using search engines, downloading relevant class material, communicating online, and using education-related computer applications. The researchers found that students felt less confident in their ability to digitally access and distribute educational material than teachers did, and that teachers were more optimistic about technology's prospects for improving educational outcomes. All teachers surveyed believed that use of technology in the classroom led to greater levels of student exploration of relevant content and led to greater student enjoyment while learning (Osakwe et al., 2017).

### **Veteran Teachers**

According to the Title II, Part A section of the No Child Left Behind Act of 2001, a veteran teacher is defined as one who has worked in the profession and has been working in a public school for a total of three or more complete school years. Snyder (2017) stated that a veteran teacher is someone who has worked for more than 20 years in the field and who is also more than 50 years old. For this study, I have chosen to define veteran teachers as those who have been in the profession for at least 15 years. According to the Schools and Staffing Survey conducted by the National Center for Educational Statistics (n.d.), using data collected in 2011-12, just over 40% of teachers in the United States were identified as teaching for 15 or more years. Increases in teacher experience have been found to correlate positively with student outcomes in both math and reading test scores in students, (Kini & Podolsky, 2016). The criteria used in this study of

recruiting teachers with more than a few years' experience is consistent with other studies defining veteran teachers (Hussar & Bailey, 2018; Rotermund et al., 2017; Schechter et al., 2017; Snyder, 2017).

### **Veteran Teachers' Perceptions of Blended Learning**

Carver (2016) explored teachers' perceptions of the benefits and barriers to implementing technology on students' daily instruction through a mixed methods survey. This study's participants consisted of 68 students enrolled in online classes in the graduate studies in the education department of a small private liberal arts institution in the southeast. Those that were enrolled in the course and surveyed were all educators, working at the K-12 levels. About 19% of participants taught at the high school level (Grades 9-12) and the remaining 81% taught K-8 classes; the majority of the K-8 teachers appeared to be elementary teachers, as many respondents indicated teaching both humanities and science, technology, engineering, or math subjects. Nearly three in four participants taught language arts classes, 66% taught science or math classes, and fewer than 10% of participants taught an elective class. The data collected for the study was collected using an open-ended qualitative survey format which included both multiple-choice questions and written response questions. Carver determined that the majority of participants used technology daily, most commonly computers and digital projectors (93% and 85%, respectively). These findings were supported by Rotermund et al. (2017) and Schechter et al. (2017).

The researcher also indicated that other forms of technology, including interactive whiteboards, digital cameras, tablet computers, and cell phones were also commonly used

in classroom contexts (Carver, 2016; Scherer et al., 2019; Vongkulluksn et al., 2018).

While most respondents viewed technology use as a strong means of increasing student engagement (59%), the majority of respondents (61%) also indicated that limits in the availability of technology causes them to reduce their utilization of classroom technology (Carver, 2016). This demonstrates a major obstacle in technological implementation, particularly in a blended classroom setting: if some students do not have the ability to access online educational tools at home, significant gaps in student equity are created.

Ndlovu and Mostert (2018) focused on the perception of teachers as it relates to implementing blended learning. Edannur and Marie (2017) suggested that teachers' perceptions of innovation are vital to implementing classroom innovations. The technology platform that the teachers are engaged in is the MOODLE platform. In the Edannur and Marie study, 76 in-service teachers were encouraged to access the internet to communicate asynchronously with their lectures and ask questions to students using mathematical content. The purpose of this study is to explore the efficacy of the MOODLE e-Learning platform while supporting teachers in professional learning in a blended learning setting. The findings in the literature concluded that teachers perceived the MOODLE e-Learning platform positively. The platform enabled teachers to connect with each other virtually and to share cognitive and social presences as members of a critical group (Ndlovu & Mostert, 2018).

Balci (2017) conducted a mixed-methods study to determine the perceptions of students and educators in a blended learning setting in an English Foreign Language program. Participants in this study consisted of 400 students and 100 instructors. The

researcher and others noted that just like students, educators were involved in the blended learning experience (Balci, 2017; Fisher et al., 2018). Qualitative and quantitative research methods were used to collect data to gain an insight on how educators address implementing blended learning. All participating students received a 52-question Likert-style survey on their thoughts concerning blended learning; 16 students were selected to be interviewed by the researcher. Student participants overwhelmingly indicated that face-to-face instruction was more helpful for their learning than online platform work (Balci, 2017; Lalima & Dangwal, 2017; Pandit, 2018). Many of the students interviewed indicated that this was less due to an aversion to online work in general and more due to the imperfection of the program used (Balci, 2017). Many students indicated that blended learning provided an adequate platform for more rote types of learning, but was an inadequate substitute for classwork (Balci, 2017; Lalima & Dangwal, 2017).

All participating teachers in the Balci (2017) research received a 13-question Likert-style survey on their feelings on blended learning; 10 teachers were selected to be interviewed by the researcher. The findings from the study indicated that the educators expressed positive opinions about the idea of implementing blended learning into their instruction, and generally believed that for language learning, students were given a greater degree of autonomy and a clear, easily accessible, practical context in which to develop skills. The teachers surveyed understood the tools they were using as having clear limits to their practicality; speaking and writing skills were not as easily developed by the online platform as reading and listening skills were (Balci, 2017). In some ways, this demonstrates the ideal model of blended learning, in which learning that does not

require direct human interaction is done before in-person classwork as to give students a stronger ability to process inputs and ask questions when necessary. Balci revealed the consensus from educators that an online platform in blended learning is a practical, innovative method for students to be more autonomous and to provide more input and individualized practice. This study suggests that students and teachers may have a reasonable sense of alignment in understanding the practical applications of online tools in blended classrooms.

Another study focused on teachers' perceptions of implementing technology using mobile learning. The findings by Afridi and Chaudhry (2019) revealed that university educators used computer-based technologies three different ways; online teaching activities, laptop-based teaching activities and web-based teaching activities. Researchers also explored what issues caused teachers struggles during the implementation of computer-based technology. One of the most important findings in the study indicated that teachers must have good computer skills as a means for improving teaching and ensuring effective learning as well as to meet the demands of the 21st century classroom. Such demands include the online teaching activities, laptop-based teaching activities, and web-based teaching activities.

Literature reveals that veteran teachers implement blended learning differently depending on their experiences with technology. Although Edannur and Marie (2017) suggested that teachers' perceptions are related to implementing innovation in the classroom, Balci (2017) explained that educators need to be involved in the blended learning experience to gain full understanding of the implementation process. Afridi and

Chaudhry (2019) expanded on teacher struggles and indicated that having good computer skills will increase the effectiveness within the 21st century. The finding from these studies were also supported by the work of others (Fisher et al., 2018; Lalima & Dangwal, 2017; Pandit, 2018; Rotermund et al., 2017; Schechter et al., 2017; Scherer et al., 2019; Snyder, 2017; Vongkulluksn et al., 2018).

### **Summary**

An underlying assumption guiding this study is that veteran K-5 teachers had different experiences with blended learning, technology, and teaching that caused differences in perception amongst veteran teachers on the best methods for implementation. When conducting a review of the literature on this subject, I noted a gap in research pertaining to veteran teacher perspectives in an elementary school setting. Most of the information on educator perceptions on blended learning was obtained by using the Walden University library and the librarian as resources.

Chapter 2 focused on the literature review, the search strategies, the gap in the literature, the conceptual framework, adopter categories, and blended learning. The literature suggested that blended learning is used to individualize and personalize instruction for students and can be challenging for many teachers to implement (Firdaus et al., 2018; Prescott et al., 2018). As there is relatively little research on the perception of veteran K-5 teachers while implementing blended learning, this study advanced the literature pertinent to the educational technology decisions of veteran teachers. This study focused on the day-to-day implementation of blended learning as an educational innovation among veteran teachers teaching reading to students in grades K-5.

Chapter 3 will include a detailed description of the methodology for this study, as well as the research design, the rationale and roles of the researchers, the participants' selection logic, and the instrumentation. In addition, I provide procedures for recruitment, participation, data collection, data analysis, and an explanation of how to ensure validity and reliability of all data collected for this study. Finally, I will discuss the ethical procedures.

### Chapter 3: Research Method

The purpose of this basic qualitative inquiry was to understand veteran K–5 teachers’ perceptions of implementing blended learning as an educational innovation in an elementary setting. I explored the perceptions of veteran K–5 teachers regarding implementing blended learning into their daily routine during the ELA instructional block. Rogers’s (2003) DIT was the lens used to examine blended learning adopters in elementary schools. In the DIT, Rogers identified levels of individuals’ willingness to adopt an innovation as an important stage in the diffusion of an innovation. Study results may contribute to the body of current research examining the diffusion of blended learning. In this chapter, I provide the research design and rationale of the study, the role of the researcher, the methodology, and issues of trustworthiness before providing a summary and transition to Chapter 4.

#### **Research Design and Rationale**

In this study, I explored the perceptions of veteran K–5 teachers who implemented blended learning as an educational innovation in an elementary setting using a basic qualitative interview approach. The following research question and sub questions were used to guide the study:

RQ: What are veteran K–5 ELA teachers’ perceptions of blended learning as an educational innovation?

SQ1: How do innovation attributes influence the perceptions of veteran K–5 ELA teachers regarding blended learning as an educational innovation?



SQ2: How does the adopter category of veteran K–5 ELA teachers influence their perceptions of blended learning as an educational innovation?

Merriam (2009) emphasized that the goal of a qualitative research study was to understand the experience from the viewpoint of the participant. There are several qualitative approaches, such as a qualitative narrative inquiry, a basic qualitative interview, or a case study analysis. The qualitative narrative inquiry approach was not appropriate for this study because qualitative narrative studies focus on participants' perceptions of their experiences, while this study focused on participant perceptions of a specific innovation (Merriam, 2009). Patton (2015) clarified that a narrative inquiry reveals the experiences of participants in a study through telling a story. The narrative inquiry design allows the authenticity of the participants' feelings and experiences to be conveyed through journal entries and reflections shared in a story-like context. However, I did not explore and share the participants' perceptions and thoughts using storytelling, so the narrative design was not appropriate for this study.

