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Acceptability and Usability of E-Books for Digital Immigrant Teachers in a Title I Elementary School

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Acceptability and Usability of E-Books for Digital Immigrant Teachers in a Title I Elementary School

by
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Approval Page

This applied dissertation was submitted by Allatesha D. Cain under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and School of Criminal Justice and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

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Abstract

Acceptability and Usability of E-Books for Digital Immigrant Teachers in a Title I Elementary School. Allatesha D. Cain, 2019: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: digital immigrants, e-books, digital books, online books, elementary school

The purpose of this study is to discover the factors that affect digital immigrant teachers' acceptance and usability of e-books in a Title I elementary school. The term *digital immigrant* describes individuals born before the adoption of digital technology in 1980. The researcher used a qualitative study with a phenomenological approach. The participants of this study were 15 kindergarten through Grade 5 teachers at a Title I elementary school in an urban school district. The participant teachers were interviewed to identify their perception of usefulness of the e-book to improve the reading skills of their students. Each interview was recorded, transcribed, and coded to determine common themes and identify the relationship between teachers' perception of usefulness and ease of use of e-books and their intention to use e-books in a Title I elementary school.

Themes were identified related to (a) usefulness of e-books, (b) ease of use of e-books, (c) experiences using e-books, and (d) attitudes about the e-book program. Elementary teachers' responses indicated digital immigrant teachers were hesitant to utilize the e-book reader program due to negative perceptions of its ease of use, particularly with kindergarten through Grade 2 students.

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Chapter 1: Introduction

The Every Student Succeeds Act (2015) contained specific language linking "literacy instruction" to "the ability to navigate, understand, and write about, complex print and digital subject matter" (§ 2221[b][a]). The act noted funds should be used "to improve the use of technology in order to improve the academic achievement and digital literacy of all students" (Every Student Succeeds Act, 2015, § 4101[3]). Chen and Jang (2013) emphasized that educators are to ensure that all students are technologically literate by the end of the eighth grade. In addition, Chen and Jang suggested that changes in instructional technology have influenced how reading is taught; they warned schools that do not provide innovative opportunities to encourage students to read may be placing students at a disadvantage. Sanford-Moore (2013) found that students with reading deficiencies lack motivation to read and may quit reading altogether. Lack of reading achievement is related to dropout rates (Hernandez, 2011). Washor and Majkowski (2013) explained that academic failure is a major reason students drop out of school. Students need a high school diploma in order to earn higher salaries, be productive members of society, and have the opportunity to have satisfying lives (Washor & Majkowski, 2013).

Technology helps students to be creative and self-sufficient (Embong, Noor, Ali, Bakar, & Amin, 2012). Embong et al. (2012) indicated that teaching methods can be improved by the integration of technology into the classroom. One method of integration is through the use of electronic books, or e-books. E-books are affordable, portable, efficient, and easy to navigate. In e-books, information can be set up and easily found according to individual needs (Bauerlien, 2013).

However, without proper training, teachers may not use technology effectively in the classroom (Prensky, 2001). The challenge of digital technologies is a misalignment between the way teachers teach and the way students learn (Papp & Matulich, 2011). The technology gap between the two groups can result in compromised academic achievement (Kivunja, 2014). Educational stakeholders have invested time and financial resources to purchase technology for teachers and students to enhance their knowledge and skills; however, teachers' resistance to learning how to use new technology in the classroom remains high (Adiguzel, Capraro, & Wilson, 2011). Prensky (2011) recognized that closing the technology gap between teachers and students is a crucial point in learning. Prensky observed a significant difference between teachers' and students' technical skills due to age and the accessibility of technology. Prensky identified students as *digital natives*, or individuals whose lives have been immersed in technology. Digital natives are a new generation of young people born into the digital age. Teachers, however, are *digital immigrants*, whose lives have not been immersed in technology (Prensky, 2001; Wang, Myers, & Sundaram, 2013). Digital immigrants have learned how to use computers at some stage in their adult lives. Therefore, digital immigrant teachers are still novices to new technologies, which can cause a delay in the learning process of digital native students.

Statement of the Problem

The problem investigated in this study is the lack of acceptance and use of e-books by digital immigrant teachers to enhance reading instruction, in spite of a clear need to improve student reading achievement. The National Assessment of Educational Progress (2017) reported that 36% of U.S. students in the fourth grade were not reading

at a basic proficiency level. Within the southeastern United States, 35% of fourth-grade students were not reading at basic proficiency levels (National Assessment of Educational Progress, 2017).

The problem is also specific to the study district. Table 1 outlines the percentage of students of the five Title I elementary schools in an urban school district not mastering state standards in reading on the ACT Aspire assessment, from 2013 to 2015. In 2015, according to the National Center for Education Statistics, all of the schools listed qualified for Title I federal funds due to a high percentage of students who received free or reduced meals. Another common factor shared among the elementary schools is that the populations are mostly African American.

Table 1

Percentage of Students Not Mastering State Standards in Reading on the ACT Aspire at Five Title I Elementary Schools in an Urban School District

School year & grade level	School 1	School 2	School 3	School 4	School 5
2013-2014					
Grade 3	90	97	77	78	91
Grade 4	78	91	95	93	90
Grade 5	75	96	86	84	96
2014-2015					
Grade 3	77	95	99	76	91
Grade 4	88	88	86	88	89
Grade 5	80	89	94	75	90
Average	81	93	90	82	91

Embong et al. (2012) found that e-books offer an engaging way for students to learn, but teachers who are used to paper books may find it challenging to use e-books in the learning process. Digital immigrant teachers may not like to use e-books for many reasons (Embong et al., 2012). The targeted school has a new technological tool with its

own challenges. Research is necessary to understand if the adoption of e-books affects digital immigrant teachers' intention to use digital books in the classroom.

In lieu of mandates for teachers to incorporate technology and assist students in learning and living productively in a global society (Embong et al., 2012), the presence of e-books requires teachers to adapt to using e-books. Public elementary schools are controlled, and the rampant growth of e-books in school settings is inevitable, so study is needed regarding the perceptions of digital immigrant teachers of this technology.

Phenomenon of interest. Self-efficacy is the belief that an individual can successfully complete a specific task (Bandura, 1997). However, Prensky (2001) and Skiba and Barton (2003) suggested digital immigrant teachers may feel overwhelmed or frustrated with the demands of technology initiatives, eager digital native students, and state requirements to integrate technology into daily instruction. As a result, a qualitative case study was conducted to explore how digital immigrant elementary school teachers utilize an e-book program to motivate digital native students to read. The study included an investigation during the 2018-2019 school year.

Background and justification. Chen and Jang (2013) recommended educators and administrators use innovative technology to increase students' attention. E-books are a learning platform with considerable potential for students to learn through web-based content (Chen & Jang, 2013). Furthermore, e-books provide global access to information and enable users to quickly retrieve and access materials. However, the literature has noted a concern.

Biancarosa and Griffiths (2012) confirmed that advances in technology have created high hopes among educators who believe digital devices offer great potential as

instructional resources for literacy development. However, when new technology is integrated into existing settings or processes, there is a risk that the technology will be underutilized or misused (Adiguzel et al., 2011). Adiguzel et al. (2011) affirmed that users often resist poorly planned and inappropriately applied technology. Therefore, user satisfaction must be taken into consideration to ensure the smooth implementation of new technology.

The urban public city school district in this study was founded in 1871 and is an independent school system in the southeastern United States. The school district has one high school, one middle school, and five elementary schools. The school district also has a Head Start program, an alternative school, and a technology center. Approximately 4,090 students are served by the school district.

Deficiencies in the evidence. Advancements in technology have influenced the way people read. As a result, readers have chosen to use various formats of books, including e-books. E-books have gained popularity; the trade e-book U.S. sales in 2017 were just over $1 billion, representing 266 million e-books (Statista, 2019). The rapid growth of e-books has influenced education (Lai, 2016), but a thorough review of the literature failed to reveal studies describing e-book acceptability by digital immigrant teachers.

Jones and Brown (2011) suggested that e-books have escalated in the classroom because e-books are affordable and efficient. Despite an increased presence of e-books in educational settings (Al Saadi, Lane-Kelson, Al Hafeedh, Al Sheithani, & Al Wishahi, 2017), the evidence of active use of e-books by teachers is vague. Through an exhaustive review of the literature, this researcher did not note significant evidence of teachers using

e-books.

Research exists about the advantages and disadvantages of having e-books in the classroom (Embong et al., 2012). However, this researcher was unable to find any studies that related to or mentioned digital immigrant teachers readily integrating or embracing e-books into the classroom. Al Saadi et al. (2017) mentioned the lack of studies in this area might be because e-books are fairly new in school curricula.

Audience. A qualitative case study was conducted to assist teachers in improving the reading skills of students. Elementary school teachers who want to learn about the success of e-books in their classrooms can benefit from knowing current instructional trends and may create lessons to optimize student learning experiences while using e-books. Furthermore, elementary teachers can make appropriate decisions about incorporating e-books into their instruction and determine if they need to change the way they are using the program to improve outcomes. In addition, school administrators and school board members who want to implement an e-book program would benefit from this study to build a strong reading program and motivate young students to read.

This study presents current trends related to effectively implementing e-books into traditional classroom settings. Therefore, future researchers can benefit from the results of this study because the information may expand knowledge on how to implement e-books into the traditional elementary school classroom setting.

Definition of Terms

Best practices. Best practices are the most effective teaching strategies, learning activities, and policies to optimize positive changes in student academic success (Shimoni & Barrington, 2013).

Digital immigrants. According to Prensky (2001), digital immigrants are individuals who were born before 1980 and not born into the digital world. Digital immigrants have not been immersed in technology and have a difficult time with continuous changes in technology.

Digital natives. Digital natives are children introduced to technology at young ages, even as early as preschool, and continuously introduced to new technologies through adulthood (Jones & Brown, 2011). Dede (2005) identified digital natives as millennials, as this group of individuals grew up with technology. Prensky (2001) delineated the timeframe of individuals born after 1980, which was utilized in this study. These individuals "spent their entire lives surrounded by . . . the toys and tools of the digital age and therefore, are native speakers of a digital language" (Prensky, 2001, p. 1). Levine (2010) clarified the definition further, identifying digital natives as tech-savvy individuals who "grew up in a world of computers, Internet, cell phones, MP3 players, and social networking" (p. 20).

Electronic books or e-books. Electronic books or e-books are digital versions of traditional printed books or other books that can be accessed and downloaded online via computers, smartphones, tablets, or e-readers (Martinez-Estrada & Conway, 2013). E-books differ from traditional print books because they contain "illustrations and hotspots that provide navigation mechanism for the reader" (Brueck & Lenhart, 2015, p. 373).

Electronic reader or e-reader. Electronic readers or e-readers are portable electronic devices, such as iPads or tablets, that are lightweight and have touch screens, Wi-Fi connection, and affordable applications that can be easily downloaded

(McClanahan, Williams, Kennedy, & Tate, 2012). Other examples of e-readers are the Nook by Barnes and Noble and the PRS 300 by Sony.

Multimodal features. Multimodal features are the features of e-books that include narrations, sounds, animations, and videos (Schugar, Smith, & Schugar, 2013).

myON Reader platform. The myON Reader platform (Renaissance, 2019) is one of many reading programs aimed at aiding schools during a transition from printed books to e-books. The Title I elementary school in this study is using the myON Reader platform as a tool for improving the quality of reading instruction for kindergarten through fifth-grade (K-5) students. The myON Reader platform has over 10,000 books from various genres to support reading across the curriculum.

Platform. A platform is an operating system formed by a group of technical tools, systems, and applications that are used as the structural foundation on which applications, software, or technologies are maintained, run, and developed (Techopedia, 2019).

Purpose of the Study

The purpose of this study was to discover the relationship between digital immigrant teachers' perceptions of the usefulness and ease of use of e-books and the teachers' intention of use of e-books in a Title I elementary school. The researcher explored the circumstances that affect the acceptance and usability of e-books at the Title I elementary school to improve student reading achievement. Research has shown that low reading scores correspond with low scores in other subject areas at school; these low scores are indicative of high dropout rates (Hernandez, 2011; Schimke, 2011). The majority of the student population at a particular set of five Title I elementary schools in a southern school district is at a high risk for academic failure and dropping out of school

(National Assessment of Educational Progress, 2017). Engaging students in an e-book program may rejuvenate learning for all students and increase their technological skills, thus affording students opportunities to improve both their schoolwork and their lives when they leave school (Washor & Majkowski, 2013).

