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Teachers' Perceptions on Implementing Read 180 During the Covid-19 Pandemic for Grade 3-5 Students in a Georgia Public School

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**Teachers' Perceptions on Implementing Read 180 During the Covid-19 Pandemic for
Grade 3-5 Students in a Georgia Public School**

by
Monika Nicole Whitmire

A Dissertation
Submitted in Partial Fulfillment of the Requirements for
The Degree of Doctor of Education
In Curriculum and Leadership
(CURRICULUM)

Keywords: Read 180; Covid-19; Teachers' Perceptions; Grade 3-5

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Dedication

I cannot even begin to thank God for the grace and mercy He bestowed upon me as I embark on this journey to obtain this degree. I thank God for the provision and strength that has gotten me through to this point. I dedicate this work to my mother, the Late Ada E. Works, who instilled a love of learning into me and encouraged me up until her sudden death to complete this degree. You were my greatest mentor, and I wish you were here to witness this accomplishment. I want to thank my father, Roscoe Works, for your support and encouragement. I want to dedicate this work to my sons, Jeremiah, and Jordan Whitmire, for your love and inspiration. This degree belongs to you. I wanted to show you that despite what the world or people around you say, God has the final say. We have been through a lot as a unit. I thank you for sacrificing me to work and school. The best is yet to come for us.

There have been so many family members, friends, and coworkers that have been a source of encouragement along the way. If I start naming them all, I will miss someone's name. Please know that I love you all and want to thank you. There were times when I got weary or when I needed an ear, and you were there. Thank you for it all.

I absolutely love education and learning. I dedicate this to all my students. Education gives me life every day. Each day is a fresh start, a promise, hope, a reason to dream, a chance to collaborate, and to be the best version of ourselves. I hope that people can see that in me as I seek to teach, serve, and support all students and coworkers.

Acknowledgements

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“Eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him.” 1 Corinthians 2:9

RESUME

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Professional Profile

Eager to help individuals to achieve in high need positions throughout the organization by motivating struggling individuals and using a unique combination of creative education experience and art integration

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- Dedicated to enthusiastic and dynamic teaching as a means of creating and nurturing a lifelong love of knowledge in all individuals

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- Incorporate learning modality principles into classroom and individual instruction
- Implement technological approaches to subject material
- Research educational resources on the Internet
- Assist with information retrieval, data analysis, and data driven instruction
- CPR/AED trained and certified
- High level of professionalism and excellent written and verbal communication skills
- Knowledgeable background in integrating the arts into academics
- Experience using School Improvement data to help impact student achievement

Consistent work experience, and demonstrated ability to work closely

Computer Skills

- Software (Windows and IOS environments): Microsoft Office and Apple Applications
- Google Suite Products: (Classroom, Slides, Meet, Calendar, Jamboard, etc.)
- Blackboard and Dropbox experience

- Read and Write certified
- Clear Touch certified
- Knowledge and experience with administering AMIRA, Reading Inventory, Math Inventory, and Phonics Inventory testing and data analysis
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Early Intervention Teacher (August 2019 – Present)

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Serves as the reading intervention and support person on campus for grades K-5. Provides synchronous and asynchronous ELA instruction and interventions. Offers assistance, provide coaching sessions, teach strategies, build rapport between students, parents, and teachers, and provide support for academic and testing components for the school. Provides direct support to all teachers, paraprofessionals, and worked directly under the principal. Handles technical incidents for both students and teachers as needed for online and in-person students. Facilitates biweekly meetings to monitor progress of students and teachers. Serves on the interview team for new teachers and paraprofessional that applied for positions at the school. Also, serve on the RTI, PBIS, Spelling Bee, Leadership, School Improvement, and Math Competition Teams. Serve as a member of the Local School Governance Team from 2016 - 2018.

- Head of ELA Collaborative Planning, which focus on data analysis and instructional planning
- Mentor Teacher for 4C Academy Intern
- Serves on Administrative Support Team
- Member of School Testing Team
- Assisted Principal in creating and implementing online learning plan during the onset of the COVID-19 pandemic in the role of Teacher Leader
- Response to Intervention assistant
- Attends community activities as it related to the student population
- Evaluated teachers in the area of instruction via Curriculum Focus Walks and observations virtually and in-person
- Serves on the school improvement committee
- Experience working with “at-risk” students
- Coordinates transportation for in-person students
- Provides support to teachers in terms of educational technology tools and other areas as needed
- Coordinates enrollment for in-person students
- Provides coaching teachers one on one to ensure best practices in classroom
- Served as secretary of the Local School Governance Team
- Provides technical assistance for virtual parents and students
- Track record of growth for students for ELA on the Georgia Milestones Assessment and other district diagnostic testing
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- Provided in-house professional development on the RTI process, TKES, EIP, and other presentations
- Saturday School Team Leader and instructor

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Lamar Reese Fine Arts Magnet School, 1215 Lily Pond Drive, Albany, Georgia 31705

Provided instruction 2nd and 3rd grade students. Integrated the Fine Arts into academic instruction.

Designed lesson plans and activities for ELA in grades K-5. Attended workshops and conferences on differentiated instruction, creative teaching ideas, and data analysis. Presented effective teaching strategies and differentiated instruction during professional learning opportunities.

- Communicates effectively with parents, staff and students
- Attended community activities as it related to the student population
- Supervises and evaluates science teachers in the area of instruction
- Serves on the school improvement committee
- Experience working with “at-risk” students
- Ensured students received a quality education
- Ensured student’s parents/ guardians are actively involved in their youth’s educational plan
- Ensured academic curriculum is implemented and compliant with local, state and federal guidelines
- Ensured timely and comprehensive information is reported to the Instructional Coach, administrators, and counselor to ensure students are provided an equal education in a less restrictive environment
- Reviewed and revised team action plans and procedures
- Prepared necessary documentation to physicians, social workers, school psychologist, and the Office of Disability Adjudication concerning student behaviors and disabilities
- Maintained team records and lead team meetings
- Monitored student’s progress towards educational goals;
- Implemented an after school tutoring program for students struggling in reading;
- Served as advisor, and mentor to new teachers in the field and district

Third Grade Teacher (July 2006 - July 2007)

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- Ensured student’s parents/ guardians are actively involved in their youth’s educational plan
- Ensured academic curriculum is implemented and compliant with local, state and federal guidelines
- Ensured timely and comprehensive information is reported to the Instructional Coach, administrators, and counselor to ensure students are provided an equal education in a less restrictive environment
- Reviewed team action plans and procedures
- Prepared necessary documentation to physicians, social workers, school psychologist, and the Office of Disability Adjudication concerning student behaviors and disabilities
- Monitored student’s progress towards educational goals

Professional Development in Education

- Emerging New Leaders Training, August 2016
- DCSS Superintendent Leadership Program, May 2012
- Response to Intervention Presenter, September 2019
Lamar Reese Magnet School Dougherty County School System

Supervisor Related Training Positions

- Teacher Leader, 2007-Present
Lamar Reese Fine Arts Magnet School, Albany, Georgia
- Grade Chair, 2007-2019

- Lamar Reese Fine Arts Magnet School, Albany, Georgia
- RTI Designee, 2019-2020
Lamar Reese Magnet School, Albany, Georgia
- District Mentor for New Teachers, 2012-2015
Lamar Reese Fine Arts Magnet School, Albany, Georgia

Professional Affiliations

Professional Association of Georgia Educators (PAGE)
Georgia Educators Association (GAE)
Albany Area Reading Council

Community Affiliations

Genesic Nonprofit

Abstract

The problem addressed by the study was to examine the effectiveness of the implementation of the Read 180 Universal reading intervention program for students who struggle with reading during the COVID-19 pandemic. The purpose of this case study was to describe teachers' perceptions of the effectiveness of the implementation of the Read 180 program for elementary students in a grades 3-5 Georgia elementary school during the COVID-19 pandemic. A qualitative research paradigm has been used in the research described below. A case study involved semi-structured interviews of 12 general ELA teachers in grades 3, 4, and 5. A thematic analysis of qualitative data was performed, providing insight into participants' perceptions centered around the implementation of Read 180 during the COVID-19 pandemic. The study provides insight into teachers' needs for material and professional development when implementing Read 180 in other school districts. The study supports the need for policy and procedure change on the state, district, and school level involving how online programs are implemented during times such as the COVID-19 pandemic.