According to Merriam and Grenier (2019), “the process of conducting a case study begins with the selection of the ‘case’” (p.179). The case study approach was also not ideal for this study because case studies are often used to investigate broad phenomena (see Stake, 1995), and phenomenology was not considered because the recommended sample size for this method is smaller than that of a basic qualitative interview. The smaller sample size can lead to heavy data bias in relation to the research question, thus phenomenology was not as well suited as a basic qualitative interview was for this research. Therefore, I selected a basic qualitative interview approach based on the

research purpose and research question. In addition, phenomenology was not considered for this study because the focus was not on the “lived experiences of a concept or a phenomenon” (Creswell, 2007, p. 57). This study involved the study of the perceptions explored by veteran K–5 teachers. A phenomenology study is when the researcher conducts interviews that are spread out over geographical locations and common experiences are looked for among the members of the group (Buckholder et al., 2016).

While a basic qualitative interview design shares features of a case study approach, which are useful to gain an understanding of an issue, event, or phenomenon of interest that can be explored in a real-life context (Crowe et al., 2011), a basic qualitative approach is different in that is broader in scope. The purpose of this basic qualitative interview was to understand veteran teachers’ perceptions of implementing blended learning as an educational innovation in a K-5 elementary setting. In addition, the study was grounded in the conceptual framework of Rogers’s (2003) DIT. Because the central phenomenon explored in this study was to explore veteran teachers’ perception of implementing blended learning, defined by Graham (2006) as learning in a combination of face-to-face and computer-mediated instruction, using a basic qualitative interview method was suitable for this study. To gain a deeper understanding of veteran K-5 teachers’ perceptions of blended learning and identify their stage in the diffusion of innovation process, conducting interviews and gathering information broad in scope supported the findings of this study.

### **Role of the Researcher**

Merriam (2009) noted that the researcher is the main instrument used for data collection and analysis in a qualitative study. The intent of the researcher must be clear due to the relationship the researcher establishes with the participants throughout the study (Yates & Leggett, 2016). According to Yates and Leggett (2016), researchers are responsible for many aspects of a study. Bias occurs when one outcome is favored over another, causing inaccuracies within the study (Creswell, 2012). As the researcher, I was responsible for establishing the research setting, facilitating the interviews, analyzing and transcribing the data, and achieving a valid interpretation to produce authentic findings. Therefore, I was particularly aware of any potential bias in my treatment and analysis of the data.

In this study, the possibility existed for bias due to my position within the study site school district. I have been an employee of the local public school district for the last 13 years. I have held positions as an elementary teacher and instructional reading coach and was an assistant principal at the time the study was conducted. The elementary school that I was supervising provided blended learning through a variety of educationally innovative programs for students in Grades K–5. Over the years of being an instructional reading coach and assistant principal, I provided PD to teachers, school-based staff, parents, and students on the different programs.

To control sample bias, I did not recruit or interview any veteran K–5 teachers from my school or any schools that I had previously worked at within the school district. Slotnick and Janesick (2011) suggested that using a journal can help eliminate researcher

bias. I also kept a journal that contained my reflective field notes of the interviews and the observations and used this data to examine the patterns found in the participants' perspectives. In addition, I conducted and transcribed virtual interviews using open-ended questions to obtain data. Interviewing the veteran K–5 teachers virtually allowed me to give one-on-one attention to the participants, mitigating any bias from outside influences.

### **Methodology**

Qualitative research designs are diverse, including the use of interviews, observations, journals, and focus groups, and are frequently used to build a conceptual understanding, specifically in academic and psychological research (Alamri, 2019). I used a basic qualitative interview approach to explore veteran K–5 ELA teachers' perceptions of blending learning as an educational innovation in an elementary school setting.

### **Participant Selection Logic**

The population for this study consisted of veteran K–5 ELA teachers in an elementary school setting. Each veteran K–5 ELA teacher participated in a semi structured interview with me, which allowed preplanned interview questions to be asked. Although there is no set number for sampling size in a qualitative study, 15 participants is understood to be sufficient for obtaining data saturation, or the point at which no new information is being shared (Patton, 2015; Ravitch & Carl, 2016). Data saturation is defined as data from the study that cannot be replicated (Fusch & Ness, 2017). I interviewed 15 participants based on when data saturation was achieved.

The main criteria for participant selection were selecting veteran elementary teachers who implemented blended learning during their ELA reading block or the ELA reading portion of the curriculum. Snyder (2017) indicated that the term “veteran” in education refers to those that are in the latter part of their teaching career with 20 or more years of experience. Two other criteria needed to be met for participation in the study: that the veteran teachers currently taught in Grades K–5 and that participants taught an uninterrupted 90-minute ELA block. While recruiting participants, I made sure that I clarified the uninterrupted reading block requirements before beginning the interview process.

I selected the participants by the purposive method. Qualitative researchers often use the purposive sampling strategy when dealing with a demonstrative population (Denzin & Lincoln, 2018). I contacted some of the district’s K-5 principals and asked them to recruit participants for the study through a written solicitation. This solicitation, with the permission of the school district, was sent to other elementary school principals in the study site district who shared the request for participation with veteran K–5 ELA teachers at their respective schools.

### **Instrumentation**

Interviews, journals, focus groups, and observations are some of the data collection strategies used in qualitative research (Merriam, 2009). These qualitative data collection sources include open-ended questions, descriptive answers, and little or no numerical data. Denzin and Lincoln (2018) discussed the importance of using different methods to gather data, such as surveys, interviews, texts, and group interactions. After

exploring the different possible methods of data collection, I determined that conducting interviews and observing the participants teaching an uninterrupted 90-minute ELA block gave me the depth of perception and experience I was interested in obtaining from participants. Therefore, I used a survey and semi structured interview questions as the data collection instruments.

Interviews allow researchers to have control over the type of information elicited from the participants (Creswell, 2012). Semi structured interviews consist of several key open-ended questions that help to define the areas that are being explored in the research study (Alamri, 2019). The interviews in the current study captured the veteran K-5 ELA teachers' perceptions in their own words, a desirable strategy in qualitative data collection. According to Patton (2015), interviewing participants allows the researcher to discover peripheral items that are not observable, such as the participants' feelings and thoughts. In addition, the interviews allowed the veteran K-5 ELA teachers to elaborate and give examples about their experiences and their stage in the adoption of innovation process. In addition to the interview questions, I asked participants to answer a few survey questions to gather demographic and other basic information about the participants (see Hurt et al. 1977) that measured teacher innovativeness as a way to identify the different types of adopters. The survey was given to each interviewee after their interview took place; I used the survey answers to identify trends about the data gathered in the study. This survey was beneficial for the study because it collected information about the study participants and helped identify possible trends about who adopted blended learning and who was more likely to enjoy blended learning and benefit

from it in the classroom. Once the survey was complete, the answers were shared with the participants to check for accuracy because their interview answers were given prior to the start of the survey questions.

For this study, I developed interview questions aligned to the research question and sub questions (see Appendix B). Hurt et al. (1977) created the survey questionnaire that I used to collect data for this study (see Appendix A). The questions for the survey were not modified from the original Hurt et al. survey because the instrument was found to be highly reliable with high predictive validity (Bautista et al., 2018). I emailed Dr. Bautista asking permission to use the survey instrument (see Appendix C). Dr. Bautista provided approval via email to use the survey instrument, and I obtained official usage rights (see Appendices C & D). The interview questions, coupled with the survey instrument, provided data indicating participants' adoption stage.

### **Procedures for Recruitment, Participation, and Data Collection**

The interviews were held with participants virtually using a web conferencing tool that also allowed me to record audio and automatically transcribed the interview. I completed all interviews within 2 months of receiving approval to conduct the study from the Walden University Institutional Review Board (IRB). In relation to recruitment, I emailed the public school district, requesting permission to conduct the research study with veteran K–5 ELA teachers. Once I was given permission, I sent the recruitment email to potential study participants in which I provided an overview of the research study, informed the recipients that participation was voluntary, stated that information and data collected would be kept confidential, and included a section with information on

how to participate. To facilitate obtaining consent for the interview, participants were directed to an online link to the informed consent form that allowed them to click through and indicate consent to participate in the study. Once participants provided informed consent, I scheduled dates and times that were convenient for the participant to meet virtually for the interviews. As the researcher, I collected data from virtual interviews using open-ended questions taking place on a web conferencing tool.

The first step in the interview process was to email a copy of the interview questions to each participant so they could familiarize themselves with the questions prior to the interview. Participants were reminded of the purpose of the study before the interview beginning, told that they may opt out at any point during the interview, and reminded that the interview would be audio recorded. Before asking the first question, I reviewed the informed consent form with the participants to ensure that they consented to their interview being recorded. For those who consented, I recorded the virtual session. Ravitch and Carl (2016) suggested that a key aspect to the research process is recording, which allowed for ongoing reflecting throughout the process. I also kept field notes to chronologically record the data (see Phillip & Lauderdale, 2017). The allotted time for each interview was 45 minutes.

If a participant response during the interview contradicted a previous response of theirs, this caused discrepancy in the data. The discrepant data may not have been obvious until the data were being transcribed or when the participant sent back feedback from the interview (see Delahunt, 2017). Once I identified any discrepant responses or data, I contacted the participant for clarification. Once the participant and I discussed the



discrepancy, they verified what they intended to share, and I made the necessary changes within the data.

At the conclusion of the interviews, participants were given the opportunity to address any concerns or questions they may have pertaining to the study. Finally, before concluding the interview, I asked the participants to invite other veteran K–5 ELA teachers to participate in the research study. This was the purposive sampling method. Purposive sampling is a method of gathering information to access specific groups of people (Naderifar et al., 2017). Before ending the interview, the final step was to verify the contact information for each participant in case follow-up questions were necessary. I sent each participant a copy of their transcript from the interview via email, advised them to review the transcript for accuracy, and asked them to email me with any feedback. This process continued until data saturation was met. The debriefing process ensured that participants took an active role in the research process (see Jacob & Ferguson, 2012). As an added measure of good will, participants were emailed an electronic thank you card to express my gratitude for their participation.

### **Data Analysis Plan**

I conducted the data analysis plan according to Morse and Richard's (2002) approach. The key data analysis aspects consistent with a qualitative approach are (a) transcribing the interviews, (b) immersing oneself in the data to gain detailed insights into the phenomena being explored, (c) developing a data coding system, and (d) linking codes or units of data to form overarching themes/concepts, which may lead to the development of themes (Morse & Richard, 2002). Identifying recurring and significant

themes, by methodically reviewing the data to identify patterns, can provide an illuminating description of a phenomenon. Thorough analysis of the data is a central skill in undertaking qualitative data analysis and the interviews were transcribed as soon as possible after conducting the interview using TranscribeMe!, an online audio and video transcription service. To ensure participant confidentiality, each participant was assigned a code during the transcription such as T1, T2, T3, T4 and so on. These codes helped with connecting the participants to their responses.