Summary

Within the context of the Every Student Succeeds Act (2015) and the growth of instructional technology, school districts are confronted with the need to provide appropriate tools for students to interact with technology. Administrators at the elementary schools in this study understood the need for technology in the classroom and implemented an e-book program to improve students' reading skills. This study explored elementary teachers' perceptions of a piloted e-book program in a Title I school district. Specifically, this study describes the effects of an e-book program and contributes to current research as best practices for using e-books in Title I elementary schools.

Chapter 2: Literature Review

The literature search aimed to identify, assimilate, summarize, and synthesize studies reporting on the association between the use of e-books in elementary school settings and reading achievement. Previous studies had to meet several criteria to be included in this literature review; they must have occurred in elementary school settings, related to the history of e-books, explored the advantages and disadvantages of using e-books in an elementary school setting, and explored the impacts of e-books on students' reading time and motivation.

Several procedures were followed to find studies for this literature review. First, resources for this review were obtained from textbooks and peer-reviewed articles through the Alvin Sherman Library of Nova Southeastern University's electronic database. The following databases were used: ProQuest, Education Resources Information Center (ERIC), EBSCOhost, and Sage Publications. Full articles were reviewed and included in the literature review. The criteria used for this literature review included (a) empirical studies conducted from 2007 to 2017 to address the historical perspective to current use, (b) empirical studies involving elementary schools, and (c) empirical studies published in highly respected peer reviewed journals. This literature review is divided into nine sections detailing (a) traditional reading instruction, (b) a comparison of printed books and e-books, (c) using e-books in elementary school settings, (d) an overview of the myON Reader Platform, (e) a synthesis of the research, (f) the theoretical framework, (g) a description of phenomenology, (h) a summary, and (i) the research questions.

Traditional Reading Instruction

Reading instruction is well established in elementary classrooms (Brueck & Lenhart, 2015). The National Assessment Governing Board (2017) defined reading as "an active and complex process that involves understanding written text; developing and interpreting meaning; and using meaning as appropriate to type of text, purpose, and situation" (p. iv). Reading comprehension is a cognitive process involving interaction between the reader and the text to construct meaning (National Assessment Governing Board, 2017).

Reading instruction begins as early as kindergarten with letter recognition, phonics, phonemic awareness, and writing (Jones & Brown, 2011). Jones and Brown (2011) upheld that reading skills are essential for students' personal and academic achievement. Furthermore, reading engagement is a vital factor of a student's literacy development. Students who use strategies and literacy activities are considered to be engaged readers. Other factors associated with engaged readers and reading achievement are the school's culture, intervention programs, and the home and classroom environments.

When students read traditional printed books, they read from "left to right, top to bottom, and then turn a page" (Felvegi & Matthew, 2012, p. 42) as they process graphics and text. Rasinski and Padak (2011) reported that as students have increased experiences with reading, they become more proficient in their reading skills. Reading achievement and motivation to read can be impacted if students read for 25 minutes or more per day (Rasinski & Padak, 2011). Increased reading raises "word recognition, comprehension, fluency, vocabulary, language syntax, and motivation to read" (Rasinski & Padak, 2011,

p. 553). In other words, there is a positive correlation between high occurrences of reading and students' reading achievement. Unfortunately, learning to read is not an easy task for some students (Allington, 2013).

Allington (2013) suggested that struggling readers engage in less voluntary reading than good readers, and these students need high-quality reading instruction and intervention. The National Reading Panel (2000) proposed that technology provides remediation to struggling readers and supports reading instruction because technology tools can foster motivation, student engagement, and differentiated instruction. As e-books emerge into elementary classrooms, the traditional definitions of reading and learning are impacted.

Printed Books Versus E-Books

Several studies (Embong, et al. (2012, Felvegi & Matthew, 2012, Dunbar & Akcyir, 2012) have been conducted to compare reading from printed text and electronic texts. The advantages and disadvantages of using e-books in elementary school settings have become a rising concern for research (Waller, 2013). This section outlines (a) the advantages of printed books, (b) the disadvantages of printed books, (c) the advantages of e-books, and (d) the disadvantages of e-books.

Advantages of printed books. Chao, Hegarty, and Stefanidis (2012) acknowledged that printed books have existed for over 2,000 years since the Chinese invented paper. Printed books come in various sizes and fonts, with or without graphics (Felvegi & Matthew, 2012). Swanson, Renes, and Strange (2017) described comfort in the familiarity of printed books, noting the experience of holding a physical book and marking the pages. Printed books are regarded as aesthetically pleasing and personal

(Krishen, Kachen, Kraussman, & Haniff, 2016; Mizrachi, 2015). The paper industry produces about $200 billion of paper per year (Chao et al., 2012). Chao et al. contended that e-books reduce those costs and preserve the environment. Additionally, Richardson and Mahmood (2012) delineated the advantages of reading printed text:

> compactness and portability, legible in light environments, offering random access (opening to any spots) versus serial access (think scroll), note taking in the margins or on the text with a highlighter, there is no need for an on-off switch or battery and it does not break when dropped. (p. 171)

Disadvantages of print books. Swanson et al. (2017) acknowledged that printed books can be inconvenient. Printed books are heavy and hard to carry around. Readers of printed books need lighting. Reading a printed book at night without external lighting can be difficult. Additionally, printed books can take up a lot of space in homes and in classrooms. The cost of printed books, especially hardcovers, is a disadvantage (Swanson et al., 2017). Moreover, paper degrades over time.

Advantages of e-books. The first e-reader, Amazon Kindle, was released in 2007. In 2011, Amazon reported selling more Kindle books than hard- and soft-back books combined. Apple expanded options for readers to access digital text media with its inclusion of the application iBooks.

Devices such as the Amazon Kindle can store books and other reading materials such as magazines and newspapers. Many popular titles are less expensive than printed books, and over a million out-of-copyright books are available for free (Lardinois, 2009). Bairstow (2009) indicated that other companies offer e-book readers that cost considerably less than the Kindle, such as the iPad by Apple, the Nook by Barnes and

Noble, and the PRS 300 by Sony. Each device enables users to download material in less than 1 minute.

Jones and Brown (2011) stated that this efficient and affordable availability of electronic resources can easily affect reading materials in grade schools. The aforementioned technological advances created high hopes among many teachers, administrators, researchers, and policy makers that the digital devices offer great promise as instructional tools for literacy education. Biancarosa and Griffiths (2012) maintained that e-reading technology can help to improve literacy outcomes for all children and youth.

McClanahan et al. (2012) reported that e-books allow users to customize their reading experiences. They can change font sizes, write notes within the text, and use a built-in dictionary. Furthermore, Felvegi and Matthew (2012) claimed that electronic texts reduce educational costs because they are considerably less expensive than printed text. Martinez-Estrada and Conaway (2008) explained that the "green" features appeal to e-book users because paperless devices save trees, gas, and time in production. Also, the popularity of e-books has caused a decline in the production of printed books, and the publishing industry is providing electronic copies of popular titles (Martinez-Estrada & Conaway, 2012). Other advantages of e-books found in the literature were users can adjust the font and lighting of an e-book (Harness, 2015) and the storage space on tablets and laptops is large enough to store multiple books in one place (Gomez-Borbon, 2013; Harness, 2015).

Advantages of e-books in the classroom. Morgan (2013) recommended that teachers who allow students to use e-books should provide students with multiple ways to

scaffold or gain a greater understanding of a text. For example, e-books provide visual displays of words that help students to understand new vocabulary. Words can be repeated, and the tools for animatronics and audio can help students concentrate on the meanings of words in the stories (Morgan, 2013). In addition, Larson (2010) opined that e-books support literacy development through additional text tools that provide students with guidance. The text tools help students with the narration of the story, word pronunciation, and vocabulary terms (Lacina & Mathews, 2012). Padak and Potenza-Radis (2017) stressed that teachers provide support by implementing research-based strategies and engage students in more activities for academic success, leading to pleasant learning experiences that enhance student motivation. Well-designed e-books can serve this purpose (Morgan, 2013).

Education is becoming more digital, mobile, and globally connected. Embong et al. (2012) proposed that teachers incorporate technology for students to productively live and learn in a global society. Also, Embong et al. reported using e-books in the classroom has become a growing trend because information is rapidly changing. E-books can be quickly and easily updated. As the quality of electronic displays improves and devices become more compact and mobile, more people will make the switch from printed books to e-books. Furthermore, Embong et al. predicted the price of e-books may be reduced and more e-books may be produced on a large scale, which could contribute to a continuous implementation of e-books in the classroom in the near future. As of 2012, e-books could be found in every classroom in a multitude of countries (Embong et al., 2012).

Martinez-Estrada and Conaway (2012) explained that e-books cost less than paper

books and have a high battery performance level. Additionally, students can quickly download literature for class (Martin-Estrada & Conaway, 2012). Similarly, Richardson and Mahmood (2012) stated that users like the portability of e-books and the abundance of e-book titles available on a single device. E-books are lightweight and provide access to over 3,000 books with graphics and audio capabilities (Embong et al., 2012). Embong et al. (2012) elucidate that students are not burdened with carrying heavy textbooks, resulting in a reduction in lower back pain, bad posture, and spinal deformity. Martinez-Estrada and Conaway acknowledged that e-books eliminate the need to buy textbooks, thus reducing costs when school officials invest in e-book devices for the classroom. Likewise, Embong et al. noted that e-books are cost effective for families because most e-readers are subsidized and maintained by schools.

In the classroom setting, e-books are used as a medium for teaching. Morgan (2013) asserted that e-books have many academic benefits for students when used purposefully and effectively. Embong et al. (2012) found that e-books encourage students' learning, autonomy, and creativity. Likewise, e-books allow teachers to monitor student activities, as well as enhance instructional methods (Embong et al., 2012). Teachers can improve on teaching methods through the integration of technology in the classroom, which may improve their students' learning process.

E-books provide multimodal features that encourage students to learn in visual, auditory, and kinesthetic formats (Sankey, Birch, & Gardiner, 2010). Each student is a unique individual who learns in a variety of ways, and e-books can be adapted to each student's preferred style of learning (Sankey et al., 2010). Visual learners can benefit from using e-books by viewing pictures, videos, and animation, whereas kinesthetic

learners can benefit by using their fingers to activate the features of the e-book (Morgan, 2013). Ultimately, auditory learners can benefit from using e-books by listening to the narration and the pronunciation of unfamiliar words (Morgan, 2013).

Shamir and Shlafer (2011) reported that students with learning disabilities made improvements in reading after using e-books. Morgan (2013) supported that e-books give students with disabilities more access to stories. Shamir and Baruch (2012) found 52 students with learning disabilities using e-books made improvements with not only vocabulary but also math skills. King-Sears and Evmenova (2007) also found students with learning disabilities made reading improvements and answered more questions pertaining to the stories they read. A study by Pearman (2008) was consistent with the study by King-Sears and Evmenova. Pearman reported students had higher comprehension scores while reading e-books and were more engaged with e-books than with printed books. In addition, for struggling readers needing extra assistance, e-book features allow the students to hear the pronunciation of words. The student can click the same word numerous times without the reader becoming embarrassed or without the device judging the reader's abilities or becoming impatient. In addition, Pearman and Chang (2010) noted that the ability to select targeted words creates an increased sense of self-efficacy for the reader.

E-books support early literacy skills such as phonological awareness and vocabulary (Brueck & Lenhart, 2015). In addition, e-books provide scaffolding through narrations, animations, and interactive media. Scaffolds include search capability, hyperlinks, audio and visual enhancements, and hotspot pop-up definitions of words. Smeets and Bus (2012) agreed that e-books provide opportunities for students to have

independent practice and interactions with text.

Wright, Fugett, and Caputa (2013) found that second-grade students were more compelled to read from e-books than traditional books. Brueck and Lenhart (2015) suggested that e-books motivate students to read and allow students to "investigate words, images, and interactives—such as use-controlled animations, tap to hear word pronunciations, games and puzzles" (p. 374). Furthermore, e-books provide an engaging experience for young readers and opportunities for individual reading practice for students to develop early literacy skills even in the absence of an adult (Brueck & Lenhart, 2015).