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CHAPTER I: INTRODUCTION

The ability to read and comprehend what is read is essential to learning in all content areas (Council, Cartledge, Green Barber, & Gardner, 2016). In all areas of life, reading is required in some form whether it be letters, symbols, words, formulas, sentences, etc. (Smith, 2015). Elementary teachers are tasked with teaching students how to read. Reading proficiency, or the lack thereof, in students is a growing concern in education (National Reading Panel, 1998). There have been various models of reading instruction and programs available for use, yet the National Report Card of Education Progress (NAEP) reports reading for fourth and eighth graders are steadily falling below grade level throughout the nation (NAEP, 2019). According to the 2019 National Assessment for Educational Progress Report Card for Reading, only 34% of all fourth graders are reading at or above grade level (NAEP, 2019). That would leave 66% of students reading below grade level at the foundational level, which is the beginning of reading instruction in elementary school. It is reported that 70% of school dropouts do so because they have deficits in reading with many of those students being recommended for special education services (Fenty, Mulcahy, & Washburn, 2015). The National Center for Educational Statistics (2010) suggests from fourth grade to eighth grades, students do not need to know how to read, but how to read for information acquisition across all content areas. The primary goal of education is to matriculate students from primary to higher education through learning, addressing individual needs, improving the capabilities of students through motivation, problem-solving, and discovery (Hubalovsky, Hubalovaska, & Musilek, 2019).

Currently, reading intervention programs, such as the Read 180 Universal Program, have been put in place to close the achievement gap of students who are reading below grade level and improve students' motivation to read (Vogel, 2013). The Read 180 Universal Program is a blended reading intervention program targeted for grades 3-12 (Cleveland, 2003; Houghton

Mifflin Harcourt, 2020; Nave, 2007; Pittman-Windham, 2015). Randomized control studies have found Read 180 Universal to have a significant effect on improving reading comprehension; however, its effect on reading fluency and alphabetic skills was small (Kim, Capotosto, & Fitzgerald, 2011; Kim, Sampson, Fitzgerald, & Hartry, 2010; WWC, 2016) The Read 180 Universal Program provides individualized reading instruction for students. This reading intervention instruction is based on the four following instructional shifts: Whole-Group Teaching, Student Application, Small-Group Learning, and Independent Reading (Houghton Mifflin Harcourt, 2020). Educators and students can receive data in real-time as students practice reading. These types of programs are more important than ever during times of crisis when students may be unable to attend school because they promote a flexible learning environment (Wong, Tatnall, & Burgess, 2013). For the remainder of this dissertation this program will be referred to as Read 180.

Background of the Problem

Teaching and learning have changed in recent years. Technology has been infused into pedagogy. One such model of learning that has been introduced in recent years is that of blended learning. Blended learning is a widely adopted form of teaching and learning in the field of reading (Macaruso, 2017). Blended learning is the integration of student-directed learning on an online platform that includes a teacher-led offline component (Macaruso, 2017). These types of programs often offer lessons that are differentiated for students based on an assessment (Macaruso, 2017).

This study was conducted in a southwest Georgia school district during an unprecedented time in history, the COVID-19 pandemic. The school system closed its physical doors to more than 14,000 students. The administration, faculty, staff, and students left the buildings on March

13, 2020. On March 19, 2020, the announcement was made that there would not be an immediate return to face-to-face instruction until further notice. Students were sent home with paper instructional handouts to help supplement their learning during an unspecified absence from the actual school buildings. The school district under study is a certified 1:1 Google technology district. The district began having mandated virtual training on the use of Google Classroom, Google Slides, and Google Meets for teachers of grades levels kindergarten through twelfth grade. In mid-April of 2020, students were presented with an average of the first three grading periods. Parents could accept that average as the final yearly average or choose for their students to continue working to improve their averages until the official end of the school year. During the summer months, teachers received training on products connected to Google Suite, on how to utilize common web-based educational programs (Kahoot, EdPuzzle, Padlet, etc.), and technology-based communication systems (Remind, Class Dojo, and Infinite Campus). New programs were introduced through district-wide virtual professional development. These programs were Read 180 Universal (grades 3-12), System 44 (grades 3-12), AMIRA (grades K-2), and Classworks (grades K-12). These products replaced the district-wide use of I-Ready Reading and Math as diagnostic and instructional programs. Teachers attended training for these programs depending on the grade level that they taught.

Teachers had to provide instruction and interventions for all students that were coming back in-person and online. The district did a complete overhaul of their instructional programs and received new laptop computers. The teachers attended district professional learning on August 13, 2020, in preparation for bringing students back to a school for the 2020-2021 school year in a virtual learning format due to safety measures related to the increased numbers of individuals who were continuing to test positive for COVID-19 within the local

community. During this session, teachers were introduced to the Read 180 Universal program by a Houghton Mifflin Harcourt (HMH) training coach. Teachers were provided with an overview of the program and what hard copy and online resources would be provided from the Read 180 program. Also, educators who utilized Read 180 were provided with an opportunity to interact with the teacher and student demo websites. The meeting was held in a virtual format at varied times. The training time and groups were separated by elementary, middle, and high school teachers. Other training sessions will be held throughout the adoption of the program and will be discussed in more detail in Chapter 3.

The Read 180 Universal Program was implemented to provide reading interventions for struggling students during a time of a national and local pandemic. Previous studies by Sprague et. al (2012), Swanlund et al. (2012), and White et al. (2006) found that significant gains were made in reading using the program versus students who did not, yet there are limited studies on implementing computer-assisted or blended learning programs in the wake of the pandemic (WWC, 2016).

Statement of the Problem

The problem to be examined was the effectiveness of the implementation of the Read 180 Universal reading intervention program for students who struggle with reading during the COVID-19 pandemic. In August 2020, the school district under study was confronted with the challenge of how to continue an equitable education for students who struggle with reading during the COVID-19 pandemic. A new blended reading intervention program, Read 180 Universal, had recently been implemented to be used in a virtual learning environment for students in grades 3 through 5; however, reading deficits continued to be observed in a majority of students in these grades. According to the Georgia Department of Education's latest statistics,

44.1% of the students in the school district do not read on grade level (gadoe.org, 2020). Faced with the pandemic, additional challenges arose related to student access to technology as teachers were forced to move toward an online environment. Moreover, the school district was lacking adequate resources to address the modifications needed.

Although the district continues to implement the Read 180 program, teachers have been struggling to learn how to provide rigorous and effective online instruction to students in a virtual and face-to-face environment while simultaneously learning how to utilize the new program. Within the timeframe of facing the obstacles associated with implementing the Read 180 program, there has been no feedback or evaluation from teachers regarding the implementation of the program. A notable gap in research exists because there have been no other studies that have looked at teacher perceptions of the Read 180 program implementation during the time of the pandemic. The problem examined was the effectiveness of the implementation of the Read 180 Universal reading intervention program for students who struggle with reading during the COVID-19 pandemic.

Purpose of the Study

The purpose of this qualitative case study was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 outbreak. In essence, this study described teachers' perceptions of the implementation of a new blended learning computer-assisted program for reading interventions, the implementation of such a program during a global pandemic, and their thoughts on using the program in an online learning format. In the 21st century, the use of technology and online programs are crucial in fostering children's ability to

read and comprehend (oecd.org, 2019). This direct line to instruction and interventions for struggling students is especially true during the current COVID-19 pandemic.

Research Questions

Research questions for this study will include the following:

1. What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students?
2. What are grades 3-5 elementary teachers' perceptions of using Read 180 program with their students?
3. What are grade 3-5 teachers' perceptions of student gains in reading comprehension from using the Read 180 program?

Theoretical Framework

According to Merriam & Tisdell (2016), a theoretical framework is the underlying structure of the study based on a theory that is used to explain the research problem. Mezirow's transformative learning theory, which was developed around 1978, was one of the underlying theories for this study. The transformative learning theory is defined as an orientation which holds that adult learners interpret and reinterpret their past experiences to make meaning of their learning (Mezirow, 1978; Mezirow, 1997). Mezirow (1991) was interested in adult learners making sense or meaning of their experiences, how other structures influence the way they perceive those experiences, and how the facets involved in altering past meanings undergo changes when learners find them to be dysfunctional. Mezirow's transformational learning theory will be used to describe the teachers' perceptions of the professional development provided to them to implement Read 180.