The purpose of coding is to develop a distinction between the categories or themes within the retrieved data, and coding in qualitative research aids in organizing the data into manageable units (Ravitch & Carl, 2016). Delahunt (2017) explained that interesting or important patterns that are identified in the data are the basis of thematic analysis that is then used to address the research or say something about an issue. An analysis of the coded data was classified and organized so that I could better distinguish the themes or categories. Words or phrases that were repetitive in the research data were classified as the theme derived from the coding (Saldaña, 2016). For this study, I followed Braun and Clark's (2006) six step thematic analysis approach of (a) familiarizing yourself with your data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. Using the six-step approach assisted with understanding the data and the assigned codes.

Rubin and Rubin (2012) stated to obtain a clear understanding of the codes, the researcher should go through the list of codes several times and identify similar

groupings of categories that reflect different themes. Therefore, the first and second steps researchers take to become familiar with the data are reading and rereading the transcripts and then generating initial codes. To maintain the rigors of research and follow repeatable processes, the data was reviewed several times before generating the initial codes. NVivo software was selected to support this process. NVivo is a computer program that facilitates data analysis, organization, searches, and coding (Creswell, 2005).

Once the researcher has familiarized themselves with the data and has generated the initial codes, the data analysis process flows quickly through the remaining steps. As mentioned previously, the third step was to search for themes. Themes are elements such as ideas that reoccur within the data and reveal something significant or interesting (Maguire & Delahunt, 2017). As Braun and Clarke (2006) explained, the fourth step in this process is determining the themes. During this step, researchers may ponder questions such as: “Do the themes make sense?” and “Does the data support the themes?” If the themes make sense and support the data, then analysis proceeds to the fifth step. The fifth step is defining the themes. During this step, the themes will be refined, the purpose redefined, if needed; the themes and purpose are then checked to ensure that they are appropriately named. Completed theme revisions signal that the data analysis process is near completion, and the researcher can proceed to the final step which is producing the report. The final report is a compilation of thematic findings and how they align with the research question.

### **Issues of Trustworthiness**

The criteria used in this qualitative study to establish validity included credibility, dependability, transferability, and confirmability. According to Elo et al. (2014), trustworthiness consists of not only selecting the most appropriate method of data collection, but also ensuring that the participants' privacy is assured. Keeping people and data confidential allowed for accurately reflecting the participants' experiences, ideas, and viewpoints.

#### **Credibility**

To establish internal validity for this study, I used member checking to establish credibility. Fusch and Ness (2015) suggested that participants be allowed to analyze their transcripts to ensure the accuracy of the data collected. Member checking is a step that I took to ensure data accuracy. After each interview, a summary of the interview questions and the participant's answers were provided to the participant to review and make corrections. I used the summary to ask the participants clarifying questions. Another step in achieving study credibility was to make sure to reach data saturation. Fifteen participants were interviewed; this number of interviews reached data saturation. The final method to ensure research credibility was to mitigate research bias by using reflexivity through self-introspection and by taking notes in my journal.

#### **Transferability**

For qualitative studies, researchers assess transferability by adopting the same criteria for validity (Amankwaa, 2016). For this study, participants were encouraged to elaborate on their experience with implementing blended learning into their classroom

during reading and how they adapted to innovations. Using open-ended questions during the data collection process helped to capture rich, thick, and detailed descriptions. As per the participant selection criteria, veteran K-5 ELA teachers from Title I and non-Title I schools participated in the study. Using veteran K-5 ELA teachers with diverse backgrounds enhanced variation in the participant selections and information obtained. Such variation provides a broad array of responses that helps reach greater understanding of the data and helps to guarantee data saturation (Leedy & Ormrod, 2016). Last, I also used follow-up questions to help accurately capture the thoughts of the participants; the follow-up questions were asked following the interview, but prior to ending the recording. The steps as outlined improved transferability of the research by allowing the reader to apply the information obtained to other contexts and situations.

### **Dependability**

According to Cope (2014) and Elo et al. (2014), dependability occurs when a study is stable, meaning another researcher will draw a similar conclusion from the data using the same conditions of the study. Cope and Elo et al. postulated that dependability is achieved when researchers follow the rigors of research and produce repeatable results.

To ensure dependability, I followed the research plan which included member checking and transcription review. As mentioned previously, I conducted member checking after every interview and provided the participants with a copy of their transcripts to review for any discrepancies or errors. Harper and Cole (2012) stated that member checking is meant to reduce the bias of the researcher and increase validity. Providing participants with a copy of the transcription to review helps to ensure that their

thoughts are captured accurately (Ravitch & Carl, 2016). As an added measure of dependability, I kept track of the recruiting process, data collection, and data analysis of this study in a log.

### **Confirmability**

Shenton (2004) indicated that confirmability refers to the objectivity associated with interpreting the data. I achieved confirmability by ensuring that the records I used to increase dependability were used to increase confirmability. An objective review of the documents and data collection should determine the conclusions and interpretations that emerge from the data, not from the researcher's bias (Patton, 2015). To minimize researcher bias, I used a reflective journal in which I took notes on my feelings, thoughts, or potential biases that emerged during the data collection and interpretation.

Triangulation also created confirmability. Triangulation is a data collection approach that reduces the influence of researcher bias by providing more than one source to confirm the information gathered (Merriam & Tisdell, 2016). Therefore, I collected data from interviews and surveys, for confirmability of data.

### **Ethical Procedures**

Before starting the data collection process used in this study, an approval from Walden University's IRB was obtained. As per the Walden University guidelines, this proposal was submitted to the IRB and the assigned approval number will be maintained. The IRB review and approval process was designed to make sure that students follow research protocols and conduct ethical research.

I followed Walden University's ethical planning processes worksheet to ensure that I obtained high quality and authentic results. Ensuring that research is conducted in an ethical and responsible manner is the responsibility of the researcher (Ovia, 2018). Researchers face ethical dilemmas while working on research studies and must employ forward thinking to devise a plan to resolve any ethical dilemmas that may arise. I anticipated potentially facing an ethical dilemma because I am a principal within the school district where my research was being conducted. To mitigate bias and ethical dilemmas, no veteran K-5 ELA teachers with whom I personally worked were able to participate in the study. In addition, a letter was submitted to the district office of the county public school requesting permission to conduct my research study with veteran K-5 ELA teachers from the district to serve as confidential participants for the research study.

Once I was given permission from the district and obtained names and email addresses from the district, I sent teachers an invitation email. The email provided an overview of the research study, stated the criteria for participating, informed them that participation was voluntary, and informed them that any information received from them would be kept confidential. The email contained guidance on where to sign the online informed consent form. I asked the potential participants to indicate willingness to participate by signing the form electronically and notifying me that they signed the forms. Following the guidelines of Patton (2002), participants were not obligated to complete the study if they wished to withdraw. I informed participants that their participation was voluntary, and they could opt out of the study at any time. Participants were informed of

the planned duration of the interviews and that I would be recording the interviews, with their permission. There were no incentives given to participate in this study.

To ensure confidentiality was maintained, the data obtained from the interviews and survey were downloaded on a USB flash drive. The data were coded to protect the participants' names and identities. Participants used Qualtrics to complete the survey. All written and electronic documentation were transferred to an electronic version and transferred to the USB flash drive. The USB flash drive was protected with a password. The flash drive was stored in a lockbox in my home. After 5 years, as required by Walden University, the content on USB flash drive pertaining to the study will be destroyed. After 5 years, the electronic data will be erased, and any paper data will be shredded. Each participant received a copy of their transcripts to increase transparency, accuracy, and ethical standards.

### **Summary**

The purpose of this study was to capture the perceptions of veteran K-5 ELA teachers who implement blended learning as an educational innovation in the elementary school setting. To achieve the study purpose, a basic qualitative interview approach was used. In Chapter 3, the research design was explained in depth along with a thorough explanation of the rationale for selecting the design, and the steps that were taken to limit the potential for researcher bias.



Chapter 3 included descriptions of other pertinent sections of the research study including the procedures for participant selection, the necessary criteria, and the instrumentation consisting of semi structured interviews and surveys. Also mentioned is an explanation of the process to recruit participants, the data collection process as well as the process for data analysis. Final study details contained in this chapter provide the details of thematic analysis, trustworthiness, and ethical procedures used to conduct the research study. In Chapter 4, I include an analysis of the data collected from interviews and surveys. Chapter 5 is comprised of an interpretation of the findings.

## Chapter 4: Results

The purpose of this basic qualitative inquiry was to explore veteran K–5 teachers’ perceptions of blended learning as an educational innovation. The study population consisted of 15 veteran K-5 ELA teachers from one southeastern school district. The following research question and sub questions guided this study:

RQ: What are veteran K–5 ELA teachers’ perceptions of blended learning as an educational innovation?

SQ1: How do innovation attributes influence the perceptions of veteran K–5 ELA teachers regarding blended learning as an educational innovation?

SQ2: How does the adopter category of veteran K–5 ELA teachers influence their perceptions of blended learning as an educational innovation?

In this chapter, I provide a report of the results from the interview process. This chapter also includes a discussion of the setting, demographics, data collection and data analysis processes, evidence of trustworthiness, the results, and the summary.

### **Setting**

This study included participants who reside in a single state in the southeastern region of the United States. The participants were from one southeastern school district. Because of the COVID-19 pandemic, I conducted interviews virtually. After they consented to be part of the study, participants were provided with a link to call in or login to on their computer. All interviews were audio recorded and saved to a USB drive.

There were no personal or organizational conditions that influenced participants or their experience at the time of the study that may have affected my interpretation of the study results.

### **Demographics**

Participants for this study included 15 veteran K–5 ELA teachers from one southeastern school district. All the veteran K–5 ELA teachers had taught for at least 20 years and had an opportunity to implement blended learning into their instructional day. The range of veteran teachers' experience was from 20 to 41 years. All the veteran teachers taught K–5 ELA in an elementary school at least once in their career.

Of the 15 participants, 12 participants taught in Title One schools. Three of the participants identified as male, while the other 12 participants identified as female. The range of years of implementing blended learning as an innovation in ELA was from one to 11 years. The range of adopter categories was close, according to the survey that was completed by the participants. The survey results indicated there were four innovators, two early adopters, three early majority, three late majority, and three laggards. During the time of the interview, all participants taught in a K-5 elementary setting and taught at least one of the Grades K-5. Table 1 presents the demographics of the participants.