Disadvantages of e-books in the classroom. Felvegi and Matthew (2012) suggested that e-books can offer a fun way for students to learn, and teachers in their study thought e-books improved students' academic performance. However, Felvegi and Matthew noted that teachers admitted students could misuse e-books. For example, embedded hyperlinks and activities within the text may distract students from reading the actual text (Felvegi & Matthew, 2012). Likewise, Korat (2010) noted e-books' amusing features may deter students from actually reading the text. Morgan (2013) asserted that students can make little to no academic gain if e-books have too many distracting features or if the students become too dependent on e-book features that replace traditional strategies to read, such as decoding unfamiliar words or using a traditional dictionary to research the meaning of unfamiliar vocabulary teams. Dietrich and Balli (2014) implied that the potential for students to get off-task increases as the number of available devices increases. Dietrich and Balli recommended teachers monitor each student to deter students from playing noneducational games, e-mailing friends, or engaging in other off-

task behaviors.

Although studies exploring the relationship between comprehension and e-books are scarce, previous research has not clearly suggested whether e-book features support or impede reading comprehension (Schugar et al., 2013). Larson (2010) cited that readers using multimodal texts were distracted from actually reading the text and comprehending what they read. Multimedia features may distract readers by taking their attention away from the story. Baird and Henninger (2011) described digital reading as a form of "edutainment," because the e-books were movie-like and diverted students from the actual process of reading and learning. Students focus on the technology as opposed to being attentive to the text and making meaning of the text (Mangen, 2008). Taylor (2012) agreed that students preferred the audio support offered by e-books rather than reading the digital text on their own.

Pearman and Chang (2010) suggested that viewing animations before or during reading may prolong reading and cause fatigue and loss of focus on comprehension. Furthermore, Pearman and Chang noted that animations can be entertaining but also irritating to some readers. For example, Lefever-Davis and Pearman (2005) reported that a student blurted out, "Ugh" when interrupted by the animations.

Reading from a digital screen for an extended period of time may cause eye fatigue and boredom (Dundar & Akcayir, 2012; Hoseth & McLure, 2012). Furthermore, Noor, Embong, and Abdullah (2012) stated that users may not experience the same pleasure reading e-books as compared to reading paper books. Noor et al. also explained that teachers may not receive adequate training to incorporate e-books in lessons. Huang, Liang, Su, and Chen (2012) recommended that teachers and researchers design and

implement e-book initiative programs appropriate to meet students' learning needs on all grade levels. Felvegi and Matthew (2012) suggested students' dependence on text being read aloud could interfere with students decoding text on their own. Noor et al. noted that limited storage and power outlets in the classroom, as well as students' inability to underline, write, or annotate in margins, are additional limitations of using electronic books in traditional classrooms. The screen size of computers and mobile devices may be too small to see the entire page (Harness, 2015). Likewise, Rosenwald (2015) stated that e-book readers skim the information as opposed to reading the book in its entirety and taking notes.

E-Books in Elementary Settings

Schugar et al. (2013) affirmed that e-book devices can store hundreds of e-books, allowing students to have a vast variety of text in readily available personal libraries. E-books have changed how students use new technologies and how they learn to read because of their convenience and interactivity (Schugar et al., 2013). Notably, e-books are making a tremendous impact on reading pedagogy for students (Felvegi & Mathew, 2012). Puente (2012) specified that e-books provide an option of unlimited access to digital libraries. E-books can personalize learning for struggling and advanced students, and e-books can help build students' interests in nonfiction books, a component of the Common Core State Standards Initiative created to strengthen state standards (Puente, 2012). Struggling students can read books below their grade level, and advanced students can select books above their grade level.

Martinez-Estrada and Conaway (2012) maintained that electronic tablets offer the user a variety of functions other than reading books. These features include Internet

access, game or learning applications, and access to a wide variety of free books. Similarly, Huang et al. (2012) noted that e-books accommodate students' specific learning needs, which supports personal learning experiences and makes lessons engaging and relevant. Noor et al. (2012) suggested that teachers and curriculum designers improve teaching methods by integrating technology, which sequentially may improve students' learning processes. In addition, Noor et al. suggested a technology specialist should be available in each school to monitor e-book devices and to ensure they are operating properly.

Korat (2010) explained that e-books contain multimedia tools such as narration, hotspots, dictionaries, animations, and sound effects that can support students' literacy development. Readers can view animations of a word to clarify its definition (Pearman & Chang, 2010). For example, watching characters dance on the screen clarifies the word *jovial* or *joyous*. The narration is accompanied by highlighted text, which allows children to follow the text as the e-book reads to them (Korat, 2010). This simulated read-aloud feature provides a model of reading fluency for beginner readers because the students hear the way fluent reading is supposed to sound (Pearman & Chang, 2010).

E-books also have hotspots that, upon clicking, initiate more sounds, animations, or games. Pearman and Chang (2010) noted that hotspots can either support or be a deterrent to the story's text. Deterrents can hinder comprehension by taking the reader away from the story to a new activity. Pearman and Chang suggested that readers may not return to the story after being entertained by hotspots and insisted that readers should only be allowed to access games before or after the actual reading process. To illustrate this point, Pearman and Chang noted that multimedia tools can prolong reading, and

students can lose focus. The authors also warned that overreliance on multimedia features may hinder the students' development of decoding skills and use of context clues to figure out the meaning of unknown words. Pearman and Chang indicated that a young student not developing decoding skills or learning how to use context clues can struggle academically later.

Next, built-in dictionaries allow users to click on or touch a word to receive its definition. Korat (2010) explained that built-in dictionaries offer young students the opportunity to learn the definition of unfamiliar words. Animation and audio sound effects can convey the mood of the story by providing readers with cues that an important event is about to happen in a story (Pearman & Chang, 2010). For example, in a study by Lefever-Davis and Pearman (2005), one student stated that he anticipated a scary moment in the story because of the eerie music. Lastly, e-books offer individualized learning activities that are self-paced and game formatted, promoting student engagement (McClanahan et al., 2012). E-books provide accommodations for exceptional learners who may be visually impaired or dyslexic as well as English language learners.

Huang et al. (2012) noted challenges with young children and the design of e-books. Furthermore, Huang et al. suggested that young students need e-books that are easy to use and have functional designs. To further illustrate this point, Pearman and Chang (2010) stated that students in prekindergarten through second grade need developmentally appropriate multimedia tools to support their learning. Despite these challenges, Huang et al. concluded that e-books may supersede printed books in the future. Lastly, e-books have the potential to enhance teaching and learning as traditional and new literacy skills are integrated in meaningful ways (Larson, 2010).

Guernsey (2011) advised teachers to closely explore e-book designs to ensure that they support literacy development before implementing them in the classroom setting, because minimal adult supervision is needed as children engage in e-book reading. Schugar et al. (2013) recommended that multimodal features support and build students' comprehension of stories they have read; furthermore, these features should allow students to apply reading skills and strategies.

Thomas-Ogle (2012) recommended that teachers use electronic devices across all curricula. Students can watch educational videos to understand concepts covered in class and play educational games to reinforce skills in subjects such as mathematics and reading. Furthermore, students can take vocabulary and spelling tests or use the devices to upload study guides in preparation for tests. Most importantly, teachers can identify weaknesses and individualize instruction based on students' academic needs.

Schugar et al. (2013) recommended digital immigrant teachers prepare digital native students for the technological skills required to access and read e-books effectively. Teachers should familiarize students with the basic functions and technological skills required to navigate an e-book. One way to do this is by allowing the student to explore several e-books to find one the student feels comfortable with. Once the student is paired with the correct e-book, the teacher may assess reading skills by using the following four-step routine: (a) allow students to learn how to turn on devices and access apps; (b) demonstrate how to position the screen; (c) show students how to access e-books, turn pages, and access interactive features; and (d) provide guidelines for students' use of interactive features (Schugar et al., 2013).

While using e-books, students can read the text as well as access multimedia links

to videos, games, and puzzles (Schugar et al., 2013). Schugar et al. (2013) recognized that these features were motivating for students but also must be used in an effective way that does not impede their learning or comprehension. The multimodal features slow the students' reading rate, and their attention veers from reading the text because the students are engaging in the interactive features. Washor and Majkowski (2013) suggested that schools develop teachers who are knowledgeable and committed to sustaining innovation for the sake of student learning. Teachers need to assume new roles that require education, training, and support by administrators (Washor & Majkowski, 2013). Teachers also need to know how to help students locate e-books from digital libraries, instruct students on how to navigate through the e-book program, and be able to solve or troubleshoot issues with e-book readers.

As e-book technology emerges and teachers consider adopting e-books during reading instruction, educators must consider instructional techniques, or pedagogy, as they transition to incorporating e-books in the classroom. In this regard, Brueck and Lenhart (2015) recommended continuous professional learning to help teachers stay abreast of emerging technologies. A collaborative approach between curricular leaders and teachers would encourage students' participation in e-book reading. Additionally, professional development should foster teachers' e-book facilitation skills such as extending ideas, asking questions, and clarifying content. Brueck and Lenhart suggested teachers start incorporating e-books into instructional practice by extending students' traditional comprehension and oral reading practices.

Brueck and Lenhart (2015) expressed that educators want to integrate e-books into their daily instructional practice but may not know how to incorporate e-book

technology. Professional development in how e-books can be used in instructional delivery can help teachers to learn how to effectively and seamlessly incorporate e-books. Brueck and Lenhart also advised that school districts reduce professional development costs by using social media platforms such as Google Hangouts and FaceTime for teachers to connect, share, and learn how to incorporate e-books into their classrooms with other professionals from around the world. Social media platforms reduce the need for face-to-face meetings and traveling to meetings. Likewise, teachers have the opportunity to create personalized schedules for learning and professional growth. Ongoing support from instructional coaches, instructional designers, media specialists and technology integration specialists will ensure that teachers have knowledge they need to effectively use e-books to support students' learning experiences.

Puente (2012) also suggested that school districts provide a continuous professional development plan for teachers. The professional development plan should be formulated to support a teacher's comprehensive plan to use an e-book program and to provide ways for teachers to determine if the students are productively using the technology (Puente, 2012). Furthermore, the e-book program should be assessed to determine if students' reading levels, comprehension, and learning have been impacted while using the e-book program.

Taylor (2012) recommended a balance of reading both printed and digital books to promote diverse reading experiences for students. This balanced approach provides various text media to differentiate or make adaptations to learning experiences based on students' needs and interests, thus giving students exponential potential to maximize their learning. Morgan (2013) affirmed that teachers can differentiate instruction by providing

students opportunities to learn using many formats, as opposed to one or two formats.

Schuetz (2013) recommended that school leaders select a learning management system that supports the organizational goals. Additionally, after the adoption of a learning management system, teachers and students should give feedback. There is a greater risk of failure if school system administrators do not inform parents of the learning management system or know what is needed by teachers and students to support teaching and learning.

The myON Reader Platform

The myON Reader platform (Renaissance, 2019) is one of many reading programs aimed at aiding schools during a transition from printed books to e-books. Undoubtedly, wealthier school districts have more funds and freedom to experiment with new programs, whereas school districts in low-income areas are limited (Puente, 2012). As school districts face budget cuts, administrators need to find funding sources and seek programs that will effectively address the specific needs and concerns of their students (Puente, 2012). Likewise, administrators need to be committed to innovative efforts that will catapult learning for all students so that they ultimately can contribute to the cultural and economic development of society (Washor & Mojkowski, 2013). By embracing alternatives to existing educational practices, schools provide learning opportunities to a diverse population of students who possess unique learning styles and exponential potential to contribute to the world around them (Washor & Mojkowski, 2013).

The Title I elementary school in this study is using the myON Reader platform as a tool for improving the quality of reading instruction. The myON Reader platform is designed for prekindergarten through eighth-grade students. The myON Reader platform

has over 10,000 books from various genres to support reading across the curriculum. E-book titles are available in English and Spanish, and students can download books for off-line reading (Renaissance, 2019).