John Dewey was given the first credit for the term constructivism in 1933, by promoting that education be grounded in real-life experiences (Dewey, 1929; Olusegun 2015). Piaget redefined constructivism in terms of knowledge being acquired in steps (Piaget, 1964, Sjeberg, 2010). Piaget focused on how children's cognition changed (Genovese, 2003). Constructivism adds to this study in that student using the Read 180 program are constantly assessing their work to gain understanding (Aldoobie, 2015). It is believed that information-rich learning environments where students can explore learning and construct meaning furthers the constructivist theory (Nicaise and Barnes, 1996; Tillman, 1998). Constructivism supports this study in that student using the Read 180 program allows students to access their learning through subject-related topics of their choice, provides immediate feedback, and scaffolds lessons to help students gain new knowledge (Aldoobie, 2015). Furthermore, technology that scaffolds learning and includes lessons with authentic tasks are examples of constructivist learning because students are provided the opportunity to gain new knowledge on their own rather than regurgitating the knowledge of someone else (Tillman, 1998). Additionally, constructivism supports this study in terms of professional development, in that training for teachers must be tailored to individual adult's learning needs, abilities, and experiences (Ruey, 2010). Teachers must develop a new understanding of teaching reading interventions for application to their teaching practices (Rout & Behera, 2014).

Methodology Review

A qualitative case study was conducted for this study. A case study methodology was used because it examined a phenomenon that occurred over a specific period (Combra & Martins, 2013). For example, the study examined teachers' perceptions of the implementation of the Read 180 program over a specific period (July 2020 through May 2021). Moreover, teachers'

perceptions of the training implementation process was examined during the same time period (Starman, 2013). This study was, also, characteristic of a case study in that it is characterized by process-tracing during the implementation process for Read 180 Universal program was traced from training through a specified timeframe (Gerring, 2004; George & Bennett. 2005). For this study, the researcher had teachers complete an online interview via a video conferencing platform (Google Meet or Zoom) to assess their perceptions of the implementation of the Read 180 program during the pandemic. Semi-structured interviews included teachers who have had direct experience in implementing the Read 180 program across the district during the 2020-2021 school year. The answers from the interviews were transcribed and coded for similar themes using NVIVO 12 coding software. Codes were developed to determine overarching and connecting themes from the responses from the interviews. The transcription from the interviews were returned to the participants for member-checking after the interviews are transcribed to verify the accuracy of the transcription. Document analysis was conducted of physical evidence of the Read 180 program. These documents included the training and program materials provided to the researcher by the district under study. The program and training materials were analyzed to assist in answering research questions regarding training and instruction.

Limitations and Delimitations

Limitations of Study

Limitations of research are occurrences or aspects of the study that are out of the researcher's control (Simon & Goes, 2013). This study was limited in the use of teachers' perceptions to examine Read 180 program. The teachers' responses to interview questions may not reflect their honest viewpoints regarding the implementation and training associated with the program for fear of the lack of confidentiality. There was a perceived assumption that the

answers from the interviews will be factual; however, perceptions cannot be verified (Airasian & Gay, 2000). The implementation process was also limited by the knowledge of the person assisting with the implementation of the Read 180 Program. An additional limitation was the participants' ability to understand how to effectively implement Read 180. Because the researcher serves as a mentor for reading instruction and serves on the administrative team at an elementary school within the district, teachers selected to participate in this case study may not feel comfortable answering questions truthfully.

The training and program documents provided by the Houghton Mifflin Harcourt (HMH) may be a limitation. Documents claiming to be unbiased, and objective may contain some form of built-in bias of which the researcher is unaware (Merriam & Tisdell, 2016). This bias may be attributed to the fact that it is a product that is for purchase for school districts that yield a profit for HMH of which Read 180 is a product. The study could also be limited in terms of the participants understanding of the Read 180 program as delivered by the Houghton Mifflin representative.

Delimitations of Study

Delimitations of a study arose from limitations in the scope of the study and result from specific choices by the researcher (Simon & Goes, 2013). The research was delimited in that it only focused on one suburban school district in southern Georgia one school district, which implemented the Read 180 program. Additionally, the Read 180 was designed for reading intervention in grades 3-12. This study focused on the use of the program in elementary grades 3-5. These parameters were set due to the researcher's experience in teaching reading and providing reading interventions on the elementary level where foundational reading skills are taught.

Another delimitation was that only full-time, regular education teachers who were employed on a basis during the 2020-2021 academic school year were eligible to participate in this study. There were other teachers in fields such as Early Intervention and Exceptional Students that will not be eligible for the study. Regular education teachers were selected for this study in that they teach students who are at variable reading levels.

Definition of Terms

Several terms included were important to convey the information in this study. These terms are found in this body of work.

- *Alphabet method*: a methodology that the child needs to master letter recognition rather than the sounds. (DiObilda & Petrillo, 2020).
- *Blended learning*: the integration of classroom face-to-face learning experiences with online learning experiences (Horn & Staker, 2011).
- *Computer-assisted instructional (CAI) program*: software is used to create an individualized learning plan for each student (Sprague et. al, 2011).
- *Decoding*: the ability to apply knowledge of letter-sound relationships, including knowledge of letter patterns or to correctly pronounce written words (Kelly, 2020).
- *Fluency*: the ability to read a text easily with accuracy, speed, expression, and comprehension (Elish-Piper, 2010).
- *Pandemic*: the outbreak or widespread of a disease (Merriam-Webster Online Dictionary)
- *Phonemic Awareness*: the ability to hear and manipulate the sounds in spoken words and the understanding that spoken words and syllables are made up of sequences of speech sounds (Yopp, 1992).

- *Read 180*: A blended learning reading intervention that builds reading comprehension, academic vocabulary, and writing skills for struggling students in Grades 4 and up (Houghton Mifflin Harcourt, 2020).
- *Reading intervention*: activities and strategies that help struggling readers develop their ability to read (Houghton Mifflin Harcourt, 2020).
- *Reading on grade level* indicates the readability of the text by grade and reflects the grade level at which a student reading on grade could read the book independently (Scholastic, 2020).
- *Scaffolding*: support which learners receive in their interaction with parents, teachers, and other ‘mentors’ as they move towards new skills, concepts, or levels of understanding (Wood, Bruner, & Ross, 1976; Vygotsky, 1978).
- *Sight word recognition*: the ability to recall or recognize words that most frequently occur in text and are learned through a process of memorization (Dolch, 1936; Meadan, Stoner, & Parette, 2008).
- *Vocabulary acquisition*: any process in which word knowledge is gained through a variety of methods (sight word recognition, affixes, context clues, etc.) (Beck & McKeown, 2007).

Significance of the Study

This study set out to examine the perceptions of teachers in 3rd through 5th grade regarding the implementation of the Read 180 reading intervention program during the COVID-19 pandemic. That problem was how to continue to provide intense reading interventions to students who are one or more grade levels behind with reading during the COVID-19 pandemic while brick and mortar schools are closed. There has been a great emphasis placed on increasing

reading proficiency in schools by addressing early literacy (Zhu, Loadman, Lomax, & Moore, 2010). Research has shown that providing interventions in the early elementary grades has proven to be effective in closing the gap in reading (What Works Clearinghouse [WWC], 2007; Zhu, Loadman, Lomax, & Moore, 2010). The literature reviewed provided evidence that there was a need to provide alternative forms of reading instruction (Berkeley, Bender, Gregg Peaster, & Saunders, 2009; L. Fuchs & D. Fuchs, 2007; Smith 2012). This study adds to the body of knowledge in that it addresses gaps in the literature in regards teachers' perceptions of implementing a new reading intervention program, Read 180, as an effective alternative form of reading intervention during the current pandemic when schools are closed, and students cannot benefit from in-person instruction.

This study is significant in that it reveals the need for change in the training and preparation to implement future instructional programs during times of emergency school closures. The interviews provided insight into what teachers' concerns and ongoing training needs for Read 180 to district leaders in which the study takes. Gunter and Reeves (2017) found that consistent and ongoing professional development, teachers' beliefs, and teacher's instructional strategies can have a significant impact on student learning outcomes.

Additionally, in terms of educational policy. This study revealed a need to further educational policy. This study has revealed the need for policy changes regarding how online programs are implemented during times such as the COVID-19 pandemic. Consideration to the learning needs of teachers should be embedded into any training or implementation of a program such as Read 180. Policymakers will have more knowledge of what implementation of a program like Read 180 entails.

Summary

The purpose of this qualitative case study was to examine teachers' perceptions of the implementation of the Read 180 program during the COVID-19 pandemic. Because schools received different professional development coaching sessions, this study is designed to obtain the perceptions of teachers regarding the effectiveness of professional development for the implementation of the Read 180 program. One data collection method will consist of open-ended interviews. These interviews were conducted via Google Meet or Zoom. Document analysis will serve as the second form of data collection. The responses from the semi-structured interviews were coded using thematic coding. The significance of this study is that distance education, blended learning models are necessary in the wake of global and national emergencies, especially during this current pandemic. Schools have been forced to close and the creation of instructional delivery models is important for equity for all students. This research has the potential to offer insights into the implementation of the READ 180 programs and programs like it.