**Table 1***Participant Demographics*

Participant	# Years of Teaching	#Years Implementing Blended Learning	Stage of Adopter according to survey
T1	31	11	Innovator
T2	22	4	Late majority
T3	20	9	Early adopter
T4	20	7	Early adopter
T5	23	9	Innovator
T6	26	6	Late majority
T7	41	28	Early majority
T8	30	1	Laggard
T9	20	3	Laggard
T10	21	4	Late majority
T11	25	8	Early majority
T12	24-	9	Innovator
T13	25	7	Early majority
T14	20	4	Laggard
T15	22	10	Innovator

**Data Collection**

For this basic qualitative inquiry, I collected data from two different sources. A total of 15 veteran K–5 ELA teachers from the southeastern region of the United States completed a survey and one round of semi structured, individual, virtual interviews to measure their innovativeness. After receiving approval from the Walden University IRB (IRB Approval #02-09-22-0651853), I sent an email to elementary teachers using the district’s public website and explained the study and the criteria. If teachers were

interested in participating, I asked that they reply directly to me through email. Once I received a reply email, I reached out to the potential participant with a welcome email and the consent form. Potential participants were instructed to read the informed consent and reply, "I consent," to the email. The participants were then emailed the survey and asked to set a date and time that they would like to be interviewed. Once a participant set a date and time for their interview, I created a calendar invite for a virtual interview and attached the survey questions. Participants were asked to send the completed survey back via email prior to the virtual interview.

Participants were reminded the day before the interviews of their scheduled time via email. Prior to the beginning of the interview, I assured the participants that I was serving as a researcher and the information shared would be used only for the study, and their identity would be kept confidential. Participants were given an opportunity to withdraw from the interview at any time if they felt uncomfortable. I explained that I, my dissertation committee, and the IRB would be the only people with access to the interview recording. Due to the COVID-19 pandemic, I conducted interviews virtually. I interviewed 15 participants using Microsoft Teams between February 15, 2022, and March 5, 2022. All interviews were recorded using the recording feature within Microsoft Teams and then transcribed using NVivo. The interviews lasted from 17 minutes to an hour depending on the amount of information that was shared. To ensure that the interviews were equitable, I used an interview protocol (see Appendix B) and asked each participant the questions in the order listed on the protocol.

Participants were sent a password-protected copy of the transcript within 24–48 hours of completing the interview. I explained the process of member checking and requested that they return the document to me within 2 days of receipt. Of the 15 participants, 14 did not find any errors. The one error that was found was the spelling of a particular blended learning program that a participant implements into their reading instruction. I made the necessary correction after obtaining the appropriate spelling. Reflective journaling occurred immediately after each interview to record my personal thoughts throughout the entire study. All data collected were stored on a USB drive that is locked in safe place in my home office to maintain confidentiality of the participants.

### **Data Analysis**

Data analysis in qualitative research is an iterative process (Merriam & Tisdell, 2016). I analyzed the data using thematic analysis. The process of thematic analysis is used to classify similar occurrences that address the research or issue (Maguire & Delahunt, 2017). After conducting the interviews, I used Yin's (2015) five steps for analyzing qualitative data: compile, disassemble, reassemble, interpret, and conclude.

#### **Compile**

I compiled the data by transcribing the interviews using NVivo. Participants participated in the member checking process by reading their transcribed interview for accuracy. Once the participants returned their transcribed interviews, I reviewed the returned transcripts and made any necessary suggested edits according to the participant. There was only one participant that found a spelling error with transcriptions.

**Disassemble**

I disassembled the data to develop groups of ideas by coding to identify the different patterns, similarities, meanings, context, and order of the presentation. NVivo software was used for coding and the first cycle and descriptive coding were conducted to identify words and codes within the transcripts. During the first cycle, I generated 85 codes using NVivo and hand coding to check for any missing codes. During the second cycle, I used axial coding. Axial coding allows for a connection to be made between the codes identified initially in the first cycle and the second cycle to create categories (Saldaña, 2016). From the different coding, I was able to find three different themes.

**Reassemble**

I generated themes according to the different codes. Creswell and Poth (2016) suggested that identifying and analyzing the relationship among similar codes creates themes and categories. I created a table with the research question, sub questions, codes, and themes and used this to categorize the participants' responses. Using Microsoft Excel allowed me to visualize the data and group similar codes with each other.

**Interpret**

I was able to interpret the data by closely looking at the themes and answers to questions, which allowed me to identify themes, such as PD needs, student engagement levels, and teacher acceptance of the innovation. These themes were derived from responses to interview questions aligned with the research question. Items aligned with SQ1 generated the themes of teachers' preference and compatibility. The theme of

teachers' openness to innovation was identified from responses to items aligned with SQ2.

### **Conclude**

With Yin's (2015) first four steps for analyzing qualitative data, I was able to make conclusions from the themes that were developed. Based on the research question, I was able to conclude that veteran K–5 ELA teachers did not initially link the idea of implementing learning into their instructional practices with little to no PD on the different blended learning platforms that were available. Participants stated that blended learning is good to provide students with enrichment, engagement, and remediation. Related to SQ1, I concluded that participants who adopted with the last majority and laggards had similar characteristics. Related to SQ2, I concluded that teacher characteristics were influential in their perception of blended learning as an innovation.

### **Evidence of Trustworthiness**

I supported issues of trustworthiness in several ways. Merriam and Grenier (2019) noted that a valuable qualitative study is one that is accomplished ethically. King et al. (2018) suggested that the trustworthiness of a qualitative study depends on whether the study is reliable or valid. In this section, I describe how I ensured credibility, transferability, dependability, and confirmability throughout the research process.

### **Credibility**

Merriam and Tisdell (2016) defined credibility as how closely the “research findings match reality” (p. 242). I followed the interview protocol by asking each participant the same questions using the same clear language to avoid any bias. To ensure



credibility, I engaged participants in member checking (see Merriam & Tisdell, 2016). Member checking is the use of interview participants as examiners of the data collected during the study to avoid misinterpretations of the meaning of information shared during interviews. Participants were emailed their original transcripts and asked to review them for accuracy. Participants then emailed me the reviewed transcripts, and I made the necessary changes. For this process, T8 stated one of the blended learning programs that she uses was misspelled; therefore, I made the adjustment to the spelling of the program. There were no other significant changes to any of the transcripts.

### **Transferability**

Merriam and Tisdell (2016) defined transferability as the replicability of the study findings by a different researcher. To ensure transferability in this study, I provided details about the setting and demographics of where the participants were located without compromising the confidentiality of the participants (see Amankwaa, 2016). I also presented general information about the participants, such as the number of years they have taught and the number of years they have implemented blended learning into their instruction at the time of the study.

### **Dependability**

Dependability means that the data, its analysis, and the coding of it is replicable (Amankwaa, 2016). To ensure dependability, I used a public website to reach out to veteran K–5 teachers. Originally, I stated in Chapter 3 that I would use principal colleagues to ask their teachers to participate in the study. After conversations with the IRB and my committee, it was determined that it would be best for me to reach out

directly to the potential participants. I kept a log of the recruitment process to ensure that everything was accounted for.

### **Confirmability**

To ensure confirmability in this study, I used member checking to allow participants to confirm the data presented in the results and whether they agreed, disagreed, or suggested any additions (see Merriam & Tisdell, 2016). I also used a reflective journal to capture any notes that I would need to ask for clarification. After each interview, I started the transcribing process using NVivo to ensure that data were accurate. Once I completed the transcription, I emailed the participants their interview transcript and asked that they return the reviewed transcript to me within 2 days. There were no noticeable changes that needed to be made within the transcription for this study.

### **Results**

In this section, I organized the results by research question, sub questions, themes, and subthemes resulting from the data analysis (see Table 2). Participants completed a survey to determine their adopter category and were asked 10 semi structured questions. Their responses to the interview questions revealed themes related to their perceptions of implementing blended learning as an innovation. The codes reveal themes as they relate to K–5 ELA teachers’ assigned adopter category as defined in Rogers’s (2003) DIT.

**Table 2**

*Research Question, Sub questions, Themes, and Subtheme*

Research Question (RQ) and Sub questions (SQs)	Theme	Subtheme
RQ: What are veteran K–5 ELA teachers’ perceptions	Experiences Professional development	Networking

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of blended learning as an educational innovation?	Student engagement Barriers Benefits Teachers' acceptance of the innovation	Reliability of technology
SQ1: How do innovation attributes influence the perceptions of veteran K–5 ELA regarding blended learning as an educational innovation?	Trialability Compatibility	
SQ2: How does the adopter category of veteran K–5 ELA teachers influence their perceptions of blended learning as an educational innovation?	Teachers' openness to innovation	

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### **Research Question Results**

Participants in this study described their personal experiences with implementing blended learning, the lack of PD provided for novice and veteran teachers, and student engagement. The themes associated with the research question are experiences, PD, student engagement, barriers, benefits, and teachers' acceptance of the innovation.

#### ***Theme 1: Experiences***

When asked to share their experiences with implementing blended learning and how the experience shaped perceptions, several of the participants were able to answer the question immediately. Many of their experiences can be related to the attribute of compatibility identified by Rogers (2003) because their comments included reference to blended learning's fit with current/past practices. Some of the participants, such as T2 and T4, were explicit in their views of blended learning as an innovation with the Rogers

DIT attribute of compatibility. T2 stated, “When they get the Aha moment and they see the connection with what we’re doing on computers as well as with what we’re doing in the classroom.” T4 said that their most memorable moment was when, “Students see the connection of what they are learning in class and now get an opportunity to work on the skill or strategy on the laptop. When the student’s light bulb comes on, it is a powerful moment.”

Other participants’ experiences with blended learning as an innovation compatible with current practice were less obviously related to Rogers’s compatibility attribute. Nonetheless, the responses of such participants showed that they consider blended learning to be an innovation that fits with their current instruction or instruction they are seeking to implement. For example, T1 described how blended learning was compatible with her desire to individualize instruction.

According to T1,

My experience with blended learning, I like that because it allowed me an opportunity to individualize the instruction if there were students who needed more or additional help. I can assign those children motivated to do activities individual work while I work with the group. So, I was excited about it when I first got started doing the blended part of the lessons.