The myON Reader platform generates a customized e-book reading list for students based on their interests as determined by student surveys, the students' reading skill level, and their Lexile scores (Puente, 2012), thus personalizing the students' reading and learning experiences. Sandford-Moore (2013) attested that Lexile scores are used to match students with appropriate reading materials for their skill level. Properly matching students to the correct reading level reduces frustration while reading (Sanford-Moore, 2013).

Puente (2012) noted that teachers can differentiate instruction. Likewise, teachers and parents can monitor students' reading activities and academic growth. The myON Reader platform provides professional development and support to teachers so that they may effectively implement the program to motivate digital native students to read.

Synthesis of the Research Findings

Students who struggle with and dislike reading may give up on reading to avoid failure and poor performance (Rasinski, Padak, & Fawcett, 2010). Low reading levels will hinder students' performances in other academic subjects (Morgan, 2013) and may lead them to drop out of school. To deter this, digital immigrant teachers need to use strategies to make reading enjoyable for digital native students. One solution is to use e-books while teaching reading.

E-books benefit students in many ways. E-books are appealing to students because they address the unique learning styles of students for students to use multiple

formats to comprehend text. Also, students have access to a plethora of books and built-in resources that can make reading more enjoyable and easier. Morgan (2013) agreed that e-books provide opportunities to keep students engaged and motivated to read. Furthermore, Rasinski et al. (2010) noted that e-books are valuable resources for students and can enhance instruction.

Technology plays a major role in classrooms across America, engaging students and providing access to learning experiences (International Society for Technology in Education, 2017). As with any technology, the teacher must have a thorough understanding of the technology tool to maximize its potential in the classroom (Pearman & Chang, 2010). E-books provide multisensory reading experiences and support comprehension. Nonetheless, Pearman and Chang (2010) concurred that beginning readers need supervision in the attainment of reading skills and strategies; e-book devices only aid upon the reader's request and will not prompt students if they read words incorrectly or do not comprehend the story. Although this technology is not new, the emerging presence of e-books in elementary education classrooms justifies a thorough examination of the important factors relating to its practicality for its intended purpose.

Theoretical Framework for the Study

The technology acceptance model (TAM) by Davis, Bagozzi, and Warshaw (1989) theorizes that a person's beliefs, attitudes, and intentions are key factors for accepting or refusing new technologies. TAM guided this study. TAM derived from Fishbein and Ajzen's 1975 theory of reasoned action (as cited in Davis et al., 1989) and emphasizes users' perceptions, confidence, and willingness to use new technology (Sánchez & Hueros, 2010). Specifically, TAM was used to understand the variables that

affect teachers' acceptance of technology and evaluate teachers' attitudes, intentions to use technology, and the perceived usefulness and ease of use of new technology. TAM assesses the relationship of determinants for accepting technology: belief, attitude, intention, and behavior.

TAM was originally used in the workplace. Davis et al. (1989) explained that an individual's perceived ease of use and perceived usefulness are two constructs that influence the acceptance or rejection of new technologies. Due to criticism that TAM only had two constructs to determine the acceptance of technology, revisions of the model were made (Adiguzel et al., 2011). Subsequent research was conducted based on TAM, and the model was extended to relate to an educational context (Adiguzel et al., 2011; Edmunds, Thorpe, & Conole, 2012). In addition, teacher acceptance is the key indicator of implementation of new technology to support instruction (Ngai, Poon, & Chan, 2007). Successful integration of new technologies is attainable only when teachers agree to utilize the new technology in the classroom setting (Paraskeva, Bouta, & Papagianna, 2008; Teo, Lee, & Chai, 2008).

TAM is still applied and dominates in studies 25 years after its initiation (Edmunds et al., 2012). Ertmer (1999) advanced TAM and sorted the internal and external factors affecting the use of technology. Internal factors refer to teachers' beliefs, attitudes, teaching practices, class structure, and resistance to change. The external factors are insufficient access to computers and a lack of computer software, time, and technical assistance (Ertmer, 1999).

The first level of a system's actual use, or *actual behavior*, of technology is the *intention to use* the technology (Venkatesh, 2000). A factor of intention to use technology

is the user's *attitude toward use*, which explains the individual's positive or negative perceptions about using the system. *Perceived usefulness* of technology is the belief that using a system will increase job or work performance. *Ease of use* is the belief that using the system does not require much of an effort. If the individual can use this system without much effort, the effect on perceived usefulness will increase (Venkatesh, 2000). Teachers who experience difficulties accepting new technologies will go back to their old teaching strategies (Elmas & Geban, 2012; Gunes & Baki, 2011). Dietrich and Balli (2014) confirmed that technology in the classroom can be engaging; however, without proper training, technology can have the opposite effect. Technology integration is problematic if teacher training is insufficient.

Johnston, Berg, Pillon, and Williams (2015) found that high school students rated the ease of use and usefulness of digital text as positive. However, interacting with the digital text required more learning on the students' part. Johnston et al. specified that, since the digital text is transitioning from optional to required use, educators need to understand how students accept and use digital text to ensure students have efficacious learning experiences.

Ibili and Sahin (2016) described the contribution of cartoons to academic achievement and teaching practices based on the variables of TAM: perceived benefit, perceived ease of use, attitude towards use, intention to use, and actual behavior. They noted that teachers had hesitations about ease of use due to insufficient technological infrastructure in classrooms and inaccessibility to cartoons related to topics in their lessons. Ibili and Sahin found despite the perceived benefit of using cartoons, teachers did not use cartoons during instruction.

The framework of TAM was explored to understand how the perceived benefits and limitations concerning the use of e-books reflect on intention to use. To increase the acceptance of e-books and to accelerate their integration in elementary schools, researchers should study elementary teachers' acceptance of this technology in classroom settings. If Davis et al. (1989) are correct in their assumptions about TAM, digital immigrant teachers need to learn how to use technology to effectively use and integrate technology in the classroom to support the learning experiences of digital native students.

Phenomenology

A phenomenon is the foundation for all knowledge (Moustakas, 1994); it is the object of an individual's experience, as it presents itself. Teaching and learning with technology is a distinct phenomenon from traditional teaching and learning. Cilesiz (2011) expounded that technology and media impact teaching and learning. For example, Web 2.0 provides a new medium to produce and share information with others via the Internet.

Understanding the influence technology has on teaching and learning requires understanding individuals' experiences with technology (Cilesiz, 2011). Cilesiz (2011) argued the need to study experiences with technology in depth to comprehend its impact and role in education. Cilesiz stated the field of educational technology needs a concise research agenda enabling researchers to explore experiences by teachers and learners. A solution would be to use the phenomenological approach to study experiences. Cilesiz maintained that the phenomenological approach provides an appropriate framework for research on experiences. Cilesiz specified that phenomenology is not a new concept, but rather an underutilized method in the field of educational technology. Cilesiz stated

phenomenology can "unearth more information about the vital process of teaching and learning with technology" (p. 489).

Cilesiz (2011) concluded that the definitions for experience and education are intertwined. Dewey (1938) defined education as an educative experience involving intellectual and moral growth, interaction, and continuity. In sum, according to Cilesiz, "The importance of experience in education and learning is well established, and thus experience with technology as a construct in educational technology research is worthy of and promising for a research agenda" (p. 490).

According to Dewey (1938), learning does not occur in intervals, but rather an individual's experience molds future experiences by influencing attitudes, preferences, and aversions. The relationship between past and future experiences forms a foundation for learning. Cilesiz (2011) speculated that an examination of technology would enable researchers to understand, design, or influence learning experiences. Phenomenology is a suitable approach to facilitate research on experiences with technology because it "includes a philosophical approach to the concept of experience, a methodology to guide research design, and methods to study experiences in depth" (Cilesiz, 2011, p. 492).

Phenomenology was founded by Edmund Husserl (1859–1938) in the early 20th century (Moustakas, 1994). Husserl was known as the father of modern phenomenology (Phillips-Pula, Strunk, & Pickler, 2011). Phenomenology describes an individual's direct experience (Edmunds et al., 2012) with phenomena or events. Husserl's philosophical view was that knowledge is attained through an individual's discernment of life experiences. The current views of the phenomenological approach derived from Husserl's philosophical traditions and emerged to understand how people construct

reality. Furthermore, phenomenology is the study of lifeworld, "what we know best, what is always taken for granted in all human life always familiar to us in its typology through experiences" (Husserl, 1970, pp. 123-124).

Edmunds et al. (2012) stated, "Researchers use the phenomenological approach when they are interested in exploring the meaning, composition, and core of the lived experience of specific phenomena" (p. 136). The researcher should not adopt any position on the correctness or falsity of a participant's claims regarding the views or judgments intrinsic to his or her lifeworld.

Phillips-Pula et al. (2011) identified, regardless of the type of phenomenological approach, strategic steps to conducting a phenomenological study. First, the authors pointed out that the researcher should develop questions about the phenomenon. Second, the researcher needs to identify willing and appropriate participants. Phillips-Pula et al. supported that data from phenomenological studies are collected by observing, interviewing, or writing descriptions of the phenomenon. Last, data are analyzed by coding and categorizing. The results are presented as an interpretation or comprehensive description of the participants' experiences with the investigated phenomenon.

Cilesiz (2011) determined that only phenomenology is suited to study the meaning of experiences. Phenomenology is suitable to study human experiences with technology because technology has become a pervasive aspect in life and education—for example, students playing with video games and teachers integrating technology in lessons.

Husserl's (1970) vision of phenomenology stemmed from realism and idealism. Realism is the idea that objects exist without individuals being conscious of them,

yielding a world of many objects to be discovered and perceived. In other words, the reality of a given object precedes the discovery of that particular object. On the contrary, idealism is defined as reality that is dependent of the human mind, rather than independent of the mind. In other words, the world does not exist outside of a human's mind.

The goal of phenomenology is to describe and understand a given phenomenon and describe the essence of the participants' lived experiences of that particular phenomenon. Essence is defined as a common quality or similar condition of an experience (Husserl, 1969; Moustakas, 1994). Unearthing the essence of an experience is the purpose of phenomenology (Cilesiz, 2011). Moustakas (1994) maintained that, in phenomenological research, the essence of an experience is never exhausted, and its conclusion does not represent the universal truth. Instead, in a phenomenological study, the essences of a specific place and a specific time of the participants' experiences are presented as they are perceived by the researcher (Moustakas, 1994). For example, in educational technology, a researcher can investigate participants' experiences with an aspect of technology and arrive at the essence of the experience with that particular aspect of technology via the participants' experiences.

Husserl (1969) stressed that in phenomenological studies, the researcher must omit prejudgments of the phenomenon to be investigated. He proposed epoche or bracketing to systematically set aside any preconceived ideas or prior knowledge regarding the phenomenon. A researcher's "deliberate naïveté" (Kvale, 1996, p. 31) is encouraged to understand and open all possible meanings of the phenomenon. For example, a researcher using phenomenology and epoche would bracket his or her own

experiences and knowledge about the phenomenon to avoid potential bias and be thoroughly open to gain an understanding of the participants' experiences with the phenomenon.

A phenomenological study is the participants' perceived reality; thus, it is subjective. Therefore, phenomenological inquiry does not state factual claims because "pure essential truths do not make the slightest assertion concerning facts" (Husserl, 1969, p. 57). Additionally, phenomenological studies do not formulate empirical generalizations or develop theories to control or predict; rather, they generate insights for researchers to understand a given phenomenon.

Creswell (2017) advised that researchers should select participants who have meaningful and significant interactions with the investigated phenomenon. Criterion sampling is the most suitable method to select participants for phenomenological inquiries. In criterion sampling, the researcher purposefully selects participants who have the ability to reflect on and provide full descriptions of their lived experiences (Creswell, 2017). Another consideration for selecting participants includes composition and size. Large sample sizes are discouraged for phenomenological research due to its in-depth nature. Creswell (2017) recommended 3–10 participants.

Lastly, in phenomenological research, researchers are required to select a homogenous group of participants to identify the shared essence of experiences within that particular group. In this study, the researcher used criterion sampling to select elementary teachers at the same Title I school district who were teaching general education courses (reading, mathematics, language arts, science, and social studies) and had been using the myON Reader platform since August 2016.

Cilesiz (2011) stated that exploring experiences with aspects of technology is an important area of research for educational technology. Phenomenology constitutes a suitable theoretical framework and methodology for this area of research and has the potential to address vial research questions in the field. It can be infused into existing areas of research at the core of educational technology as well as open up new lines of inquiry.