CHAPTER II: LITERATURE REVIEW

The purpose of this qualitative case study was to explore elementary teachers in grades 3-5 perceptions of implementing the Read 180 program in a Georgia grades 3-5 elementary school during the COVID-19 pandemic. During the COVID-19 pandemic, there was an immediate need for teachers to shift their pedagogical approaches to tackle new challenges in online learning (Dhawan, 2020). Therefore, the preparation of educators to teach potentially impacts the quality of the implementation of instruction provided in blended and online learning courses (Gurley, 2018). In this chapter, relevant studies have been reviewed to determine the participants' perceptions.

This chapter contains studies related to this study. In addition, a historical account of reading education is included. Further, the articles in this literature review provide evidence pertaining to effective reading instruction, the essential of reading interventions, and the components of technology associated with facilitating online or blended learning programs during the COVID-19 pandemic. Furthermore, the literature review provides insights on programs similar to the Reading 180 reading intervention program. Additionally, gaps in the literature are noted as the basis of establishing the problem for this study and guiding the search for other studies.

The review of literature is presented in several domains. The history of reading instruction and reading interventions outlines reading from the alphabetic principle to whole word reading. The theoretical frameworks of Mezirow's Transformative Learning Theory (1978) and Piaget's Constructivism (1960) is outlined in the second domain. The Educational Technology domain outlines blended learning, adaptive personalized instruction, and blended learning as it relates to this study. Additionally, the Reading Program domain discusses the components of I-Ready Reading, Open Court Reading (Imagine It!), Reading Wonders, and

Lexia Core 5, which are similar to Read 180. Interferences to reading was outlined in the literature review in regards to system of meaning, system of language, system of print, and motivation. Read 180 was discussed independent of the other programs, since it is the one under study. Moreover, Literature regarding teaching during the COVID-19 pandemic was presented in Chapter II. Professional Development in Education was discussed in terms of online professional development in education, professional development for reading, and online professional development for reading.

Historical Overview of Reading

Reading has historically been and currently is evident in all aspects of education (Rose, 2007). The teaching and learning of reading have been a long-standing tradition in the United States educational system (Venezky, 1986). Reading materials and the purpose of learning reading was to pass on Christian, Protestant, and Puritan religious principles (Barry 2008; DiObilda & Petrillo, 2020) During the 1600s, methods of reading instruction (a variety of texts, such as primers, spellers, and readers) were incorporated due to a growing concern with students who struggled with reading (Patterson et al, 2011). In 1607, The New England Primer was written by Benjamin Harris and was the first schoolbook of America that taught the alphabet by moral rhymes (sutori.com, n.d.). Subsequently, children continued to be taught through memorization of the alphabet and corresponding sounds to letters (Halford, 1997).

The reading gained attention in the nineteenth century (DiObilda & Petrillo, 2020). New methodologies were developed as reading instruction progressed. The alphabetic method was the first formal reading instruction taught using hornbooks, which contained religious instructions (Barry, 2008). A hornbook was a sheet that contained letters, syllables, and prayers mounted on a wooden shaped tablet (Britannica, 2017). The alphabet method of learning letters moved from

learning letters and their corresponding sound recognition to the learning and pronunciation of syllables. Eventually, the alphabetic method evolved into word recognition, sight word recognition, and oral spelling was the goal of the alphabet method (DiObilda & Petrillo, 2020). However, the alphabetic method of reading instruction proved problematic because the silent letters with more than one sound were difficult for students to master (Dobbs, 1967). Noah Webster introduced the emphasis on spelling which included rules for spelling, pronunciation, the alphabet, syllables, and consonant combinations (Barry, 2008; as cited in DiObilda & Petrillo, 2020). In 1783, Webster published his book, *American Spelling Book*, in which he stressed the importance of oral reading. (Veatch, 1998, p. 53; DiObilda & Petrillo, 2020).

The advancement of reading education occurred during the Industrial Revolution (1760-1840) (Dodds, 1967; University of Texas, 2015). The focus of reading changed from a religious aspect to nationalism (Dodds, 1967). The 1800s introduced new additions to reading instruction (Nichols, 2009). During this time, reading instruction primarily focused on the ability to read aloud with expression and fluency (Rupley, Nichols, Raisnski, & Paige, 2020). The word method introduced by Horace Mann rejected the learning of sounds and focused on whole word recognition (Nichols, 2009; Parker, 2019). In contrast to past research on reading instruction, the work of Horace Mann, Rousseau, and Pestalozzi during the 1820s stressed students were failing to find meaning, which gave rise to the beginning work of reading comprehension (Barry, 2008). While in 1860, McGuffey introduced the concept of basal readers where there was a different text that addressed varying graded levels and concepts (Nichols, 2009). Basal readers are still used in today's reading classrooms, although the context and concepts changed due to societal and educational needs of incorporating whole language and literature-based reading and writing (Nichols, 2009).

The end of the 20th century brought new changes to reading instruction. In 1910, the emphasis from oral reading skills to silent sustained reading with the inception of normed-referenced tests that measured reading proficiency (Ortlieb, 2012). During this time, the United States entered World War I (Scammacca, Roberts, Cho, Williams, Roberts, Vaughn, & Carroll, 2016) In 1917, Thorndike answered the question of what constitutes reading (preceden.com, 2021). Later in 1938, Rosenblatt's reader response theory emerged, which added the assumption that meaning is constructed through the interaction of the reader with the text (Mart, 2019).

The 1900s changed the emphasis from oral reading to silent reading as a catalyst to reading assessment (Rupley, Nichols, Raisnski, & Paige, 2020). Within this time period, the U.S. military found that a huge number of soldiers could not read or comprehend simple instructions, which brought the need to address reading deficits to the forefront of education (Scammacca et. al, 2016). In addition, the need for reading diagnostics and) In remediation of reading skills with Arthur Gates' Improvement in Reading in 1927 (Ortlieb, 2012). At its core, Gates' work concluded that students with reading deficits failed to learn foundational reading skills (Smith, 2021 Ortlieb, 2012). Moreover, this expanded Thorndike's (1914) research that found the need for normed assessments to identify students who struggle in reading (Scammacca et. al, 2016). Later in 1940, reading comprehension tests, which assessed the level and speed of reading, were refined (preceden.com, 2021). In 1958, President Lyndon B. Johnson created the Head Start program to provide early learning and development, provide healthcare services, and promote family well-being in an effort to provide early literacy intervention programs to low-income families (acf.hhs.gov, 2020).

In effect, phonics instruction became more prevalent from 1965-1975 with the introduction of analytic phonics, in which the student learns the words and then associates

sounds to those words (Parker, 2019). Students were taught to combine letters into words and then use these units to build simple sentences (DiObilda & Petrillo, 2020). From 1950-1965 was the Era of Conditioned Learning, which gave rise to the look-say approach promoted through the Dick and Jane reading text (Alexander & Fox, 2004; Gray, Artley, & Arbuthnot, 1951). Gray et. al (1951) used these readers to practice controlled vocabulary instruction and synthetic phonics drills (Alexander & Fox, 2004). The year 1965, also, gave rise to the linguistic approach to reading, which focused on learning patterns of spelling and sound correspondences (preceden.com, 2021). Also, in 1965, Title I of the Elementary and Secondary Education Act was created to close achievement gaps between low- and high-performing students, provide targeted resources for instruction, ensure high-quality assessments, and meet the needs of low achieving students (www2.ed.gov, 2004)

In 1967, Jeanne Chall began to give insight to the need for a connection between all instructional methods including phonics, word recognition, syllables, and sight words (Nichols, 2009; as cited in Parker,2019). California was one of the first states to develop an English Language Arts framework for balanced literacy instruction and an assessment to look at reading proficiency (Barry, 2008; as cited in Parker, 2019). In the late 1980s, changes were made in the reading curriculum based on schooling, societal issues, culture, and historical perceptions (Patterson, Cormack, & Green, 2012). From the period of 1997-2000, the National Reading Panel established that reading instruction should include phonics and Whole Word Reading should begin as early as kindergarten (Parker, 2019). In 2004, the International Reading Association added to the standards for reading instruction that the historical perceptions must be linked to contemporary methods and materials of reading instruction.