Similar to T1, T3 described how the premade lessons in the blended learning tools fit with their small group instruction. T3 said,

I think using the lessons that are given to you for small groups, it helps. It helps you narrow down on what the students need. [It] will help with . . . what they got

wrong. And then you can use those lessons to really home in on what they need help with.

For participant T7, the experiences with blended learning were compatible with their attempts to support students who struggled with written expression. T7 stated,

And they just expounded well beyond what I thought that they could ever do. And you know, I believe all children can learn, but I just never expected that. And so, then I began to use Flip Grid with all of my students to help them respond to the prompt and find and just kind of talk through what they were finding in the text to support their answers. And that was really not a way that I had ever heard of Flip Grid being used with kids. And so, I was really pleased with that.

For several participants, the innovation of blended learning had the attribute of compatibility with their desire to see students enjoying their learning.

T12 concluded by expressing that their most memorable experience with blended learning was on-going. Of blended learning, T12 shared that it, “Allowed me to see the excitement on the students faces daily when I incorporated blended learning. My Kindergarten students like learning the different functions of the computer.” T12 continued, “I remember this one time when all my students logged into the computers without assistance. It’s the small things that matter the most to me in kinder.” Similar to T12, T14 said,

Reaching shy students virtually during the pandemic is a moment that I will forever remember. Students were more open and participated in the virtual world. You know the students that never talk in class. During virtual learning those were

my students that excelled. Those were the students that were on the computer and logged in and ready to learn daily.

T6 shared their experience of blended learning as a positive innovation when they described their students' excitement for learning. T6 said, "[O]nce that I began to use technology and other methods of teaching the children, the children became more excited about what they were doing with the new technology."

Participants T1, T2, T3, T4, T6, T7, T12, and T14 each spoke about their experiences with blended learning as learning – for staff and students – which aligned with current practice or desired practice. This current/desired practice was across multiple areas such as small group instruction, support for struggling learners, and social/emotional development, but for each of these participants, the innovation of blended learning had Rogers's attribute of compatibility. The number of participants who found blended learning in some way compatible with their existing practice is noteworthy because these participants spanned the adopter stage from innovators to laggards.

### ***Theme 2: Professional Development***

While a considerable number of participants found that blended learning had the positive attribute of compatibility, all 15 participants expressed dissatisfaction with PD, and many indicated that their dissatisfaction with the PD led them to perceive of blended learning as having Rogers's DIT innovation attribute of complexity. For some, complexity came because no PD was offered to help support implementation. T4 stated, "And if I'm not mistaken, I don't remember any blended learning training. Professional development." T13 elaborated that their specific school did not offer PD, however, the

school did provide virtual videos if needed to assist with the virtual learning platforms that are available.

For others, the PD offered did not address the complexity of the innovation because it was received too late in the implementation process, or the training did not fit their needs. T1 stated PD on blended learning resembled the analogy of putting the “cart before the horse. [W]e always got information after we have gotten into the process.” T1 (Innovator) further explained that in their view, “Administration realized that we did not understand what was going on, nor do we have the background information to do what was necessary for the children. So, they start back loading rather than front loading.” T2 emphasized, “I think due to COVID restrictions, there hasn’t been as much in-person training. So that’s kind of been a lack. I’m still kind of feeling my way through the newest blended learning platform that we’re working on.”

T7 further explained,

I don’t find that professional development is helpful because nobody is able to sit down individually with me and say. . . . Let me give you some tips about this particular student and what you can do for that student. And so, because of that the interactions weren’t targeted. I find them boring, and I think that a lot of people tune out and they just do it to get the professional development points.

According to T15,

Professional development for blended learning should be differentiated according to the skills of the teachers. Some teachers like me who are eager to implement new innovative technology should have training on a more accelerated pace than

those that are reluctant to implement technology into the classroom. PD should be on-going as well.

T10 also included, “Some knowledge of computer uses with the computer for professional development would have been helpful.”

T8 and T14 expressed that blended learning was a complex intervention because the PD they received was overwhelming. About their experience with PD on blended learning, T14 stated,

You go to the PD, and they present so many technology apps and blended learning platforms when you leave you are either still lost or not sure which one even to try. And most times I don't implement until I am mandated to do so.

Despite the overwhelming majority of comments about the PD for blended learning being negative, a few participants did express some positive feelings about the PD they received. T10 stated,

Professional development was always a good opportunity to learn new things about the blended learning platforms that we do have access to [when] participating in a blended learning training. Just received more information. More ways to use the platform that can help with student achievement. The professional development was very informational, and I do like the opportunity to always getting new information that can help us with the student growth and achievement.



T12 described one of their PD experiences by saying, “I also attended Achieve 3000 training which was kind of beneficial in telling me how to pull the reports and guide instruction.”

### ***Theme 3: Student Engagement***

Participants described student engagement as one of the ultimate goals for student success with blended learning. Considering this goal, it is reasonable to conclude that participants who spoke positively about blended learning and its relationship with student engagement find that as an innovation blended learning has the attribute of compatibility. Participants who indicated that blended learning was compatible to their student engagement practices or goals were innovators, early majority adopters, late majority adopters, and even laggards. T9 commented, “Blended learning is useful in developing academic student interest and promotes student engagement.” T11 expressed that, “Using blended learning platforms, I can gain student interest and engage them in learning, regardless of how they learn or their instructional level.” T10 noted, “blended learning keeps students engaged, and students find more interest in the content.”

According to T7,

Student success, high engagement, and those are the things that have made me love using blended learning tools in my classroom. But if I don't see that, then I want to step away because the two most important things for me are that the children that I serve have to be motivated to learn and meet the standard. And it has to work for us.

T13 described the different incentives that were provided to increase student engagement. T5 and T15 discussed how they use blended learning to create a learning environment among their students who struggle with lectures and traditional content that uses paper. T5 stated, “In these days, it’s kind of a way for most of our students to learn. Everyone isn’t a sit down or sit and get student.” T5 continued by sharing that students get excited when it is blended learning time. “I feel it allows students to be in control of their own learning and create success,” T5 expounded.

#### ***Theme 4: Barriers***

Enhancing learning using technology is an increasingly popular approach in K-12 classrooms. Along with the increased demand of implementing blended learning, there are some barriers that teachers encounter. Of the 15 participants, eight shared their belief that lack of opportunities, resources, and cost are just a few of the barriers with implementing blended learning. Three participants explained the actual use of the technology devices created a barrier for the implementation. These participants exhibit the attributes of complexity. Rogers (2003) defined complexity as the degree to which an innovation is perceived as relatively difficult to use or understand. The participants who expressed that blended learning as an innovation had the attribute of complexity due to technology challenges/needs were innovators, early adopters, late majority adopters, and laggards. T3 commented,

The computer technology that we have at our school and all of the computers don’t work a lot and the sound goes out in them, the headphones don’t work. . .

They have to listen to it out loud, which causes distraction. And getting 18 students logged on to a computer when they're only five, that's to me is a barrier. T15 explained, "Just like anytime you use technologies like reliability of the technology or also like access to technology like if I wanted students to like have one to one devices and thinking about the buy-in from supervisors and colleagues." When describing the barriers to implementing blended learning, T2 said,

Some of the areas have also been the technology itself working. Computers go down. We have to, you know, get those repaired with tech tickets. . . Oh, yeah, the internet, we're having problems, it's something. It could be a spot in the room where the internet does not work, and those things are barriers.

T4 also mentioned the barrier of technological resources,

It's the ability for the students to have computers not having enough, the not having one to one I think. My ultimate dream would be every school to be one to one, and that's not possible. So, if everyone had one to one laptops. There will be no barriers with blended learning.

T1 stated,

Barriers. Sometimes the Administration is slow about getting what we need in the classroom. Sometimes we just don't have it. Well, I know funding is one of the barriers that we have. . . Another one that would probably affect me in my classroom is some of our children just don't have some of the tools that they need. . . A lack of time that parents have to make and take the children to the public

library because they have a lot of activities and things that goes on in the public library that could help student, but our children just don't get those opportunities.

Even in cases where the technology is available for use, blended learning was viewed by some as a complex innovation because of student skill levels. Two participants, T8 and T9 spoke about the need for student development of technological skills. T8 discussed the physical barriers that younger students encountered. T8 described specific barriers they had witnessed or dealt with,

not being able to maneuver the mouse, not being introduced to or not knowing where to click on a mouse. Um, not knowing how to work a computer and then just not having enough time. . . not being able to sit there with them and help them with that. It was difficult.

T9 explained,

The barrier is basically making sure the students know how to utilize it when first introducing the time it takes to get everyone set up and on. . . Yes, getting them to a smooth spot where they can be able to do things on their own, independently log in and get started on their own and in their shoes. Yeah, just they'll be able to utilize them, understand, click drag and things like that. So just hoping that for whatever platforms have ways to teach the students, . . . make something that is more user friendly for the smaller one.

It is interesting to note that only laggards commented on the technological use skills of students. In contrast, when discussing the benefits of blended learning, T2 stated,

We have kids that are very savvy with technology, so they don't have a problem with clicking and going through things and seeing how things work. . . So, the benefits of them being able to use what they already know and apply it to their learning, and they are feeling very accomplished when they do things like that.

#### ***Theme 5: Benefits***

All participants expressed benefits to implementing blended learning. Comments on the benefits of blended learning indicated that many view the innovation as having Rogers's attribute of relative advantage. According to Rogers (2003), relative advantage is the appearance of superiority or value for an innovation. The relative advantages perceived by participants varied. Comments described the relative advantage for: English learners, data analysis, targeted enrichment, student enjoyment.

Along with the benefits described at the end of the last theme discussion, T2 described more benefits to blended learning saying,

Everybody can feel accomplished like, yeah, positive vibes. . . they (the online platform) give it on their level. And even like my English learners, it can be read to them. So, everybody feels accomplished and then it brings them from where they are trying to move them along and help them learn as much as they can and grow as much as they can. Those are definitely the benefits of the programs.

According to T3,

The benefits as you get to see your data right away, as far as the benchmark assessment with the learning A to Z, then the benefit is the kids get access to books. All the time. Now they can read at home as well if they have internet at

home. Then that's a big benefit because I know a lot of students, parents always say we don't really have the books. This gives them a way to be able to get online and read with their student, their child at home. Also think it gives the students more access to technology when they start early on so that it doesn't become such a hard thing. If you start in kindergarten and you have access to technology all the way through, it becomes like second nature instead of something new.