Phenomenological studies on technology integration can address the dynamics, "classroom culture, classroom management, teacher's role, and pedagogy" (Cilesiz, 2011, p. 504). Results from phenomenological inquiry can reveal possible apprehension about incorporating new technology, encourage administrators to provide support to those who are apprehensive about new technology, and encourage exploration with future new technologies. In sum, phenomenology has great potential in the field of instructional technology.

Summary

Since e-books are relatively new to the market, gaps remain in the literature on the best practices of integrating e-books in elementary school settings. Previous research revealed that technology has affected teaching and learning (Chen & Jang, 2013). Elementary school systems are utilizing e-books to allow students to interact with technology. E-book programs have undergone exponential growth despite disadvantages to its use in traditional classroom settings. King-Sears and Evmenova (2007) reminded teachers that some e-books are well designed for students, but this resource is not as important as how teachers use them to support instruction. The collaborative efforts of teachers and administrators are integral in designing an effective e-book program.

Additional studies are needed to provide educators with specific pedagogical practices and methods on how to successfully integrate e-books for various grade levels and different content areas (Felvegi & Matthew, 2012). Future research on this incipient technology will be beneficial to educators and the profession of instructional technology and distance education.

Research Questions

Two primary research questions (Research Questions 1 and 2) and two corollary research questions (Research Questions 3 and 4) guided this study. This study will be guided by the following research questions:

1. How do digital immigrant teachers describe the practicality of e-books in a Title I elementary classroom setting?

2. How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting?

3. In what specific ways do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting?

4. To what extent do digital immigrant teachers attitudes about an e-book program affect educational success as it relates to gender, educational level, and fear of failing?

Chapter 3: Methodology

Aim of the Study

The purpose of this phenomenological research (Moustakas, 1994) was to discover the relationship between digital immigrant teachers' perception of usefulness and ease of use of e-books and their intention to use e-books in a Title I elementary school. The research explored the factors that affected the acceptance and usability of e-books in a Title I elementary school to enhance students' reading skills. This study reveals current trends to effectively incorporate e-book reading applications in a traditional classroom setting to motivate digital immigrant teachers to use technology to improve students' learning experience. An increased understanding of how students and teachers perceive the use of e-books in their daily routines is vital for students' academic success.

Qualitative Research Approach

This was a qualitative study with a phenomenological approach. First, the qualitative method with a phenomenological approach was selected because the research methods are useful in unearthing the meaning that people give to events they experience and allow researchers to study experiences in depth (Cilesiz, 2011). In the current study, the participants' experiences with using e-books to improve students' reading achievement were investigated by asking 11 open-ended questions during interviews.

Second, the qualitative approach is effective when studying participants in their natural setting (Cilesiz, 2011). In this present study, interviews were conducted in the location of the participants' employment.

Third, Creswell (2017) emphasized that researchers are active participants in the

study. In this study, the researcher collected and interpreted data. To this end, the qualitative approach was the best approach to answer the research questions in this dissertation. For the current study, the researcher explored four questions:

1. How do digital immigrant teachers describe the usefulness of e-books in a Title I elementary classroom setting?

2. How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting?

3. How do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting?

4. How do digital immigrant teachers' attitudes about an e-book program affect educational success as it relates to gender, educational level, and fear of failing?

Moustakas (1994) theorized that phenomenological studies are a systematic attempt to gain a deeper understanding of nature or meaning of experiences of phenomenon. In this study, the participants' perceived attitudes of e-books and their actual use of e-books as digital content in their classrooms were explored by asking open-ended questions during interviews.

Cilesiz (2011) warned that using quantitative methods do not unearth the depth of experiences because data are collected by using satisfaction scales on broad aspects of experiences. Furthermore, data collected through qualitative methods are less generalized as compared to data collected through quantitative methods (Cilesiz, 2011).

The overarching question guiding this qualitative study was, "What are the perceptions of elementary school educators of the usefulness of e-books in a Title I elementary classroom setting?" K-5 teachers were asked to participate in this study. Data

were collected during the 2018-2019 academic school year. This study examined the impact of how digital immigrant elementary school teachers used an e-book program to motivate digital native students to read. The qualitative data were obtained through semistructured interview sessions scheduled by the researcher. The interviews were conducted with 15 faculty members from one public Title I elementary school.

Cilesiz (2011) explained that using quantitative methods does not unearth the depth of experiences because data are collected by using satisfaction scales on broad aspects of experiences. Data collected through qualitative methods are less generalized as compared to data collected through quantitative methods (Cilesiz, 2011).

The instrument used to conduct this study was an interview protocol for teachers (see Appendix). The data from this study may be used in future research concerning how digital immigrant elementary school teachers utilize an e-book program to motivate digital native students to read.

Participants

Participants were a purposeful sample of K-5 general education teachers in a Title I school in a southern state. “The idea behind qualitative research is to purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research questions” (Creswell, 2013, p. 189). Therefore, the criteria to select participants for this study were that the teacher must have been born before 1980 and must have used the e-book program for at least 1 year prior to the study. This would avoid bias regarding the excitement of using new technology, which might affect the teacher’s judgment when evaluating its potential use.

Each teacher and student at the target elementary school received a laptop from

the school district. The school district adopted the mandatory use of an e-book program, the myON Reader platform, in 2016. Teachers are not required to pay for the laptop or insurance. A broken device is returned for repair. If the device cannot be repaired, the teacher receives a new device. The e-book program is also funded by the school district. The researcher attended professional development sessions on how to properly implement the myON Reader platform and interpret data to improve reading instruction. A representative of the myON Reader platform provided training sessions on how teachers can implement the program in the classroom setting. The teachers received additional support from the myON Reader platform representative and attended subsequent training sessions with the representative.

The focus of this study was to explore the relationship between the digital immigrant teachers' (a) perceptions of the usefulness and ease of use of e-books and (b) the teachers' actual intention to use e-books in a Title I elementary school. The school district was selected based on the district's involvement in an e-book program. At the time of this study, the school district had five elementary schools and 82 K-5 teachers. The researcher narrowed the search to a purposeful sample of 15 K-5 teachers from a Title I public school.

Preliminary e-mails were sent to teachers to ask if they would be willing to participate in this study by answering interview questions in their own words. A follow-up letter was sent to each participant to further explain the study. An adult consent form was included with directions to sign and return. The adult consent form is required by the Institutional Review Board of Nova Southeastern University.

Data Collection Tools

The instrument (see Appendix) used is a series of open-ended interview questions for elementary teachers. The tool was developed by this researcher. The instrument was verified prior to the study by three PhD-level professionals in the educational field to ensure the authenticity, logic, and structure of the interview questions. The professionals provided revisions to ensure that the instrument was concise and clear.

Creswell (2013) advised that an interview guide is effective in maintaining control of the interview. The interview guide in this study allowed the participants to convey their views on the topic and allowed the interviewer to establish control of the interview. Realizing the importance of an effective guide to aid the data collection process, the researcher developed the Teacher Interview Protocol for this study. The data were obtained through face-to-face interviews or via telephone. Participants responded to the questions by using their own words.

Procedures

A purposeful sample of 15 participants was used to gather data for this study. Each participant received preliminary contact via telephone and a follow-up e-mail to describe the purpose of this study. The following steps were used to accomplish the goals of this study:

1. The researcher obtained written approval to conduct this research from the school district superintendent and the Nova Southeastern University Institutional Review Board.

2. The researcher obtained approval from the principal of the target school to conduct research at the school site.

3. A letter to request consent to participate in the study was sent to 15 participants. The researcher works at the school site and delivered letters to the participants' school mailbox.

4. Interviews were scheduled before and after school hours. Interviews were conducted face-to-face in the teacher's classroom or by telephone. Each teacher had an option to have the interview dictated or audio recorded. If the participant selected dictation, the researcher would transcribe the interviews verbatim using the Teacher Interview Protocol (see Appendix). If the participant chose to be audio recorded, the interview was recorded using a Sony Digital Voice Recorder. The researcher used the Teacher Interview Protocol to take notes. The audio recording and written interview responses were secured in a locked file cabinet in the researcher's home office. The data will be secured for 3 years and then destroyed.

5. Teacher interviews were member checked. Participants were asked 11 interview questions. The interview was estimated to last 30–45 minutes. Each interview was transcribed using QDA Miner Lite by the researcher within 48 hours of the interview. The transcript was e-mailed to the interviewee. The researcher gave the interviewee 5 days to review or edit the interview responses. If the interviewee did not respond in 5 days, the researcher accepted the interview responses to be accurate and approved by the interviewee.

6. Data were organized using NVivo 12, which included analyzing the data and coding the findings. Random identification codes were assigned to each participant to ensure confidentiality. The data are stored in a locked file cabinet in the researcher's home office.

7. The final step was to prepare and present the findings and recommendations by using a narrative format.

Data Analysis

The data were obtained from open-ended questions from the Teacher Interview Protocol. Creswell (2015) identified six steps that were used as a guide to analyzing data for this study: (a) preparing and organizing the data, (b) exploring and coding the database, (c) describing findings and forming themes, (d) presenting and reporting findings, (e) interpreting the meaning of the findings, and (f) validating the accuracy of the findings.

Preparing and organizing the data. The data were transcribed and summarized after each interview. The transcript was a word-for-word representation of the respondents' answers to the interview questions. Transcripts were saved into a single file folder after reading through the data.

Exploring and coding the database. Lin (2013) stated that phenomenological data analysis is the process of coding, categorizing, and interpreting the essential meaning of a phenomenon. Related events, themes, and concepts were highlighted and coded in the text excerpts. Each code was sorted and stored in a single file folder. Each file was summarized. NVivo 12, a computer software program that stores, organizes, and categorizes qualitative data, was used to gain a deeper understanding of the data.

Describing findings and forming themes. NVivo 12 was used to quickly sort, categorize, and identify themes. This software program also aided in drawing better conclusions of the unstructured information.

Interpreting the meaning of the findings. The researcher summarized the

findings. The findings were used to answer the research questions of this study.

Validating the accuracy of the findings. The interview transcripts were e-mailed to each respondent of this study to determine if the researcher's interpretations of the findings were accurate. The researcher gave each interviewee 5 days to review the findings. If an interviewee did not respond within 5 days, the researcher accepted the findings to be accurate and approved by the interviewee.

Presenting and reporting findings. Results were generalized and presented in narrative form. The purpose of this study was to gain an understanding of the relationship between digital immigrant teachers' perceived usefulness and ease of use of e-books and the teachers' actual intention to use e-books in a Title I elementary school.

Ethical Considerations

"Ethical considerations are vital for any research endeavor" (Cilesiz, 2011, p. 502). Cilesiz (2011) stated that maintaining the confidentiality of participants is vital because failing to do so may jeopardize the participants' reputation or result in other unforeseen consequences. The participants were informed of the purpose of the study and the role of the researcher. Interview responses were anonymous, and transcripts and identities were not shared with other participants. The participants could answer the interview questions at their own convenience. The interview was estimated to last 30–45 minutes. The data collection process would take up to 2 months to complete. The participants were informed that responses to the interview questions would be securely stored for 5 years in a locked file cabinet in the researcher's home office. The participants did not receive compensation for participating in this study. Identifying information was not revealed; the privacy of the participants was protected. The anonymity of the

participants was maintained in accordance with Nova Southeastern University's Code of Ethics.

Trustworthiness

An interview protocol for elementary teachers within a Title I school district was used to direct interviews for the intended purpose of this study. The interview protocol was created to elicit interviewees' perceptions of using an e-book program. After each interview, each participant had an opportunity to review transcribed recordings and reconstruct their responses, if necessary. In order to ensure the confidentiality and anonymity of the participants, interview responses were not shared or discussed with other participants or other school district employees not directly involved in the research process. The recordings and notes are stored in a locked file cabinet in the researcher's home office. Additionally, coding lists, notes, and all other documents are stored in a locked file cabinet in the home office of the researcher.