Theoretical Framework

Merriam and Tisdell (2016) defined a theoretical framework as the underlying structure, scaffolding, or frame for the study. “The theories behind the frameworks for this study are interrelated concepts, definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, to explain and expect the phenomena,” (Kivunja, 2018). This study was grounded in Mezirow’s (1978) transformative learning theory and Piaget’s (1970) constructivist learning theory.

Mezirow’s Transformative Learning Theory

Jack Mezirow (1997) defined transformative learning theory as a theory emphasizing how adult learners interpret and reinterpret their past experiences to make meaning of their learning. Furthermore, this theory is premised on the idea that this group of learners take the time to critically reflect on what they have learned (Meizrow, 1997). The transformative learning theory was born from a study Mezirow conducted of U.S. colleges and work re-entry programs for women (Kitchenham, 2008). Mezirow found that the participants of his study had undergone a “personal transformation” during their re-enrollment and matriculation in varying adult learning programs (Kitchenham, 2008). Jack Mezirow (1978) first articulated the transformative learning theory to describe a structure of adult learning where change is affected through a frame of reference from the adult learner’s assumptions, expectations, and beliefs (Colmon, 2019). This frame of reference transforms and delimits learning expectations, perceptions, cognition, and feelings (Mezirow, 1997). Moreover, transformative learning is often characterized by a shift of consciousness in which individuals think about the world around them (TEAL, 2011).

In addition, Mezirow presented 10 phases of transformative learning which include the following: a distorted dilemma, self-reflection, a critical assessment, exploring new roles,

planning a course of action, acquisition of new knowledge, trying new roles, building self-efficacy, and integration on new knowledge (Kitchenham, 2008). Initially, transformative learning takes place when there is a distorting dilemma, which challenges the learner's perspective in such a way that causes reflection and critical thinking to adjust their beliefs (Valamis, 2020). In this instance, “a meaningful perspective can no longer comfortably deal with anomalies in a new situation, as a result a transformation occurs” (Mezirow, 1978). The dilemma can be a situation where what was thought to be true in the past no longer is credible (WGU, 2020). The concept of distorting dilemma was influenced by Freire’s conscientization of 1970 (Kitchenham, 2008). Gathering perceptions of situations pertaining to changes and restrictions to traditional ways of providing training to teachers who provide reading instruction because of the COVID would serve as a distorting dilemma in this study. To answer the research questions of this study. Teachers will be asked to assess their previous assumptions or beliefs, regarding providing reading intervention to struggling students and acquiring training solely online.

Mezirow’s (1978) transformative learning theory evolved over time. Around 1985, Mezirow’s work on transformative learning added two domains in which learning takes place, which are the instrumental domain and communicative domain (Kitchenham, 2008; Wang, 2018). The instrumental domain’s goal is to manipulate and control the environment or the people to improve self-efficacy and performance (Mezirow, 1997). The instrumental domain fits this study because new knowledge acquired through continuous virtual training by the HMH coach provides the control of the implementation of the program to improve the teachers’ self-efficacy in terms of using the program for reading intervention instruction. Teachers are also provided with training materials (user guides, reference materials, simulator guides, etc.) by HMH. which are controlled by the company. Moreover, the instrumental domain strives to

understand how learners can best learn the information (Wang, 2018). This aligns with this study since the professional development related to the implementation of the Read 180 program is centered around teachers being able to gain information, gain real-time experience using simulators for both the teacher experience.

Furthermore, communicative learning involves how individuals communicate their feelings, needs and desires (WGU, 2020). Additionally, this domain includes understanding, describing, and explaining intentions, values, and ideas (Wang, 2018). The communicative domain of transformative learning fits this research because through interviews teachers will be asked about their perceptions regarding the effectiveness of the information provided during monthly coaching sessions to prepare them to implement the program with efficacy. The instructional coach serves as a facilitator and provides opportunities for reflection and conceptual understanding of the learning that takes place in each training session (Valamis, 2020).

In addition to the previous alignment of aspects of this research, this study fits Mezirow's transformative learning theory, because the professional development that the teachers received prior to and during the implementation phase of Read 180 will be provided by an instructional coach employed by HMH to change and improve how reading interventions are provided to students who struggle with reading. After reviewing data from Read 180, teachers can reflect and collaborate on instructional practices (HMH, 2020). With the help of the HMH coach, teachers can create a new action plan to help students succeed. Based on the outcome of the training, a new course of action is created that will lead to teachers building self-efficacy regarding the implementation of Read 180.

Constructivist Theory

The second theory that grounds this study is the constructivist learning theory. The constructivist learning theory states “knowledge is best gained through a process of reflection and active construction in the mind” (Kimmons & Charkulu, n.d., p. 20; Mascolo & Fischer, 2005; Shah, 2019). Moreover, this theory holds the belief that learning does not merely take place with information being repeated multiple times (Aldoobie, 2015). There are several characteristics of the constructivist theory as it relates to learning (McLeod, 2019). These characteristics are that students are constructing knowledge from prior knowledge, the information for lessons is presented in multiple perceptions, learning is presented in a realistic context, there is a form of collaborative learning embedded, and students should be able to reflect on their learning (McLeod, 2019; Shah, 2019). It is the approach that cognitive development is based on the development of mental constructs from their experiences (Olusegun 2015). Teachers must know where the student’s current development lies to use constructivist teaching to help students create new meanings based on information learned (Powell & Kalina, 2009). In addition, Shah (2019) states the constructivist learning theory sets out to meet the needs of students by allowing them to explore with the teacher serving as a facilitator of knowledge rather than just disseminating information.

There are several psychologists who shaped the constructivist learning theory and shared a common belief that learning starts with the experiences in the classroom (Kimmons & Charkulu, n.d., p. 20, UCD, n.d.). They were Dewey, Piaget, Vygotsky, and Bruner (Kimmons & Char, n.d.). Constructivism was first coined by John Dewey in 1933 (Kimmons & Charkulu, n.d., p. 21; UCD, n.d.) Dewey believed that learning should engage in real-world experiences where students should be able to think for themselves (Guttek, 2014; Williams, 2017, UCD, n.d.)

Dewey denounced repetitive, rote memorization of facts given by teachers (Duffy and Cunningham, n.d.). Dewey saw students as unique individuals who learn by doing, which is how they construct new knowledge (Williams, 2017).

Jerome Bruner was an American psychologist who added to the constructivist learning theory by studying the structure of learning (Jiang & Perkins, 2013). Bruner (1960) presented the constructivist theory in terms of teaching, language, and instruction (UCD, n.d.) Bruner asserted meaning is built from new concepts based upon present knowledge and active practice (Smith & Robinson, 2020). Bruner's perspective on constructivism explains that learning happens through active student involvement in a shared learning environment (Khanal, 2014; Smith & Robinson, 2020). Additionally, Bruner asserts that learning should reflect readiness, spiral organization, and going beyond the information that is given (UCD, n.d.).

Piaget (1972) shared similar views as Dewey (Kimmons, n.d.) They both believed in a student-centered approach to learning (Kimmons & Charkulu, n.d., p. 20; UCD, n.d.) Piaget, also, rejected passive learning (Genovese, 2003; McLeod, 2018). Piaget infused child development into the constructivist theory by suggesting that children's cognitive development changed as they got older (Powell & Kalina, 2009; McLeod, 2020). Piaget (1972) suggested that students go through stages of development which include assimilation and accommodation (Powell & Kalina, 2009; McLeod, 2020; UCD, n.d.). These stages include sensorimotor, preoperational, concrete operational, and formal operational (McLeod, 2020; Powell & Kalina, 2009). In the classroom, constructivism looks like students engaged in active learning (experiments, real-world problem solving, collaboration) (Powell & Kalina, 2009). Experiences are provided where multiple modes of learning are present, and students are given ownership of the learning process (Olusegun 2015).

Vygotsky's (1978) work was centered around child development and socialization (Liu & Chen, 2020; Powell & Kalina, 2009; Shah, 2019). His work rejected Piaget's in that Vygotsky felt socialization was necessary to learning (Liu & Chen, 2020; UCD, n.d.). Vygotsky added to the constructivist learning theory by asserting that learning and development occur in a particular social or cultural context, or the type of activities and situations, in which people exist and grow (Kincheloe, 199, p. 9; Shah, 2019). Furthermore, Vygotsky believed that more could be achieved through the help and interaction of others (Kimmons & Charkulu, n.d.).