T4 spoke about the benefits in the area of enrichment.

Usually people want to say, well, I'll put my students [on a platform], they didn't score well on a particular assessment. . . We're going to put those students on the computer. Well, it's different when it comes to science, so students that score higher, we go ahead and put them on the computer. Just to give them a little more enrichment in a particular benchmark. For instance, if they scored really high on 4E62, which is rocks and minerals, we will go ahead and give them a little enrichment on rocks and minerals.

Both participant T8 and T9 spoke about motivation and enjoyment as pieces of the benefit of blended learning as an innovation. It is interesting to note that both participants who spoke about student enjoyment are laggard adopters. T9 described the benefit by speaking about the technological presentations, "It caters to them with vibrant colors, songs. They help them remember the different strategies or letter names and things of that nature, The games, it makes it fun for them. They're enjoying the learning aspect." Participant T8 opted to view the students' enjoyment as a potential tool for behavior modification. About blended learning, T8 stated,

It was almost looked at in my classrooms as a reward. . .being on a computer, it's a more fun way of learning. So, I will use it as maybe like a reward or a tactic to get, or to encourage the students to complete other things like other tasks.

***Theme 6: Teachers' Acceptance of the Innovation***

Ten of the 15 participants individually stated that when they first hear about an innovation, they think it is good or at least are willing to give it a try. Many of the participants who perceived blended learning as an innovation which they could try in its entirety or in pieces demonstrated that they viewed blended learning as an innovation with the attribute of trialability. One such participant was T11. T11 stated,

I'm interested and I want to know more about it. And I want to play with that. I want hands on so that I can figure out how to use it for my needs best. I don't really want to be told, you know, this is the tool, and this is exactly how I want you to use it. . .So just let me see the tool and then let me figure out. Let me take it and make it an innovation for me.

T12 added that,

I generally have a lot of questions. I feel maybe a little insecure at first about trying something new. I definitely take time to process how I'm going to personally implement the innovation. I'm 100 percent usually for it just because I'm a yes person and I want to please. So, it's definitely something that when I hear an innovation, I want to immediately start brainstorming and thinking about how I'm going to implement it in my own classroom. My reaction does sometimes change. . . the attributes that influence my current attitude is definitely

when I'm front loaded with the training. Plus, get additional training after the blended learning platform has been implemented. I generally feel like much better.

Another participant whose response indicated that they perceive balanced literacy to have trialability is T3. T3 said about innovations, "I'm always open to what it is and seeing if it's going to work for me in my classroom."

The other five participants were not against the innovation. They made comments that questioned when the innovation would take place. For example, T4 stated,

My first reaction is good, great. And then, OK, when we're going to have time to do it. When are we going to get it? Where's that going to fit in to the whole puzzle? And are we getting rid of something else in order to gain this new innovation? Something that might still be usable.

T2 explained,

I sometimes worry about if it's geared towards little elementary kids or it's more geared towards intermediate because I know teaching kindergarten, some of the ideas that I feel that people have doesn't really help, like doesn't help the little kids because they're not ready for that yet. So, but I'm always open to what it is and seeing if it's going to work for me in my classroom.

T9 echoed the thoughts of T2 when they said that when they first hear about an innovation, "I guess you come into it wondering if you know how to use a resource because you want to know if you know how to utilize it, but you're excited to see the function.



## **Results for Sub question 1**

Sub question 1 presented in this study was, “How do innovation attributes influence the perceptions of veteran K-5 ELA teachers regarding blended learning as an educational innovation? Rogers (2003) described the five attributes of an innovation: (a) relative advantage, (b) compatibility, (c) complexity, (d) trialability, and (e) observability. These attributes can determine how adopters perceive an innovation and how these perceptions influence diffusion and implementation of the innovation. The themes trialability and compatibility were generated from responses aligned with this sub question. The theme of trialability was found throughout participant comments regarding ways they have modified implementing blended learning as well as ways that they wish they could modify this innovation. The theme of compatibility was identified as a theme found in responses to interview questions regarding blended learning as an educational innovation compatible with existing practices. Chapter 5 includes discussion of how each of the attributes of innovation was, and was not, indicated to be an influence on blended learning implementation.

### ***Theme 7: Trialability***

Teachers in this study expressed the desire to try the innovation in ways that they felt best fit them. This autonomy can be related to trialability as defined by Rogers (2003). T1 stated,

I need to look to find different methods, different strategies to meet all of the children’s needs because they see we don’t have a homogeneous group in a classroom. It’s not homogeneous. And we have to find something that will work

for everybody, even though. It takes a lot of work, but still, if we want to do a better job or we won't be able to teach our children we need, I need to have come up with different methods and so find a method that we will learn, and they will do. But to be innovative, find out things on the fly. You can look and see this thing here. Work best for this child. And so, you do it as long as the child is getting that instruction. It doesn't make it different. Just innovative

T4 acknowledged,

Sometimes there are some things that I think are good that people are doing but given my clientele their needs. Is it going to be the best thing for me to use for my classroom? There's a lot of good stuff out there. . . You must discover what's the best fit for you, for the teacher if it's going to take too much on the front end, is it really worth it? And sometimes I see some wonderful things, but when I dig into it and see how much it takes for me, how much it takes from the kids, it might not necessarily be the best fit for us.

T7 commented that teachers should have the flexibility to implement whichever blended learning idea they think is best for their students. T7 explained,

Normally we are allowed to use whatever blended learning program that we deem necessary for our students. However, most recently the district has mandated that we use certain platforms for our students. I allow my students to use the required platforms first, then I allow them to use other educational blended learning platforms so that they can enjoy being on the laptop or desktop.

T10 concurred, “Students normally spend 45 minutes a week on the district mandated platform and then I allow them to explore. This increases their engagement.” T14 agreed that allowing students to complete the mandated blended learning platform invites students to be more engaged and treats them as an innovator as they explore more platforms.

### ***Theme 8: Compatibility***

Overall, 15 of 15 participants were able to describe at least one strength they believed they have pertaining to implementing blended learning. This unanimous ability to identify a strength of their own practice of blended learning relates to Rogers’s innovation attribute of compatibility. Since the participants were able to identify a strength of blended learning, or their own practice of blended learning, they show that they consider the innovation of blended learning compatible with their needs, views, or values. T12 said, “I consider the blended learning approach to have positive impact on student learning which is a strength for implementing.” According to T7,

I think that is my strength is that I don’t see blended learning as an intrusion into my classroom, but an enhancement and part of a way to make my life easier to gather more and more data on my kids to help me make instructional decisions. And then also, um, it just helps to prepare my kids better for the future. And when we see a purpose for what we’re doing as adults and as children, I think we have more buy-in to do it.

While T7 and T9 spoke about blended learning being compatible with their instruction because it allows them to better access and use data, T9 also mentioned data being used formatively by the students themselves. T9 said,

I would say the strength is my strength when implementing the blended learning is, I guess, going back, looking at the data and seeing where we where I would need to. I'll go back and read wrangle over some of the. Some of the places where the students are having difficulty, so I think that part would be my students being able to look at the data, see. . .is it a, uh, a user error or are do they have misconceptions in the area?

T12 and T14 indicated that implementation of blended learning is compatible with their views on reward systems. T12 elaborated,

I kind of use punch cards and the students get to visit something called a snack shack when they complete eight lessons at high proficiency. We also celebrate like their time spent on track with treasure box rewards, and then each time they pass the lesson, they're able to get a small treat. I think, like rewarding them for their blended learning has kind of been my strength.

T14 stated, "My students have found a love for tracking their data from the different blended learning programs. Once they are finish, they can place a sticker by their name and get a treat. To establish this routine is very impressive."

For T6, blended learning, specifically the technology associated with the innovation, is compatible with their pedagogical value for modeling. T6 added,

I guess my strength is when I model or show them what my expectations are. And I feel like that can be carried over into multiple subjects because of the technology, but showing them how to use the technology, showing them how to use the tools, showing them how to use whatever I'm using. I feel like the strength is being able to model [for] them.

### **Results for Sub -question 2**

Sub -question 2 posed during this study was, how does the adopter category of veteran K-5 ELA teachers influence their perceptions of blended learning as an educational innovation. The data analyzed to help answer this question focused on teachers' autonomy of implementation, or lack thereof, according to their interview and survey answers. The responses from the participants shed some light on how their adopter category related to feelings about implementing blended learning into reading instruction. Most of the participants' adopter category aligned with how they initially felt when they were directed to implement blended learning into their ELA instruction. Some of the responses demonstrated Theme 9: Teachers' openness to innovation. T11 stated the need to be open-minded by expressing, "Whatever new blended learning that comes up or even just enhancements with some of the blended learning platforms we may already have. I'm always open to getting the opportunity for growth and to learn more about the platform." T7 elaborated about their experience having difficulty with being open, stating,

There was a lot of buzz about a new program called Freckle. And everyone wanted to use this program, and they were sure that it was going to be the savior for all of our students. But nobody could really explain specifically how it was

going to better the students sitting in front of me and . . . so then I thought, Well, maybe I should try it and just see so that I can get on the good report and. You know, I did try it, but I haven't found the success that I need with it. And so I just have backed off, you know, and shared my reasons for backing off and why I want to go back to what I have been having success with prior to that kind of jumping on the bandwagon.

T15 shared their recognition of openness by stating,

If the administration is pushing for blended learning to occur, then most likely it will get done. However, if it is not something that is being monitored on the elementary level it does not get done. Especially when students have a hard time with operating the technology provided for them.

### **Summary**

In this basic qualitative inquiry, I explored the perception of blended learning among veteran K-5 ELA teachers. In this chapter, I presented themes that emerged from the data analysis from data collection through semi structured interviews of 15 veteran K-5 ELA teachers from the southeastern region of the United States. Six themes emerged that are associated with the research question: experiences, PD, student engagement, barriers, benefits, and teachers' acceptance of the innovation. Two themes emerged from SQ1: trialability and compatibility. In addition, one theme emerged from SQ2: teachers' openness to innovation

The results of this study indicated that veteran K-5 ELA teachers' perceptions of blended learning is that it is just another program to implement as a requirement from

administration. Participants felt reluctant to implement initially, due to the lack of PD and constant change with educational programs. Once a veteran K-5 ELA teacher observed an academic benefit, the veteran K-5 teacher was more willing to implement daily use of blended learning in their ELA instructional block. However, the veteran K-5 ELA teachers whose adopter category ranged from late majority to laggard expressed their need for continuous PD to fully implement blended learning to provide opportunities for their students to achieve success.