Potential Research Bias

The researcher is a novice myON Reader platform user, as are many of the teachers in the Title I school, and has a solid foundation and passion for technology, high-quality instruction, and student achievement. Considering 15 years of experience as a teacher, the researcher noticed the demand to incorporate technology into the traditional classroom setting. During this study, a conscious effort was made not to discourage or promote the use of the myON Reader platform. Likewise, personal experiences with the e-book program were not shared with participants, particularly due to maintaining epoche. The researcher met with the district's assessment coordinator to allow for objectivity in analyzing the data. Furthermore, the researcher will provide a copy of the

final report for the district superintendent to review, providing trustworthiness for this qualitative case study.

Chapter 4: Findings

The purpose of this study was to discover the relationship between digital immigrant teachers' perceptions of the usefulness and ease of use of e-books and the teachers' intention of use of e-books in a Title I elementary school. The Title I elementary school in this study is using the myON Reader platform (Renaissance, 2019) as a tool for improving the quality of reading instruction. The myON Reader platform has over 10,000 books from various genres to support reading across the curriculum. A qualitative method with a phenomenological approach was utilized because it was best suited to answer the research questions. The following topics are discussed in this chapter: (a) participants, (b) data collection and analysis, including the coding process and emergent themes, (c) qualitative interview results by research question, and (d) a summary of key findings.

Participants

After obtaining Institutional Review Board approval, the study began. Criterion sampling was used to select participants for the study. The participants were recruited from a Title I public elementary school in a southern state. A letter to request consent to participate was sent to 15 potential participants. After 2 weeks, 15 teachers expressed interest in participating in the study and submitted the consent to participate. The participants for this study were digital immigrant teachers who used the myON Reader platform for at least 1 year in an elementary classroom setting. Face-to-face interviews were conducted with participants who had experienced the phenomenon.

The participating teachers were assigned a number (1–15) to correspond with the numeric sequence in which the interviews occurred. Table 2 outlines the participants'

demographics. At the time of the research study, the youngest participant was age 37, born in 1982, and the oldest participant was 66, born in 1953. Three participants were over 50; one was under 40, as noted; and the rest were in their 40s (M = 46.9 years). The participants had varied years of teaching experience working within public elementary school settings, ranging from 2 to 24 years (M = 15.9 years). They had a combined 239 years of teaching experience. Each participant had various levels of education and brought different perspectives to the interview regarding the usefulness and ease of use of an e-book reader platform.

Table 2

Participant Demographics

Demographic	*n*	%
Age range		
Under 40	1	6.7
40-49	11	73.3
50+	3	20.0
Years teaching experience		
< 5	1	6.7
6–10	1	6.7
11–15	5	33.3
16–20	3	20.0
21–24	5	33.3
Highest degree		
Bachelor's	7	46.7
Master's	7	46.7
Educational Specialist	1	6.7

Data Collection and Analysis

The qualitative data consisted of on-site interviews with 15 K-5 digital immigrant teachers at a Title I elementary school in a southern state. Face-to-face interviews were

held in the participants' classrooms at the end of school hours. The data collection instrument consisted of the Teacher Interview Protocol (see Appendix). The interview questions were based on the research questions for this study. The researcher posed 11 open-ended questions to the participants. Field notes and a Sony digital voice recorder were used to collect data. Interviews were transcribed using QDA Miner Lite.

Member checking. The researcher e-mailed transcripts to the interviewee within 48 hours of the interview. The researcher gave the participants 5 days to review or edit the interview responses. If the interviewee did not respond in 5 days, the researcher accepted the interview responses to be accurate and approved by the interviewee. During this member checking process, 2 interviewees responded to the e-mail and provided edits to the interview responses. The researcher updated the transcripts based on the interviewees' recommendations. The two updated transcripts were e-mailed to the two interviewees. After 5 days, the remaining two participants did not respond to the e-mail, and the researcher accepted the updated responses to be accurate and approved by the interviewees.

Coding process. The researcher read each interview transcript to gain a sense of the participants lived experiences with an e-book Reader platform. Transcripts were read several times and the transcripts of 15 interview files were imported into NVivo 12 qualitative software. NVivo 12 is a qualitative data analysis software used to import and analyze data (Edhlund & McDougall, 2019). Words and phrases were identified from repeated data. Codes were developed from the selected words and phrases to compare and contrast. The researcher explored patterns and identified categories and themes among the interview responses.

Emergent themes. The interview data were analyzed to answer the four research questions for this study. The researcher evaluated the interview transcripts to identify common themes that emerged from the data. The themes were categorized based on the research questions to which they applied (see Table 3).

Table 3

Themes of the Study Results

Research question	Themes
1. How do digital immigrant teachers describe the usefulness of e-books in a Title I elementary classroom setting?	• Useful by allowing students to read books of their own choice and interest • Useful by enhancing instruction • Useful by being convenient and maximizing instructional time • Useful by differentiating instruction
2. How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting?	• Not easy to use, particularly with younger students • Technological and resource problems
3. How do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting?	• Incorporating the e-book reader platform into instruction • Audio hindering reading • Monitoring students to keep them on task
4. How do digital immigrant teachers' attitudes about an e-book program affect educational success as it relates to gender, educational level, and fear of failing?	• Teacher age as a factor in not using the e-book program • Positive impact on student achievement

The responses from interviews were represented by four areas and are a way to begin to explain how digital immigrant elementary teachers utilize an e-book reader platform to motivate digital native students to read, as perceived by the participants. The themes determined are presented in the four areas of (a) usefulness of e-books, (b) ease of

use of e-books, (c) experiences using e-books, and (d) attitude about an e-book program. See Table 3.

Results for Research Question 1

How do digital immigrant teachers describe the usefulness of e-books in a Title I elementary classroom setting? In evaluating the results of the qualitative data collected from digital immigrant teachers, the majority of the participants described that the e-book reader platform was useful because the program (a) enabled students to read books of their own choice and interests, (b) enhanced instruction, (d) was convenient and maximized instructional time, (e) differentiated instruction, .

Useful by allowing students to read books of their own choice and interest. Participant 8 stated the following:

> Well, one thing that I've learned from this particular program, myON, is that the kids have a little more independence on the selection of books. They get to read books they like, which encourages them to read. And, because it's levelized, which helps them, and they're not getting books that are too easy or books that are too hard. And they focus on their interests. So, if you're trying to motivate with e-books, I think it's good. It's good for motivating.

Participant 2 responded,

> I like the fact that each student can read books of their choice or in other words, books that they like. . . . With myON, they are given a preassessment to see what they like. So, they are actually reading the books, because if they like sports, they're reading sports books. If they like mystery, they're reading mystery books. So, because they are able to read the books that they like, they're reading more.

Participant 12 explained,

> They're able to read a wide variety of material, and that draws more interest into reading. And I believe that's a special thing, because we want to make sure all our students are reading. They're going to read everything you want them to read, but we want to make sure they're reading overall.

Participant 15 confirmed that children were reading material they liked:

> It's useful because the kids are engaged, because they're reading books that they actually like. You can go into myON, and you can choose books beforehand as a teacher. Whatever subject you're talking about. . . . We've been reading about Paul Revere, and we've been reading about the Declaration of Independence. I've been able to go in, find books on those subjects, . . . and just kind of go use it in the classroom as a tool to get the kids interested in the reading.

Useful by enhancing instruction. The four participants reported that the e-book reader platform was useful because the program enhanced instruction in the elementary classroom setting. Participant 1 stated the following:

> I like to go in and select stories that are similar to stories the students are familiar with to give them different versions of a story. The students seem amazed by the e-books more than the stories they read in regular books. It holds their attention. I also like the colorful pictures that the e-books use. and the students really seem engaged. I also liked that they have books that relate to songs, like the *Wheels on the Bus*, *There Was an Old Lady Who Swallowed a Fly*. My students love those stories, and they're engaged, and if they read it over and over and over, they get familiar with the words. I like that about the myON e-book reading.

Participant 4 reported,

> I use e-books as the opener for my lesson, the attention grabber to get their attention. I'll show them something they can relate to. For example, if we're getting ready to read a story about girls playing basketball and it's not the norm of course, or wanting to play basketball with boys, I will maybe pull out an e-book about Michael Jordan and share his story or foundation of how he got started, something like that.

Participant 14 stated,

> It's useful to enhance your reading program or whatever skill you're teaching. Particularly, I think building background and the skills, the skills, most importantly because you can always pull out whatever skill you're covering at whatever time out of a book, for the most part a trade book, which I would hope is on the e-book reader series program.

Participant 12 mentioned, "I use the e-book program to have the opportunity to make sure all my students are reading. You know, they're not stuck in a textbook. They're not stuck just reading a copy of the material. That can be boring."

Useful by being convenient and maximizing instructional time. Four participants expressed that the e-book reader platform was useful because the program is convenient and maximizes instructional time. Participant 8 indicated,

> It takes a lot of the guessing off of me. As far as trying to find interest, you know, books that are of interest to them. It takes that part, it takes that work off me. Instead of always giving out reading surveys and then they go through a list of questions, because that part is done for me with myON. So, I like that part, and I

> like the part that the quiz is there, . . . like an accelerated reader, whereas the quiz at the end is to make sure that they understand what they've read or what has been read to them. Also, I do know it helps me tell, when I want to direct them to reading on a particular topic, it's helpful in that way too. When I don't have certain books, you know, access to certain books in my classroom library in my class, I can try to find something on myON. I do know that.

Participant 5 mentioned,

> The convenience of having the books right at your fingertips, right there. You don't have to send them to the library. And it also is very easy to locate the book that goes with the subject that you're teaching.

Participant 1 reported,

> I think that e-books are useful to myself and it could be useful to other educators because we don't have to physically go to the library looking for books, like the school library is limited on what they have, and we wouldn't have to take time from after school to go to the public library trying to locate a book that we want our students to read. The program that we have, we're able to go in and search for books, and hopefully it'll be there, but the convenience of it, like there's thousands of books on different grade levels, so that's useful. We can immediately put our hands on it and send it to our kids or use the Promethean board to do a whole group story where the students could learn from it and watch you model how to change the pages and highlight the words and put a note on there. And you can also take the quiz together so that they could see and know what you expect for them to do on the e-book.

Participant 11 indicated the following:

> I like the ease of having the books at your fingertips . . . yeah, the ease of having the material that you want to supplement with right there. All you do is just type in the genre or the name of a book, and you have it right there. You don't have as much planning to do. Not as much, you know, like trying to track down the book in the library, and it's checked out, or whatever.

Useful by differentiating instruction. Three participants believed that the e-book reader program was useful in differentiating instruction for English language learners and struggling readers. Participant 3 indicated,

> I like the pictures that come with it a lot of times for the ELL [English language learner] kids, that's beneficial because their vocabulary sometimes is a little, you know, lower than the average first-grade student. And so, a lot of times they can look at the pictures and decipher what the story is about.

Participant 2 explained,

> One of my students who is a Hispanic student who's having a hard time reading, I use it with her as a homework tool. I've talked to her father about it. She has access to the Internet at home, and so from using MyON, it has really improved her English.

Participant 14 reported the following:

> MyON for my low, low readers, it is good, and I tell everybody if you have a low, low reader, and to be honest with you, some of our third graders, they come, they cannot read. I use the myON a lot because it reads to the children, and that way when the child doesn't know the word, I ask them to read along with the book and

> touch their finger on the words as the voice is reading the story to them. That helps them with their comprehension and mostly helps them also to be able to gain the vocabulary and words they'll be able to read because if they didn't have the audio reading that goes with the myON, it would have children who can't read or the children who would stumble with a word stuck if they did not know the word.

Results for Research Question 2

How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting? In evaluating the results of the qualitative data collected from digital immigrant teachers, no themes emerged common to all participants. Three participants were familiar with the functions of the e-book reader platform. Participant 1 offered a very specific account, noting,

> I enjoy being able to go in and specifically select books and categorize it for my students. It'll be easier for me to send it to them than for them to search and search and try to select. So I try to weed out, like, let's say a 12th-grade book or something that's too hard for them to read.

Two themes developed: (a) lack of ease of use, particularly with young students, and (b) technological and resource problems.

Not easy to use, particularly with younger students. Whereas the majority of the participants expressed the benefits of using the e-book reader platform in the classroom setting, kindergarten through second-grade teachers shared that navigating the e-book reader program was cumbersome to teachers and young students. Participant 7 explained, "It's difficult having kindergarteners to sign on individually. I have to do it

because they're not quite independent workers yet, and that takes up instructional time."