Blended learning has increased within the last year (Afify, 2017). conducted a study to provide knowledge-based regarding digital learning in terms of the constructivist learning theory. The use of blended learning fits the constructivist learning theory because it is an open-ended learning environment where learning is constructed based on the interaction of the user (Cronje, 2020). Furthermore, blended learning fits into the constructivist theory because the computer provides real-world simulations of learning, and the teacher facilitates learning (Meir, 2016). Exploration in an e-learning environment, learning activities that are used to direct the student toward objectives and deepen the learning by building concepts of their own (Olusegun 2015). The presence of an evaluation tool that assesses the learner's work and building collaborative learning among students by building cooperative knowledge are inclusive in the construction (Olusegun 2015).

Tillman (1998) studied the use of the internet as a constructivist environment for learning and the ramification of technology-infused constructivism. He noted that there were numerous amounts of free and fee-based resources for teachers on the internet. That can be used through synchronous and asynchronous instruction (Tillman, 1998). Educational technology incorporates collaboration, adaption, interaction, and reflection, which are aspects of constructivism (Thota &

Negreiros, 2019). The thought behind technology and constructivist learning is that critical thinking is developed because students are spending more time analyzing information via an online platform that facilitates personalized learning (Tillman, 1998).

Also, the constructivist theory speaks to professional development. Ruey (2010) stated that a constructivist approach to learning explores the ‘why’ and ‘how’ of learning. First, professional development is active learning, in which the teachers assume the role of the learner and construct new knowledge based on their past and present experiences with instruction (Schwartz, 2018). The participants of this study will be engaged in synchronous and asynchronous online training in which they will have to interact with the trainer, training videos, and simulators of both the teacher and student experience for Read 180. These teachers will have to change their perceptions and practice of providing reading instruction and interventions. Rout and Behera (2014) assert that constructivism is evident in teacher professional development because of the need to rethink and restructure education in terms of practice due to new trends in education and society. This study is aligned with this assertion in that the professional development needs of the teachers had to be restructured to a virtual format to prevent the spread of the COVID-19 virus. Successful PD is affected when the learning is designed with the needs of the trainee and keeping their experiences in mind (Ruey, 2010).

Educational Technology

Technology is evident in the everyday lives of children across the world (McDermott & Gormley, 2019). Children today are termed “digikids” as technology has become important in their lives both at home and at school (Yang, Kuo, Ji, & McTigue, 2018). Education technology is widely defined as a variety of electronic tools and applications (computer-assisted instruction, integrated learning systems, and use of video and embedded multimedia) that help deliver

learning materials and support the learning process in K-12 classrooms as components of reading instruction” (Cheung & Slavin, 2013). In addition, educational technology is a systematic method of implementing modern technology which aims to optimize educational output by regulating instruction, the actions of students, the practices of instructors and student interconnections (Balalle & Weerasinghe, 2021). Saettler (2004) said that educational technology is concerned with the systematic way of designing, evaluating, and applying the process of teaching and learning.

The United States Department of Education’s National Educational Statistics Report from the Fall of 2008 (2010) reported that 100% of all schools had technology with internet access with a 3.1 ratio of technology per student, however, only 91% of these computers were used for instruction. Although technology cannot replace a teacher, it has the ability to transmit learning in various forms (Mukherjee & Hasan, 2020) The inclusion of technology in education can benefit student achievement by increasing student engagement, increasing student motivation to learn, it reduces cognitive load and promotes retention of learning, and increases the flexibility of instruction (Jamshidifarsani, Garbaya, Lim, & Blazevic, 2018). While educational technology has had a positive impact on reading since its inception, the effect size is minimal (Cheung & Slavin, 2013).

Since the 1980s, Educational technology has been used to support learning (Voet & Weaver, 2017). Educational technology tools have evolved not only in terms of the user but also in terms of the device (Voet & Mete, 2017). Historically, the main device considered for educational purposes was the computer but has been extended to whiteboards, tablets, programmable toys, cameras, talking books, etc. (Jack & Higgins, 2019). Huang, Sampson, and Chen (2013) found that mobile devices and game-based learning have had an upward trend since

2003. Furthermore, educational technology tools have evolved in terms of the teacher with the use of Padlet, Dropbox, and Kahoot just to name a few (Riegel, & Mete, 2017). For this literature review, educational technologies are placed into the following categories: online instruction, computer-assisted instruction (CAI), and adaptive personalized instruction (API).

Online Instruction

Online learning has increased over the last decade with more than 400,000 students enrolled in a full-time K-12 online learning school, and an estimated 2.5 million K-12 students are enrolled in some supplemental courses (Besley & Beck, 2017). Online learning is defined as a form of distance education where technology mediates the learning process, teaching is delivered completely using the internet, and students and instructors are not required to be available at the same time and place (Joksimović et. al, 2018). Liang and Chen (2012) stated any definition of online learning must consider what is being taught, how the learning occurs online, and implications for flexibility, access, interaction, and collaboration.

Online instruction was first developed in the 1960s and 1970s with the creation of the mainframe computer (Pappas, 2015). Live training via television was introduced in the 1980s (Pappas, 2015). In 1981, the first fully online courses were utilized, and it was evident that online instruction would provide a new facet of teaching and learning (Joksimovic et. al, 2015). States within this country began the practice of “virtual” schooling to begin connecting students in a synchronous environment as early as 1992 (Keene, 2013).

The increase of online learning has grown due to its ability to reach diverse learners (Beasley & Beck, 2017). Research has found several advantages and disadvantages to online learning (Dhull & Sakkshi, 2017). Online learning’s flexibility has emerged into different types of formats such as hybrid, asynchronous learning, synchronous learning, blended learning, and

web-based learning just to name a few (Means, Toyama, Murphy, Bakia, & Jones, 2010). In addition, the flexibility of online learning is suited to students who choose or cannot attend in-person learning, and it can prove to be cost-effective in terms of purchasing textbooks (Means, Toyama, Murphy, Bakia, & Jones, 2010). Aspects of online learning such as personalization of instruction that allows students to direct their own learning increase students' self-esteem and motivation (Dhull & Sakkshi, 2017).

However, there are some disadvantages that have been associated with online learning (Liang & Chen, 2012). Dhull and Sakshi (2017) noted challenges with the lack of face-to-face communication with students, which can create misunderstandings between students and teachers. Also, the fast-paced changes to technology cause educators to experience technology gaps (Davis et. al, 2019; Joksimovic et. al, 2015; Lian & Chen, 2012). In a different study, Davis et. al (2019) stated obstacles with expectations that are difficult to achieve.

Computerized Reading Instruction

Computer-assisted instruction (CAI) is on the rise in schools although further research of standards and skills (Bhatti, 2013). CAI is defined as any instruction that uses a computer as the central component to support instruction and learning or checks a learner's knowledge (Anohina 2005; Root, Stevenson, Davis, Geddes-Hall, & Test, 2016). Moreover, the cognitive learning theory suggests that CAI provides repeated practice, allows students to work at their own pace, and provides the students with immediate and consistent feedback, which translates into increased information retention (Fenty, Mulcahy, Washburn, 2015). Computers have been adapted to meet the individual needs of students to remediate and accelerate (Cheung & Slavin, 2013).

CAI has been utilized in different means in education. McDermott and Gormely (2015) found that the most common uses of CAI in the classroom were the following: (a) multimedia displays via video, audio, and images of literacy skills; (b) interactive or physical movement via a Smart Boards; (c) focusing student attention to contexts such as spelling and vocabulary; (d) displaying of shared text for choral reading; (e) and use completing work independently. Bhatti (2013) found through a yearlong study that literal, inferential, and evaluative reading skills can be greatly improved using CAI. The one-to-one interaction and personalization possible with CAI on instruction had positive effects on student outcomes (Rose & Beck-Hill, 2012). Tying incentives to engagements was found to be important to enhancing student motivation with struggling students when working on CAI (Council et. al, 2016).

CAI for reading instruction has been noted as being attention-gathering because of its graphics and game-like features, provides immediate rewards, includes images and content that engages students, which makes complete practice and task enjoyable (Saine, Lerkkanen, Ahomen, Tolvanen, & Lyytinen, 2011). Instruction provided by these CAI programs can provide differentiated instruction in numerous ways for numerous students that may be difficult for the teacher to reach and can preserve the teacher's time and attention to other responsibilities within the classroom (Gibson et. al, 2011). Also, computerized-assisted instruction has been found to be beneficial in reading instruction and reading intervention for at-risk students (Rose & Beck-Hill, 2012; Saine et al.,2011). The researchers, also, stated that students should be followed through the third grade and receive intense instruction for any remediation to be effective (Saine et. al, 2011).