Chapter 5 includes interpretations of findings and limitations of the study. I also discuss recommendations and implications. Furthermore, I provide a conclusion for the study. Two overarching themes emerged from a synthesis of the research question and sub questions 1 and 2: lack of PD and teachers' acceptance of the innovation. In Chapter 5, I also discuss the potential social changes that implementing blended learning can impact.

## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this basic qualitative inquiry was to explore how veteran K–5 ELA teachers implemented blended learning during their reading block.

I attempted to answer the following research question and two sub questions:

RQ: What are veteran K–5 ELA teachers’ perceptions of blended learning as an educational innovation?

SQ1: How do innovation attributes influence the perceptions of veteran K–5 ELA teachers regarding blended learning as an educational innovation?

SQ2: How does the adopter category of veteran K–5 ELA teachers influence their perceptions of blended learning as an educational innovation?

The data collection process began with semi structured, one-on-one, virtual interviews. I interviewed 15 veteran K–5 ELA teachers from public schools in the southeastern region of the United States. The interviews consisted of 10 open-ended questions related to the implementation of blended learning as an innovation within their instructional day. In addition, participants answered an innovativeness survey to gain insight on their adopter category.

### **Interpretation of the Findings**

The purpose of this study was to analyze data based on the participants’ perceptions of blended learning and how they implemented blended learning in their ELA instruction. The findings revealed teachers’ characteristics that lead to identifying their



adopter category according to Rogers's (2003) DIT process. I interpreted the data using the research question and two sub questions. After collecting and analyzing the data, nine themes emerged: experiences, PD, student engagement, barriers, benefits, teachers' acceptance of the innovation, trialability, compatibility, and teachers' openness to innovation. In this section, I analyze the results based on the research question and a comparison of findings from the literature review with the conclusions of the current study. Findings from this study related to Rogers's DIT in many ways but did not clearly align with the conceptual framework in others. Some findings from this study confirmed, disconfirmed, and extended several findings discussed in the literature review in Chapter 2.

### **Alignment with Conceptual Framework**

As stated in Chapter 2, Medlin (2001) and Parisot (1995) purported that Rogers's DIT is the most appropriate theory for analyzing technology adoption in educational settings. Portions of Rogers's theory relating to innovation attributes were supported by the current study. An examination of the data did indicate numerous patterns regarding veteran K-5 ELA teachers' views on blended learning as an innovation and Rogers's attributes of innovations. I used SQ2 to analyze adopter category and the teachers' perceptions of the innovation. The nature of this question did not lead to responses that aligned with any of Rogers's attributes of innovations. For this reason, Theme 9: Teachers' influence, generated during analysis of responses to SQ2 is not discussed in the following interpretation of the findings as it relates to alignment with the conceptual framework.

There is also no discussion of alignment to Rogers's attribute of observability because none of the themes that emerged came from responses that showed a pattern of observability as a contributing factor. This is particularly noteworthy because observability relates to the ability of an innovation to be seen in use by others and, thus, make it more likely to be adopted because its successful application is visible. The nature of the questions posed to the participants in interviews may have inadvertently steered responses away from commentary on Rogers's attribute of observability. Future research in this area may wish to include questions regarding participants' experiences, if any, observing others implementing the innovation.

Across the six themes generated in response to the research question, four of Rogers's attributes of innovation aligned with participant responses. Only observability did not align with any of the six themes of the research question. For SQ1, the attributes of trialability and compatibility emerged from data analysis. No theme clearly had more than one of Rogers's attributes associated with it. The two attributes found in participant responses for Theme 7: Trialability and Theme 8: Strength, both associated with SQ1, were trialability and compatibility, respectively.

### ***Relative Advantage***

Rogers's innovation attribute of relative advantage was demonstrated in the responses for only one theme, Theme 5: Benefits. This theme resulted from a direct interview question that asked participants to identify their perceived benefits of blended learning as an educational innovation. Though a direct question was asked of participants, the pattern of responses still led to the identification of an associated theme of benefits.

As discussed previously, a variety of benefits were identified in responses. Still, Rogers's attribute of relative advantage was clearly seen in responses as participants described how blended learning was better, in various ways or considerations, than other innovations or practices. It is worth noting that participants in neither the innovator nor early majority adopter stages had very clear comments regarding the relative advantage of blended learning. One might expect that an innovator would see, and point out in an interview, an innovation's relative advantage(s).

### *Compatibility*

Rogers's attribute of compatibility is highly correlated with implementation. As such, it is a positive sign for the district that three of the nine themes identified came from participant responses that indicated that the respondents viewed blended learning as having the attribute of compatibility. Two of the three themes (i.e., Theme 1: Experiences and Theme 3: Student Engagement) demonstrating perception of compatibility were for the research question. The other theme with indications of compatibility according to Rogers (2003) was Theme 8: Strength, which supported the first sub question.

A majority of participants, including participants from every adopter stage, described their experience with blended learning as an innovation, connecting with Rogers's attribute of compatibility. It is a positive sign for the district when not only innovators and early adopters, but also late majority adopters and laggards, express that they view an innovation as being compatible with past or existing practices. When it came to student engagement, innovators, early majority adopters, late majority adopters, and laggards commented about blended learning as being compatible with current

practice. The only adopter stage with no direct comments on blended learning's compatibility with existing practices was the early adopter stage.

Interestingly, the early adopter stage was also the only stage not represented by comments of compatibility between blended learning and current practices for Theme: 8 Strength. The adopter stages of innovators, early majority adopters, late majority adopters, and laggards were all represented in the participant responses associated with the strengths or benefits of blended learning as an innovation. When questions are posed in such a way as to ask participants to identify positive aspects of a program or implementation of a program, results could become skewed. Future research should consider whether to reword Interview Question 2 so that participants have a clearer opportunity to not identify a strength of their own in relation to blended learning implementation.

### ***Complexity***

Responses for Themes 2 and 4 related to the research question indicated that participants viewed the innovation of blended learning as having the attribute of complexity. Though Rogers (2003) discussed complexity as the second attribute of innovations, it is the only attribute that, when perceived by stakeholders, is negatively correlated with implementation. Theme 2: Professional development resulted from participants of every adopter stage expressing unhappiness or frustration with the lack of PD they received prior to implementing blended learning. Every participant interviewed expressed dissatisfaction with the PD received prior to expected/required implementation of blended learning. These feelings of not having the necessary training and subsequent

understanding before implementation understandably led most participants to view blended learning as having the attribute of complexity because the unknown often seems hard. Veteran K–5 ELA teachers whose adopter categories ranged from late majority to laggard expressed their need for continuous PD to fully implement blended learning to provide opportunities for their students to achieve success. Veteran K–5 ELA teachers of other adopter categories indicated they would also welcome more PD on blended learning, even at this point in implementation.

Theme 4: Barriers arose from comments by innovators, early adopters, late majority adopters, and laggards. Only early majority adopters were not represented in the responses, indicating that the theme of barriers was associated with Rogers’s attribute of complexity. In total 11 of the 15 participants gave responses that indicated that their view of the barriers of blended learning as an innovation was associated with Rogers’s innovation attribute of complexity. Interview Question 9 asked participants to describe barriers encountered with implementation. Future research could potentially benefit from rewording so that participants more clearly have the option to say that they did not encounter barriers with implementation.

### ***Trialability***

The responses that generated Theme 6: Teacher perception and Theme 7: Trialability indicated that Rogers’s attribute of trialability impacted participant thinking. For Theme 6: Teacher perception, responses that support blended learning as having the attribute of trialability came from participants at every adopter stage. For Theme 7: Strength, the only adopter stage with no members indicating that they perceive blended

learning as having the attribute of trialability was the laggard stage. It is logical that laggards would not identify the innovation as having the attribute of trialability because laggards are associated with not being prone to experimentation, which is the hallmark of trialability.

### **Confirm**

Participant comments regarding challenges with technology – acquiring, malfunctions, etc. – aligned with research by Truitt and Ku (2018), Varier et al. (2017), and Carver (2016). The findings suggest that there is a need for on-going PD as it relates to implementing blended learning. The finding of a need for on-going PD confirms the findings of Ramadan (2017) and Osakwe et al. (2017). Participants also indicated that blended learning helps give teachers feedback regarding student learning.

### **Disconfirm**

Some of the previous research contrasts with this study's findings. Where Balci (2017) found blended learning to be a benefit in many ways, including in providing a sense of alignment for staff and learners, in this study I found that teachers did not often see the kind of alignment Balci found. Teachers in study reported that the alignment was not clear with the initial implementation.

### **Extend**

This study adds to the body of literature by providing insight into veteran K–5 teachers' perceptions of blended learning. This study also includes data from educators who were using blended learning prior to the COVID-19 pandemic. Li and Lalani (2020) implied that the COVID-19 pandemic brought change to the status of learning in

the 21st century. Most of the participants in this study had experience with blended learning prior to the pandemic; therefore, their perceptions regarding blended learning as an innovation may be markedly different from those who implemented blended learning only since 2020.

This study also increases the understanding of the relationship between implementation of an innovation and teacher perception of that innovation. The participants' comments on their desire for PD speaks to their wish to be informed and better able to be engaged with the innovation. Schechter et al. (2017) found that engaged teachers had higher rates of implementation for blended learning. The participants of the current study were all engaged as defined by including at least the district's required 45 minutes of blended learning instruction; however, it is reasonable to conclude that their engagement would be more internalized and powerful with the PD they are requesting.

It is noteworthy that the veteran K-5 ELA teachers in this study were seeking PD and anticipating change to their instruction because Snyder (2017) found that veteran teachers typically resist change. Snyder found that social and political nostalgia were reasons that veteran teachers were resistant to change. This study extends Snyder's research by analyzing veteran teachers' willingness to change during a global pandemic that necessitated massive shifts in instructional strategies.

Christensen et al. (2013) found that the blended learning structures, such as those used by the participants in the current study, were disruptive to learning. When Christensen et al. conducted their research, they predicted that blended learning would not become a widely used innovation in elementary schools. The COVID-19 pandemic

led to a reality counter to what Christensen et al. anticipated. Data on the effectiveness of blended learning implemented due to a pandemic might support Christensen because blended learning may be disruptive compared to traditional learning due to the nature of the suddenness of its implementation. The participants in the current study were elementary teachers with experience with blended learning before and during the COVID-19 pandemic-impacted schooling. The potential disruptiveness of blended learning on elementary students can be more accurately assessed through schools such as the ones in the study site district.