Participant 3 indicated,

> It's hard to navigate through there. Sometimes if I need the kids to do it by themselves, they might struggle to log on or to find what they're looking for easily. If it's, you know, if it's hard to figure it out, but hopefully after a bit they'd be trained in, it would be more easily usable for them.

Participant 3 also stated,

> It's just kind of hard to navigate through there sometimes, and I get frustrated really easily with technology. So, if it's not pretty easy for me to figure out within a minute or two, I usually just give up and move on. . . . A challenge I had was it is not teacher friendly. Sometimes it's hard to maneuver through there and make my way through to kind of figure out what I'm doing.

Participant 1 stated the following:

> One thing that I don't like about the MyON is that it's difficult for the students to log into. The first piece of information that it asks for is the school's name. And so if the student types it incorrectly or if there's another school with the same name in another city, it's hard for them to tell the exact location of the school. So they not only have to know the name of the school but the city that is in, because if they select the wrong school and put in their username, the correct username and the correct password with the wrong school, it won't let them in, so they get frustrated with that. And then I will have to pull away from my small group to come and assist them in finding the correct name and location of the school. So it basically takes time from struggling readers because I have to leave them to go

assist someone who is supposed to be working independently on this tool. Participant 6 explained the following:

> I don't implement it as much in kindergarten. Plus the fact that I'm computer illiterate, so until they're more independent, it takes a lot of my instruction time and then . . . 2 seconds in, they exited the website and were on something else. The kids are immature. They don't know how to spell their name on paper or type it in. They don't know their letters, they don't know the numbers. So until they are more mature. That's why I don't use it. It's not just me being the oldest teacher here, it's also them being such babies. The ones who have that experience with a computer don't have as much problems, like all the ones at home they have a computer, but with kids new to computers, it's an exercise in frustration taken away from my teaching.

Technological and resource problems. Three participants mentioned that an inadequate number of earbuds or headphones and a weak Wi-Fi signal posed challenges with incorporating the e-book reader platform in the classroom setting. Participants also observed when new students enrolled in the targeted school, devices were not readily available for the students' individual use. Participant 5 responded, "I don't like the fact that I don't have enough earbuds for everybody in my class is a problem. I wish I had a whole set." Similarly, Participant 1 stated the following:

> I have two major issues in my classroom. The first one is having earbuds or headphones for the students. So if I have a spare headphone that I purchased with my classroom funds and if that one goes out and the student, if the student's family can't afford to get headphones, it becomes a little loud in the classroom,

> because like you're listening to different stories at the same time, and it's a distraction to the other students. . . . So it kind of diverts the attention from me teaching them in a small group because they get interrupted by the story that they hear in the background. So having headphones for everybody that's working could eliminate that. And also, if the Internet goes down. I use myON on Mondays, so if the Internet is out on a Monday, I had to use it on another day because I want to be accountable for using this tool so that the board won't say my students aren't using the program. So again, the headphones or the lack of headphones is an issue. And the Wi-Fi going out.

Participant 10 also noted problems with the Internet being down or inadequate bandwidth.

Participant 14 noted a lack of books in languages other than English and Spanish. Participant 14 described having students from Africa or Afghanistan with little English: "You have them coming in and they barely can speak English, and you need books that can go with their language or a mixture of both, at least start with their language and then build them up."

Results for Research Question 3

How do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting? In evaluating the results of the qualitative data collected from digital immigrant teachers, the majority of the participants shared how they incorporate the e-book reader platform in their instruction. Participants also noted the audio feature hindered student reading and the independent nature of reading e-books required monitoring to ensure students did not become distracted.

Incorporating the e-book reader platform into instruction. Participant 2 stated the following:

> Well, myON is actually a tool that I use daily. Actually, they use myON before we actually start reading class. So, between the time of 8:00 to 8:30 a.m., the students go on and choose books for themselves to read and take tests on. Now, I use myON a lot in science and social studies or whatever subject that we were working on. So, science and social studies, I will go find a book on that subject and I would put it up on my Promethean board and we read it. So, it's actually used not only in reading but in science and social studies. For example, we are working on forces and motion. I found a book, pulled it up and on the Promethean board and did a read-aloud. So I was able to use the Promethean for highlighting and underlining important things in the book that the kids should know.

Participant 3 explained,

> I incorporate e-books in the reading program by selecting ones that are related to either the story we are on for that week or the sound that we're working on for that day, and sometimes I use multiple ones in a day. Sometimes I don't use any, and I might just use, you know, one a week. It just depends on what story and how it relates to what I find.

Participant 4 mentioned, "I have incorporated e-books with my students reading program by allowing them to choose books of their choice of their interest. I use them during small groups as well as whole group." Participant 15 stated,

> We use myON in the morning when they come in the morning work. I have also created projects for them to do depending on whatever the skill or subject matter

> we're talking about, content area or topic. And they have to read books pertaining to that subject.

Audio hindering reading. Four teachers believed that the audio feature of the e-book reader program hindered the students' reading abilities. Participant 15 mentioned, "Some students who are heavily reliant on the read-aloud, and they're not trying to read independently." Participant 2 stated,

> I like hard copy books. I would rather them read than have it read to them. . . . I would rather them read on their own instead of having a program that reads it to them. But, I mean, overall I like it.

Participant 8 reported,

> The only thing that I dislike about it is that the reading to them, all the time I have to tell them, turn it off and read it yourself. So, I do go back and forth and check, and I see some of them are heavily dependent or prefer having the book read to them. As far as the audio, they use it a lot, and sometimes I have to tell them, you know, you have to read the books and stop depending on somebody else to read it to you.

Participant 4 indicated,

> The children may become dependent on the audio to read to them and not practice reading fluently on their own because they have the access right at their fingertips, and so they may just get the audio, but [they should] read to themselves sometimes or read to a partner sometimes.

Participant 8 stated the following:

> I don't want to say they get lazy, but I want them to, I guess I would want to make

> sure that they are independent readers where they are decoding, oh my goodness. The problem with me is, do you know if they're reading, really reading, or are they depending on the audio? Because I, we know our listening comprehension is higher than our reading comprehension, so we'll just sit and read to ourselves, and I would want to make sure that the student is able to read and not just the audio reading for them . . . the book reading for them.

Monitoring students to keep them on task. Three participants believed that students did not actually read while using the e-book reader platform. Participant 11 reported,

> Kids just pretend like they're reading. Or kids, you know, supposed to be on myON and getting on something else . . . on the Internet that they're not supposed to be on. I have to go around, make sure that they are on their e-books, because I have a few students that like to go to other things. I have to monitor the children, I have to show them that I see what they are reading and I'm able to see how long they have taken the test or even read the books. Because it lets me know when they have to open the books. So, I use those strategies and I put on my Promethean board and I tell them, okay, so and so, you just opened the book, you were on this book for only 3 seconds, there is no way that you understood what was going on in the story. So, I use that strategy for classroom management.

Participant 15 explained,

> Specific problems that I have seen is from the kids flip through the books and not, some of them don't read the entire book. They just slipped through trying to get as many books as they can when there is a contest.

Participant 1 reported,

> The barriers and challenges that I've faced is students pretending to be reading when they sneak and go onto another website as opposed to reading. So, there is a feature so that the teacher could monitor how long the students been reading and how many books they have completed. So, monitor, monitor, monitor your students while they are on the e-book program to make sure that they are on task.

Results for Research Question 4

How do digital immigrant teachers' attitudes about an e-book program affect educational success as it relates to gender, educational level, and fear of failing? These factors were not mentioned much by teachers. In evaluating the results of the qualitative data collected from digital immigrant teachers, three participants reported their age was a factor in not incorporating the e-book reader platform in the classroom setting. Overall, attitudes were positive regarding the success of the program with students.

Teacher age as a factor in not using the e-book program: "I'm old."

Participant 7 stated,

> I am an older educator, I still believe that it's important that students actually hold a hardback or paperback book in their hand. They can easily mark where they read and where they want to come back to a lot easier than they can with an e-book, and if it's their personal book, they can highlight their favorite parts. They can, um, I had a thought there and it went away. That's part of getting old. I'm serious too, now. Where they could go back and look at something more easily with a hardback book versus what they could with an e-book.

Participant 6 responded,

> I'm old and maybe I should use it more. I want to use it, but then it wasn't convenient. I'm not good at it. It stresses me, and every program that they [school district] buy has a different password for every kid. So I get an older student who uses it to help. I wish I had the same password for everything and the kids can easily do themselves. They don't know any of their letters or their numbers, and they can't find it on a keyboard. So that's why."

Participant 10 mentioned, "I guess I wouldn't consider myself tech savvy. I guess I'm not tech savvy because I'm old and I have the little ones to do technology stuff."

Positive impact on student achievement. Four participants reported the educational success of students after incorporating the e-book reader program in the classroom setting. Participant 9 explained, "Just gains, a lot of gains on my Scantron data. With you know, with the ELA (English language arts) . . . I can just tell from my data, especially with reading." Participant 4 reported,

> I have witnessed the children's love for reading and the types of books they read, and they actually liked to read. And I can see that their comprehension levels are improving as well, especially when they read different genres of books. And particularly if they have a lesson that goes along with that when they can effectively monitor their own comprehension through whatever the activity is.

Participant 5 stated,

> It's developing a love for reading. I won't say all of my students love reading, but I think them being able to hold the device and listen to a story and read, you know, along with the story, I think it's developing a love for reading.

Participant 11 explained,

> For education, it helps me that, it helps that when they hear the words and they say to me, "I really didn't know what that word meant." We have what we call a vocabulary folder, where they write those words that they know that they cannot pronounce, or if they know they do not know what the word means and they can find context clues, to help them understand what they mean. It builds vocabulary by having them to go and do research, where they have to go on their laptop and look up those words, so they will have a better understanding of what the words mean. And then they find a synonym that they understand better and replace that word, or the definition, into the sentence that they're reading with the books. So sometimes it takes a little bit longer, but after they have read and they have the test, we talk about it. If their tests are low, we talk about why they're low. So, we talk about what they could have done better and give them more strategies to reread, read again, find context clues, or be able to work, so it helps me with the management, it helps them with comprehension, and it helps the students learn how to become better readers so they'll be better learners.

Summary

This chapter presents information about the research participants and an analysis of each research question. Information regarding the data collection process and the findings of this phenomenological study were discussed. Narratives gathered from individual interviews provided phenomenological descriptions of digital immigrant teachers' perceived usefulness and ease of use of e-books and the teachers' actual intention to use e-books in a Title I elementary school.

Chapter 5: Discussion

This qualitative phenomenological study investigated a criterion sample of 15 K-5 digital immigrant teachers from various educational levels. The intent of this study was to discover the relationship between digital immigrant teachers' perceptions of the usefulness and ease of use of e-books and the teachers' intention of use of e-books in a Title I elementary school. This qualitative study with a phenomenological approach examined the impact of how digital immigrant elementary school teachers use an e-book program to motivate digital native students to read. The research was conducted through face-to-face and telephone interviews with the participants. Four research questions guided the collection and analysis of data:

1. How do digital immigrant teachers describe the practicality of e-books in a Title I elementary classroom setting?

2. How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting?

3. In what specific ways do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting?

4. To what extent do digital immigrant teachers attitudes about an e-book program affect educational success as it relates to gender, educational level, and fear of failing?

Chapter 5 discusses the findings of this study and how the findings are linked to existing literature. Further sections presents the significance of this study, implications of the study, recommendations for future research, and the conclusion.

Overview of Findings by Research Question

Research Question 1. How do digital immigrant teachers describe the

practicality of e-books in a Title I elementary classroom setting? In evaluating the results of the qualitative data collected from digital immigrant teachers, four themes emerged relative to the practicality of e-books in a Title I elementary classroom setting: (a) useful by allowing students to read books of their own choice and interest, (b) useful by enhancing instruction, (c) useful by being convenient and maximizing instructional time, and (d) useful by differentiating instruction. According to the participants, the e-book reader platform enabled students to become excited about reading because the students read books on their own interests. A third-grade teacher at the targeted school suggested, "It's developing a love for reading."

The e-book reader platform was also useful to the educators. The program enhanced classroom lessons by supplementing the current reading program. Likewise, the educators used the e-book reader platform to build students' background knowledge and to retain the students' attention. The e-book reader platform was also useful in differentiating instruction for English language learners and struggling readers.