Adaptive Personalized Instruction

A static learning environment is defined as one where a one size fits all manner of teaching is disseminated without the consideration of student differences (Wauters, Desmet, Van de Noorgate, 2010). Adaptive personalization learning (API) is a software platform that is driven by artificial intelligence and has the capability of adjusting to a student's learning styles and needs through the monitoring of the user's activities and interpreting the user's needs based on domain-specific models, activities, available knowledge of the user, and the subject matter to be taught for the purpose of facilitating the learning process (Cai, 2018; Kakish, Robertson, & Jonassen, 2020). "Adaptability is the ability of a learning system to provide each learner with appropriate learning conditions to facilitate his or her own process of knowledge construction and transformation," (Chieu, 2005; Kara & Sevim, 2013).

Entwistle's (1997) approaches and study skills inventory for students and Vermunt's inventory of learning styles suggest that learning tactics and behaviors can change based on varying situations when presented to students (Truong, 2016). A technology revolution occurred during the early 1950s, which introduced a new platform of teaching machines called adaptive systems (Kara & Sevim, 2013). API is infused with instruction, which emerged out of Skinner's "teaching machines" and program theory teaching (Wlekininski, 2017, Peng et. al, 2019). Furthermore, Technology evolved educational practices with the development of such systems as e-learning, and smart learning applications and devices provided the capabilities of cloud computing and learning analysis (Peng, Ma, & Spector, 2019). Contents and resources that are needed by the student are anticipated by the interface as demonstrated by their performance level (Murray & Perez, 2015; Forsyth et. al, 2016). The API system is complex in that it can provide individual needs, or personalized learning, for students (Kara & Sevim, 2013).

In the case of API, adaptation occurs at four levels (adaptive interaction, adaptive course delivery, content discovery and assembly, and adaptive collaboration support) (Paramythis, & Loidl-Reisinger, 2004; Murray & Perez, 2015). The process of adaptive interaction occurs at the level of user interaction with the system where the content is not altered, but careful consideration is made in terms of graphics, font size, and color (Paramythis, & Loidl-Reisinger, 2004; Murray & Perez, 2015). Furthermore, course delivery provides personalization of learning for the user based on an initial interaction such as an assessment, while content discovery and assembly pull content and materials together for the user (Paramythis, & Loidl-Reisinger, 2004). Also, instruction is mapped and sequenced in real-time (Murray & Perz, 2015). Artificial intelligence is used to simulate teacher interaction (Murray & Perez, 2015). Lastly, collaboration support allows communication between the user and the interface, which promotes cooperative learning and alleviates isolation of online and remote learning (Paramythis, & Loidl-Reisinger, 2004). Adaptive and personalization work in concert and relationship with one another within the e-learning environment (Peng et al., 2019). Adaptivity differs from personalization because adaptivity refers to the interaction of the system user beyond responses (Newton, Stokes, & Brian, 2015; Forsyth, Kimble, Birch, Deel, & Brauer, 2016).

Research has shown added benefits of using adaptive technology within the classroom (Fischman, 2011; Kara & Sevim, 2013). First, adaptive technology can provide teachers with real time and empirical data regarding student performance, usage, and progress toward learning goals (Moltudal, Hoydal, & Krumsvik, 2020). It can, also, support and improve metacognition and self-regulated learning (Moltudal et. al, 2020). In addition, adaptive technology can be used in blended learning formats (Kara & Sevim, 2013). Programs that utilize adaptive technology puts a personal tutor in the hands of the student (Kara & Sevim, 2013). Its intended use has, also,

proven to provide a more accurate assessment of student assessment and increased rates of retention because of its student-centered approach (Forsyth et. al., 2016).

However, there are opposing opinions as it relates to adaptive learning. Afify (2018) reported that while adaptive learning has provided students with the ability to Krasnik self-organize their studies in an E-learning environment, these students often suffer from the over-cognitive load. Clark (1983) stated that educational technology did not have a significant impact on student learning under any condition because it is no more than mere vehicles that deliver instruction and has no influence on student achievement. Moreover, the matching of technology with pedagogy and rigor has created challenges for adaptive learning (Capuano & Caballé, 2020). Also, learning paths created through diagnostic assessments can create learning paths that have skipped content information that the student has not been exposed to and needs to master the learning expectations of the program (Kok, 2020).

Blended Learning

Blended learning was introduced as the integration of classroom face-to-face learning experiences with online learning experiences in the early 2000s (Graham, Henrie, & Gibbons, 2014). Staker and Horn (2011) defined blended learning as instruction that includes some form of face-to-face interaction with a teacher along with student-led digital activities in which the student retains some control over the content, pace, time, and location of their learning. The definition of blended learning was altered to specify that much of the learning is supervised and takes place via the internet (Staker & Horn, 2012). Blended learning is the integration of classroom face-to-face learning experiences with online learning experiences (Graham, Henrie, & Gibbons, 2014). Halverson et. al (2017) argued that a curriculum cannot be considered blended unless 30% of the content must be online. This is the opposite of Staker and Horn (2014)

who argued that this percentage may be too narrow to encompass all learning that needs to take place.

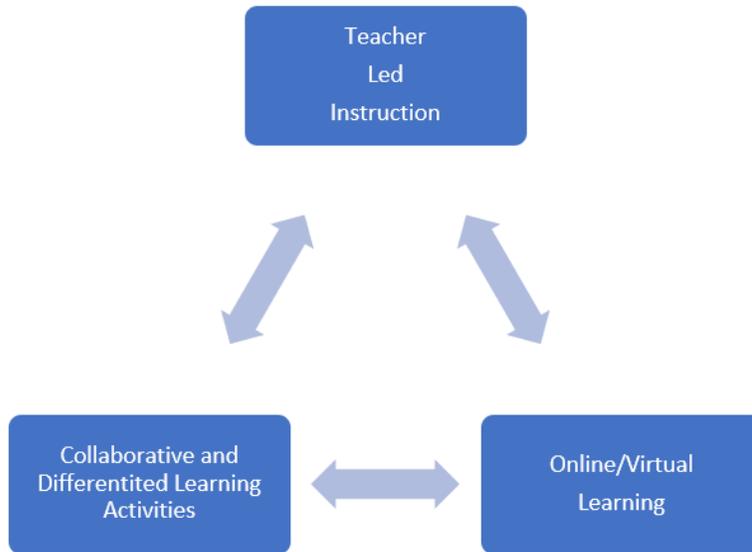
The goal of blended learning is to create a seamless transition in learning that allows a sense of co-presence (Angelone & Warner, & Zydney, 2020). The use of this type of technology integration has the potential to create fluidity in learning (Council et. al, 2019). Blended learning provides the means for continuous learning although in-person instruction is not available and helps to overcome barriers of time, place, and presence (Mukherjee & Hasan, 2020). There are several models for blended learning. Graham et. al (2014) says the case for blended learning is the answers to the following questions:

- What is being blended?
- What instructional modalities should be considered?
- What instructional methods will be used? (Graham et al., 2014)

“One common feature of the K-12 model for blended learning is that when a course takes place partly online and partly through other modalities, the components are usually connected “(Staker & Horn, 2012). A consideration for educators is time, place, the students’ learning path, and pacing (Saker & Horn, 2012). A blended learning module may consist of the use of the software for lectures, online discussions, and tutorials (Wong, Tatnall, & Burgess, 2013). A synchronous form of this model allows for students to be connected to both the instructor and other students, thereby, removing the lack of personal connections that are missed when removed from the school building (Warner & Zydney, 2020). In contrast, asynchronous learning occurs outside of real-time direct instruction by the teacher. Figure 1 shows an example of the K-12 design for blended learning.

Figure 1

K-12 Traditional Blended Learning Model



While research regarding the potential benefits of blended learning is limited, especially in elementary school settings, blended learning has been found to increase student potential when it is designed properly (Warner & Zydney, 2020). Blended learning will become the predominant model for future instruction according to Halverson, Spring, Huyett, Henrie, and Graham (2017). They stated that blended learning is moving education to be more personalized (Havlerson, 2017). While commonly used in higher education, blended learning is becoming more prevalent and widely used in primary and secondary education (Warner & Zydney, 2020).