### **Limitations of the Study**

The limitations of this study were related to the use of a basic qualitative inquiry research design. Using a basic qualitative inquiry design allows the researcher to collect data from participants' experiences to understand the interpretation of those experience (Merriam & Tisdell, 2016). Although previously stated in Chapter 3, I described the strategies I used to ensure that my role as a principal was different than the role of a researcher. To ensure there were no biases, I conducted member checking with the 15 participants who were interviewed. Participants confirmed and validated the transcripts of their interviews prior to the data analysis process.

Another limitation of this study was that it was limited to a specific group of teachers (i.e., veteran K-5 ELA teachers) in the southeastern region of the United States. Additionally, these teachers had to be currently teaching in an elementary setting to be included in the study.



The third limitation was related to the participants. Due to the COVID-19 global pandemic, all interviews were conducted virtually for the safety of me and the participants. With some of the participants not comfortable or familiar with virtual platforms, this caused a limitation on the amount of information that was shared. A face-to-face interview was not offered to gather more data for some of the participants.

### **Recommendations**

My recommendations for further research are based on the study results and limitations of the study. In this study, I focused on veteran K–5 ELA teachers' perceptions of the implementation of blended learning as it related to their adopter category. It was evident in the findings that most teachers did not mind implementing blended learning into their instruction; however, there are several elements that factor into implementation. Some believed that the blended learning platforms used in the district were not utilized long enough to provide any real value in the programs.

Furthermore, this study was limited to veteran K–5 ELA teachers; therefore, the data are limited to the experiences at an elementary level. I would recommend that further studies acquire teachers' perceptions of the implementation among different subjects and grade levels, such as in the pre-K–12th grade setting. After expanding the data to include perceptual data from pre-K–12th grade, I would recommend further research regarding the blended learning models in place and the relationships between models and perceptions. The scope of this study did not allow for the examination of potential relationships between type of blended learning model and teacher perceptions of attributes or teacher adopter category.

In addition, all the participants faced the barrier of having the appropriate technology available to implement blended learning as a concern. Lastly, most of the participants did not attend PD prior to implementing blended learning for their students. I recommend PD as a mandatory practice prior to requiring teachers to implement district-wide blended learning programs. The PD should be tailored to the needs of the teachers according to their adopter category according to Rogers's theory.

### **Implications**

The results of this study and the teacher perceptions presented may have the potential to inform educational stakeholders and decision makers on the importance of PD for both novice and veteran K-5 ELA teachers to enable them to be prepared to implement blended learning in their reading lessons. This study examined the impact of blended learning as an innovation in elementary schools. As the educational world adjusts and readjusts to the COVID-19 pandemic and its impact on schooling, blended learning is becoming much more prevalent thus making implementation facilitation more important. This study has implications for positive social change for teachers, students, and student families. For example, teachers working in districts implementing blended learning now have a better understanding of the PD needs to support effective implementation of blended learning. For students and their families, positive social change implications from this study might result in improved schooling and academic achievement from effective innovation implementation.

Moreover, positive social change could occur at the school district level based on this study's findings by informing school districts of the need for PD for blended learning

implementation. In addition, stakeholders can better understand effective implementation processes and the educational potential of blended learning. Last, this study offers school districts the ease of implementation of blended learning when potential technology challenges are addressed before they become problematic.

### **Conclusion**

The problem related to my study focused on the perceptions of veteran K-5 teachers implementing blended learning during their ELA reading block. The key findings for this basic qualitative inquiry were that veteran K-5 ELA teachers were initially hesitant to implement blended learning because it is another thing to do, the lack of PD as it relates to the blended learning program, and inability to control the barriers. Veteran K-5 ELA teachers that were in the innovator category were more willing to try the educational technology when first introduced. Participants who were in the early adopter and early majority phases were willing to implement blended learning into their classrooms when other blended learning teachers mentioned their successes. Last, participants in the late majority and laggard categories found themselves implementing blended learning more because at times it was the only way to connect with their students. With the increase in blended learning because of COVID-19, veteran K-5 ELA teachers were more open to implementing different programs into their daily reading instruction.

Based on the study, veteran K-5 ELA teachers' perceptions of implementing blended learning as an educational innovation vary but the perceived outcomes are enhancement of student achievement and student engagement, according to the data

gathered through the data analysis, which was vital to understanding the usefulness of blended learning. Implementing blended learning takes time and does not happen overnight. In this study, the participants shared their personal experiences with the implementation of blended learning. After analyzing the data, blended learning cannot be understood as a one-size-fits-all strategy; everyone must have a “buy-in” approach for the implementation to work. When blended learning is individualized for a distinct classroom and school, the benefits can be clearly seen. As such, this study has the potential to expand the research on implementing blended learning in an elementary setting. In conclusion, regardless of the veteran K-5 ELA teachers’ attribute connections, adopter category, level of comfort with implementing an educational technology, barriers, or lack of PD, veteran K-5 ELA teachers will create opportunities for students to be successful.

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### Appendix A: Scales for the Measurement of Innovativeness

Directions: People respond to their environment in different ways. The statements below refer to some of the ways people can respond. Please indicate the degree to which each statement applies to you by marking whether you: Strongly Disagree = 1; Disagree = 2; are Neutral = 3; Agree = 4; Strongly Agree = 5

Please work quickly, there are no right or wrong answers, just record your first impression.

- \_\_\_\_\_ 1. My peers often ask me for advice or information.
- \_\_\_\_\_ 2. I enjoy trying new ideas.
- \_\_\_\_\_ 3. I seek out new ways to do things.
- \_\_\_\_\_ 4. I am generally cautious about accepting new ideas.
- \_\_\_\_\_ 5. I frequently improvise methods for solving a problem when an answer is not apparent.
- \_\_\_\_\_ 6. I am suspicious of new inventions and new ways of thinking.
- \_\_\_\_\_ 7. I rarely trust new ideas until I can see whether the vast majority of people around me accept them.
- \_\_\_\_\_ 8. I feel that I am an influential member of my peer group.
- \_\_\_\_\_ 9. I consider myself to be creative and original in my thinking and behavior.
- \_\_\_\_\_ 10. I am aware that I am usually one of the last people in my group to accept something new.
- \_\_\_\_\_ 11. I am an inventive kind of person.
- \_\_\_\_\_ 12. I enjoy taking part in the leadership responsibilities of the group I belong to.
- \_\_\_\_\_ 13. I am reluctant about adopting new ways of doing things until I see them working for people around me.
- \_\_\_\_\_ 14. I find it stimulating to be original in my thinking and behavior.
- \_\_\_\_\_ 15. I tend to feel that the old way of living and doing things is the best way.
- \_\_\_\_\_ 16. I am challenged by ambiguities and unsolved problems.
- \_\_\_\_\_ 17. I must see other people using new innovations before I will consider them.
- \_\_\_\_\_ 18. I am receptive to new ideas.
- \_\_\_\_\_ 19. I am challenged by unanswered questions.
- \_\_\_\_\_ 20. I often find myself skeptical of new ideas.

#### Scoring:

Step 1: Add the scores for items 4, 6, 7, 10, 13, 15, 17, and 20.

Step 2: Add the scores for items 1, 2, 3, 5, 8, 9, 11, 12, 14, 16, 18, and 19.

Step 3: Complete the following formula:  $II = 42 + \text{total score for Step 2} - \text{total score for Step 1}$ .

Scores above 80 are classified as Innovators.

Scores between 69 and 80 are classified as Early Adopters.

Scores between 57 and 68 are classified as Early Majority.

Scores between 46 and 56 are classified as Late Majority.

Scores below 46 are classified as Laggards/Traditionalists.

In general people who score above 68 and considered highly innovative, and

people who score below 64 are considered low in innovativeness.

## Appendix B: Interview Questions

1. Think about two of your experiences with implementing blended learning into your reading lesson. Describe how you felt about the implementation.
2. Describe your strengths when implementing blend learning in your classroom.
3. Describe your experiences with any professional development training you attended related to blended learning for novice and/or veteran K-5 ELA teachers.
4. What does it mean to be innovative as it relates to educational technology?
5. What is your first reaction when you hear about an innovation?  

Does your reaction change after trying the innovation?

When others use blended learning, does that affect your reactions to trying it?

What events influenced your current attitude towards blended learning?
6. What blended learning programs do you feel are or would be sufficient to close the achievement gap among elementary school students in reading?
7. What blended learning ideas have you implemented into your reading curriculum for elementary students?
8. What are some potential benefits for integrating those blended learning into curriculum for elementary students?
9. Describe the barriers you encountered with implementing blended learning.
10. How do you decide which blended learning program to use in your classroom?

## Appendix C: Permission Form

## Re: Survey: Scales for the measurement of innovativeness

Romiro Bautista <romiro.bautista@qsu.edu.ph>

Wed 3/13/2019 11:52 AM

To: Faith Roberts-Graham <faith.roberts-graham@waldenu.edu>

The questionnaire is made available and open for use (i believe). I cant find ways to contact them so i just cited them properly in my article

On Wed, 13 Mar 2019 at 11:28 PM Faith Roberts-Graham <[faith.roberts-graham@waldenu.edu](mailto:faith.roberts-graham@waldenu.edu)> wrote:

Thanks so much for your reply. With the survey being old, how did you get permission to use it? Please advise.

-Faith

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**From:** Romiro Bautista <[romiro.bautista@qsu.edu.ph](mailto:romiro.bautista@qsu.edu.ph)>

**Sent:** Wednesday, March 13, 2019 11:25 AM

**To:** Faith Roberts-Graham

**Subject:** Re: Survey: Scales for the measurement of innovativeness

Hi!

We did not modify it.

On Wed, 13 Mar 2019 at 10:06 PM Faith Roberts-Graham <[faith.roberts-graham@waldenu.edu](mailto:faith.roberts-graham@waldenu.edu)> wrote:

Hello

I am a doctoral student at Walden University. I am very interested in using the Scales for the measurement of innovativeness survey by Hurt, Joseph, & Cook (1977). I was wondering how did you go about obtaining permission to use the survey and if you modified the survey?

I look forward to your reply.

Educationally Yours, Faith L. Roberts-Graham

## Appendix D: Public Inquiry


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