Research Question 2. How do digital immigrant teachers describe the ease of use of e-books in a Title I elementary classroom setting? In evaluating the results of the qualitative data collected from digital immigrant teachers, the majority of the teachers were not familiar with the functions of the e-book reader platform, but expressed that the program was beneficial because it provides a plethora of reading materials for the students. Two themes emerged: not easy to use, particularly with young students, and technological and resource problems. The early childhood educators who teach kindergarten through second grade thought the e-book reader program was difficult for the students and teachers to navigate. The oldest educator, who is a kindergarten teacher,

suggested that young students were too immature to log into the e-book reader program. The kindergarten through second grade teachers stated that they did not use the e-book reader platform daily. The teachers admitted to feelings of frustration. Participant 6 suggested, “If I had step-by-step directions, I would be able to see what I’m supposed to do. I need to see it.”

Participants noted challenges to incorporating the e-book reader platform. The concerns were lack of earbuds or headphones for all students in the classroom, weak or no Wi-Fi signals, and delays on receiving devices for newly enrolled students. Having an inadequate number of individual earbuds or headphones led to heightened noise levels in the classroom. This posed distractions to students. Participant 1 explained that when students do not use earbuds or headphones, the classroom is noisy when more than one story is being narrated aloud.

No Internet connection and a weak Wi-Fi signal caused delays with students accessing the online e-book reader platform. Participant 10 shared that it is inconvenient when the Internet is not working, but suggested that educators have a “Plan B” or plan a different activity that does not require the use of the Internet.

Participants in this study indicated that when new students enrolled in the targeted school, devices were not readily available for the students’ individual use. Participant 9 believed that it was unfair to have new students watch other students engaged with the e-book reader program. Finally, one participant noted e-books were not available in all languages to help students with limited English who were not native Spanish speakers.

Research Question 3. In what specific ways do digital immigrant teachers describe their own experiences using e-books in a Title I elementary classroom setting?

In evaluating the results of the qualitative data collected from digital immigrant teachers, three themes emerged relative to the experiences of digital immigrant teachers using e-books in a Title I elementary classroom setting: (a) incorporating the e-book reader platform into instruction, (b) audio hindering reading, and (c) monitoring students to keep them on task. Based on the interview responses, the participants used the e-book reader program throughout various times of the school day. Most teachers had no predetermined time for when they would schedule using the e-book reader program in the classroom. The program was also used as an individual or whole-group activity.

The participants experienced the students being heavily reliant on the audio feature of the e-book reader program. The digital immigrant teachers preferred the students to use traditional hardback books to practice and strengthen their reading skills. Participant 8 believed that the students' listening comprehension was high but wondered if the reading skills of the students were improving. Likewise, many participants believed that the students were not reading the text of the story on their own. Instances of students logging off of the e-book reader program to go to other websites and students just clicking on the pages of the e-book were noted by the participants.

Research Question 4. To what extent do digital immigrant teachers attitude about an e-book program affect educational success as it relates to gender, educational level, and fear of failing? In evaluating the results of the qualitative data collected from digital immigrant teachers, two themes emerged relative to the attitudes of an e-book reader platform: (a) teacher age as a factor in not using the e-book program and (b) attitudes reflecting a positive impact on student achievement. Some participants indicated that they did not incorporate the e-book reader program frequently in the classroom setting because

"I'm old." Participant 6 was conflicted, knowing the expectations for teachers to incorporate the e-book reader platform, but admitted to the program being stressful. Based on the participants' responses, the causes of stress were not being "tech savvy" and having to assist younger students in kindergarten through second grade to log into the e-book reader program.

Many participants stated the e-book reader program was beneficial in the educational success of struggling and English language learner students. Participant 9 indicated there was an increase in the reading data for English language learner students in her classroom. All the participants reported an increase in the students' engagement with reading. Participant 5 stated, "It's developing a love of reading."

Meanings and Understandings

This study was based on the TAM developed by Davis et al. (1989). TAM theorizes that a person's beliefs, attitudes, and intentions are key factors for accepting or refusing new technologies. The purpose of this study was to discover the relationship between digital immigrant teachers' perceptions of the usefulness and ease of use of e-books and the teachers' intention of use of e-books in a Title I elementary school. The researcher explored the circumstances that affect the acceptance and usability of e-books at the Title I elementary school to improve student reading achievement.

Some participants indicated that they did not incorporate the e-book reader program frequently in the classroom setting due to negative perceptions of the ease of use of the e-book reader program. The digital immigrant participants were aware of the expectations for teachers to incorporate the e-book reader platform into daily instructional practices but admitted that using the e-book reader program was frustrating.

Based on the participants' responses, the causes of stress were not being "tech savvy" and decreasing instructional time to help kindergarten through second-grade students log into the e-book reader program. Kindergarten through second-grade teachers experienced more challenges than third- through fifth-grade teachers due to the perceived maturity levels of the students by the teachers.

Brueck and Lenhart (2015) recommended continuous professional learning to help teachers stay abreast of emerging technologies. Ongoing support from instructional coaches, instructional designers, media specialists, and technology integration specialists will ensure that teachers have the knowledge they need to effectively use e-books to support students' learning experiences.

Findings Linked to Existing Literature

The problem investigated in this study is the lack of acceptance and use of e-books by digital immigrant teachers to enhance reading instruction, in spite of a clear need to improve student reading achievement. Participants in this study believed that using the e-book reader program was beneficial because of opportunities to enhance and support the learning process. The participants described that the e-book reader program builds students' prior knowledge, help engage students during lessons, and helps to differentiate instruction. However, challenges of incorporating the e-book reader program caused the digital immigrant participants in this study to use the program inconsistently. Participants who taught kindergarten through second-grade students preferred to use the e-book reader program as a whole-group activity to minimize interruptions during instruction. Participants who taught third- through fifth-grade students used the program as it was intended to be used.

Many participants suggested that the students were excited to use the e-book reader program because the students had ownership of the reading material. This correlation confirmed similar results of other researchers (Embong et al., 2012). However, four of the 15 participants explained that they believed students were not actually reading text on the e-book reader program. This finding correlates with Dietrich and Balli (2014), who recommended teachers monitor each student to deter students from playing noneducational games, e-mailing friends, or engaging in other off-task behaviors. Last, participants in this study expressed that they preferred using traditional books as opposed to e-Books because the students were heavily reliant on the audio feature of the e-book reader program. This finding correlates with Taylor (2012), who found that students preferred the audio support offered by e-books rather than reading the digital text on their own.

Previous studies (Huang et al., 2012; Pearman & Chang, 2010) noted challenges with young children and the design of e-books. Huang et al. (2012) suggested that young students in prekindergarten through second grade need e-books that are easy to use and have functional designs. Kindergarten through second-grade teachers in this study described that using the e-book reader program was counterproductive because the teachers had to minimize instructional time to assist students with logging into individual accounts. The kindergarten through second-grade teachers admitted to feelings of frustration and were hesitant to use the e-book reader program daily.

Research Significance

The present study presents results that are useful to school administrators and school board members who may want to implement an e-book program to build a strong

reading program and motivate young students to read. Research has shown that low reading scores correspond with low scores in other subject areas at school; these low scores are predictive of high dropout rates (Hernandez, 2011; Schimke, 2011). Students who drop out of school are at risk of lower earnings and poorer health (Deussen, Hanson, & Bisht, 2017).

This doctoral study was conducted at one elementary school, and the findings may not be representative of all elementary schools. However, this study does provide information that can assist school administrators and board members to help digital immigrant teachers effectively and seamlessly incorporate e-books in conjunction with other reading programs.

Implications of the Study

The researcher explored the circumstances that affect the acceptance and usability of e-books at the Title I elementary school to improve student reading achievement. The results of this doctoral study implied that the digital immigrant teachers understood the benefits of using the e-book reader program in the traditional classroom setting, but the perceived ease of use of the program affected the actual use of the program. This correlation confirmed the TAM (Davis et al., 1989). Eight of the 15 participants in this study had negative perceptions of the ease of use of the e-book reader program that affected the actual use of the e-book reader program.

Limitations

The researcher is a first-grade teacher at the study school and has taught at the same school for 15 years. Due to workforce limitations, all K-5 teachers at the school were contacted to solicit participation in the study. The sample was limited to 15

participants. Teachers were assumed to provide honest responses. One limitation to the study is that it was confined to one Title I elementary school, and the findings cannot be generalized to other Title I elementary schools.

Additionally, qualitative research is subjective. The researcher is a digital immigrant elementary school teacher, whose professional experiences might have affected the integrity of the research validity in regards to presentation. The researcher was conscious to maintain epoche to set aside preconceived ideas or prior knowledge regarding the phenomenon in this study.

Directions for Future Research

This doctoral research was limited to one public Title I elementary school in a southern state. Further studies with additional schools with a larger population of teachers may provide a better understanding of the variables used by TAM that affect the acceptance of new technology. Further research should extend these findings by including quantitative data to measure digital immigrant teachers' comfort level with basic computer skills. A Likert scale or survey questionnaire can generate data to include basic computer skills that are utilized while using the e-book reader program.

Conclusions and Recommendations

The problem investigated in this study was the lack of acceptance and use of e-books by digital immigrant teachers to enhance reading instruction, in spite of a clear need to improve student reading achievement. Based on the findings of this study, digital immigrant teachers were hesitant to utilize the e-book reader program due to negative perceptions of the ease of use of the e-book program.

Kindergarten through second-grade teachers were frustrated with the e-book

reader program because the students were unable to log into the program independently. Kindergarten through second-grade students relied on teachers for usernames and passwords. The researcher recommends printing student login cards to help younger children remember login information. Teachers can demonstrate how to log in via a whole group with the use of a Promethean board or with individual students. Schugar et al. (2013) recommended that teachers should familiarize students with the basic functions and technological skills required to navigate an e-book. One way to do this is by allowing the student to explore several e-books to find one the student feels comfortable with. Once the student is paired with the correct e-book, the teacher may assess reading skills by using the following four-step routine: (a) allow students to learn how to turn on devices and access apps; (b) demonstrate how to position the screen; (c) show students how to access e-books, turn pages, and access interactive features; and (d) provide guidelines for students' use of interactive features (Schugar et al., 2013). Noor et al. (2012) also recommended providing instruction or user manuals for students who are not technology savvy, are English language learners, or have special needs.

Before school systems transition from printed books to e-books, technical support and resources must be ensured. A lack of adequate earbuds or headphones was cited as a problem in the current study. Noor et al. (2012) recommended schools "be equipped with the software and hardware the e-book reader requires" (p. 299). Further, e-books need to be regularly maintained (Noor et al., 2012). Moreover, Noor et al. recommended providing support to parents so they could be familiar with e-book technology to assist students.

The researcher also recommends that school systems interested in incorporating

e-book reader programs create a strategic plan for digital immigrant teachers to outline specifically how to use the program. Noor et al. (2012) stated, “Since the migration involves several parties: teachers, school administrators, and technology specialists, there should be a collaborative effort in designing a course syllabus which matches with the functions of the e-book reader” (p. 299). Further, Noor et al. pointed out, “Teachers, as the only mediator between the e-book and students in a classroom, need to be soundly knowledgeable and skilled with this technology” (p. 299). This study showed that implementing an e-book reading program in a traditional classroom setting can be challenging, but providing digital immigrant teachers with ongoing professional development and technological support may improve the acceptance of new technology by digital immigrant teachers in significant ways to optimize students’ learning experiences while using e-books.

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Appendix

Teacher Interview Protocol

Teacher Interview Protocol

1. How have you incorporated e-books in the current reading program?

2. What important lessons have you learned from using e-books would you share with others educators?

3. What personal strategies assisted you in incorporating e-books in your current reading program?

4. What do you enjoy most about using an e-book reading program?

5. What do you enjoy least about using an e-book reading program?

6. In what specific ways do you think an e-book reading program may be useful to you and other teachers?

7. What specific problems do you foresee by using an e-book reading program?

8. How would you describe using the e-book reading program and the impact that it has had on your teaching success?

9. What important lessons have you learned from using e-books would you share with other educators?

10. Please describe any barriers or challenges that you may have faced while implementing the e-book reading program.

11. Do you have any additional comments about the teacher's role of using e-books in the traditional classroom setting?