There have been varying results from previous studies using blended learning. The effectiveness of blended learning is steeped in many factors such as the amount of human interaction on the part of the student and teacher, the amount of time spent on the program, and the intensity of program adoption (Wong, Tatnall, & Burgess, 2013). An effective blended course integrates the best pedagogical aspects of the curriculum into online components (Keene, 2013). Council et. al

(2019) assessed reading achievement using DIBELS after using the blended learning program, Reading RACES, and found that students made gains; however, the gains were no more than two years' progress to reach their end of the year goals in second grade. Their study's participants were students in an urban school district and from a low socio-economic background (Council et.al, 2019). Wong, Tatnall, and Burgess (2013) found blended learning to be less effective than face-to-face lectures and tutorials. Keene (2013) found that the best-blended learning models include teacher design and planning because they know what is right for the students they teach. There is, also, a growing concern for the meeting of the rigor of the standards with the use of computerized reading programs (Cheung & Slavin, 2013). Research has noted that when students perceive that they were not good readers, the negative perceptions and stereotypes could impede student achievement when working within a blended learning model (Council et. al, 2016). One-to-one student interactions were noted to contribute positively to the students' performance in blended learning environments. (Rose & Beck-Hill, 2012).

Reading Programs

It is necessary to provide students with the tools needed to become successful and overcome difficulties (Dorsey, 2015). Core reading programs have been a consistent part of reading instruction since the nineteenth century (Jaeger, 2019). It has been found that over 73.3% of elementary schools use some type of core reading program that includes basal of some sort and a teacher manual that guides student instruction (Jaeger, 2019). The expectation of implementing a core reading program is that the teacher uses it with fidelity meaning that there is no layering, substitution and that the program is used as intended (Brenner and Hiebert, 2010).

With the growing use of technology in the classroom, there has been little research done in computer-assisted instruction and reading interventions (National Reading Panel, 2000). There

are several CAI reading intervention programs that have been implemented to provide support for struggling readers (Stetter & Hughes, 2010). Particularly, including CAI for reading intervention has been found to increase student motivation, the use of the technology can decrease the cognitive load, it can provide personalized tutoring when there are limited human resources (Jamshidifarsani, Garbaya, Lim, & Blazevic, 2019). The National Reading Panel (2000) stated that the use of CAI allows teachers to consistently implement reading interventions for struggling readers (Bennett, Gardner, Cartledge, & Council, 2017). For this literature review, other reading programs that are used for intervention or have intervention components and can lend themselves to blended learning during a pandemic were explored. These programs are I-Ready Reading, Open Court Reading, Reading Wonders, and Lexia Core 5. Furthermore, these blended learning programs are supported by the instruction provided by the web-based instruction while they are out of the school building due to the COVID-19 and they can continue their face-to-face education in the blended learning setting (Gercer, 2013).

I-Ready Reading

I-Ready Reading is a computer adaptive program developed by Curriculum Associates in 1969 (Curriculum Associates, 2019). The program consists of a diagnostic assessment and an individualized learning path (Curriculum Associates, 2019). The diagnostic pinpoints student deficits and provides a customized learning path of instruction for students based on the diagnostic assessment (Swain, Randal, & Dvorak, 2019). The instructional component is designed to provide lessons at the grade level at which they demonstrate deficits to either remediate or accelerate student learning (Curriculum Associates, 2019). The lessons are designed to be used in conjunction with the diagnostic and provide consistent best practices of lessons and scaffolded interventions to build conceptual understanding (Swain, et. al, 2019).

I-Ready Reading assesses and provides instruction in the areas of phonological awareness, phonics, high-frequency words and word recognition, vocabulary development, and reading comprehension (Curriculum Associates, 2020). Curriculum Associates recommends students work on their online lessons for at least 30-45 minutes per week (Durfee, Call, Throndsen, & Nielsen, 2019). The program developers created the Theory of Action (TOA) that is recognized as an important implementation component (Swain, et. al, 2019). These include the following:

- Student access to the program, which includes a personalized dashboard with their diagnostics information, lessons, and progress on lessons.
- Teacher access to the dashboard that provides class, group, and individual student data on diagnostic and lessons; instructional material to remediate or accelerate students during small group or individual instruction; projections and monitoring for growth, parent reports; access to other resources to enhance student achievement.
- Assurance of valid diagnostic scores through best practices given to teachers and students along with video training.
- Long-term district, administration, and teacher support (Swain, et. al, 2019).

Prior research has shown the effectiveness of the I-Ready Reading program. I-Ready Reading asserts that they are closely correlated with state standards (Curriculum Associates, 2019). A study found that the program showed a .80 correlation between Georgia's state assessment, which is the state where this study will be conducted (Curriculum Associates, 2019). The study indicated growth in special student subgroups such as students with disabilities (SWD), English Language Learners (ELL), and those who struggle in reading achievement (Swain, et. al, 2020). The Educational Research Institute of America (ERIA) conducted a large-scale study on the relationship between I-Ready Diagnostic and the 2017 Georgia Milestones,

which found a high correlation between I-Ready Diagnostic and the Georgia Milestones grades 3-12 (Curriculum Associates, 2020). Students that used the program showed higher test scores than those who had not used the program (Curriculum Associates, 2020). Another study conducted by the Utah Department of Education studied the use of I-Ready Reading in kindergarten through third grade. In summary, the study showed a more significant effect size on students' growth for students in kindergarten, first, and second grades, while the effect size was not as significant in third grade (Durfee, M. et. al., 2019).

Open Court Reading (Imagine It!)

Open Court Reading was introduced in 1960 by SRA/McGraw-Hill Education (What Works Clearinghouse, 2014). This reading program was developed to provide reading instruction in the areas of decoding, comprehension, inquiry, and writing for kindergarten through six grades (WWC, 2014). Open Court Reading uses systematic, explicit instruction with a carefully designed instructional sequence along with scaffolded lessons (mheducation.com, 2021). Open Court Reading is explicit in that explanations are direct and clearly modeled, and students know exactly what they are learning (mheducation.com, 2021). The program is divided into the following three progressions: Preparing to Read, Reading, and Responding, and Language Arts (WWC, 2014). The core foundation of the program is that it is phonics-based (Borman, Vaden-Kiernan, Caverly, Bell, Ruiz de Castilla, & Sullivan, 2017).

The Open Court Reading program is heavily scripted and is considered direct instruction (Ajayi, 2005). Program activities are preselected (mheducation.com, 2021). Activities include activating prior knowledge, a read-aloud with discussion, unit investigations, using question/concept board, home connection activities (Ajayi, 2005). Open Court advocates the

grouping of students by ability levels (Ede, 2006). The daily time spent on the scripted lessons requires up to three hours devoted to instruction for both whole and small groups (Ede, 2006).

Program resources include student textbooks, workbooks, decodable readers, and anthologies (WWC, 2014). Diagnostic tools, formal assessment tools, informal assessment tools, and standardized test preparation materials are provided (Borman et. al, 2017). A Foundational Skills Kit, Word Analysis Kit, and The English Language Development Kit are available as supplemental resources (mheducation.com, 2021). Teachers and administrators are provided with professional development throughout the course of the contract for the adoption of the program (WWC, 2014). All resources are available in both English and Spanish (Ede, 2006). All resources are available for online consumption (mheducation.com, 2021).

By 2001, one in every eight schools in the state of California alone used the Open Court program (Ede, 2006). Elliot (2018) conducted a quasi-experimental study that found the Open Court (Imagine It!) Reading program was effective in improving the reading scores on the Texas standardized test for fourth and fifth grade.). In addition, a cluster randomized efficacy trial examined the impact of Open Court Reading on reading achievement in grades 1 through 5 in 5 schools across the country, which revealed a one-year increase in reading levels for students who received instruction using the program the Comprehensive Test of Basic Skills (Boreman, Vden-Kiernan, Caverly, Bell, Castillia, & Sullivan, 2015).

Reading Wonders

Reading Wonders is a balanced literacy program created by McGraw-Hill, which is a multinational corporation (Jaeger, 2019). The National Reading Panel stated that the program includes the five domains of reading phonics, phonemic awareness, vocabulary, fluency, and comprehension (Dorsey, 2015). Reading Wonders prides itself in providing connected literacy

instruction from grades K-6 (mheducation.com, 2021). It is the first reading program that included Common Core State Standards into its curriculum (Jaeger, 2019). The program claims to be student-centered in that it can be adapted to meet the needs of students by providing small group instruction for English Language Learners, gifted students, students with disabilities, and students in need of intervention (mheducation.com, 2021). The authors' goal in the development of the program was to teach the whole child; therefore, the focus areas of the learning include social-emotional learning, habits of learning, and classroom culture (mheducation.com, 2021). This was done with the hope of producing critical thinkers (mheducation.com, 2021). Producing critical thinkers has been proven to foster six behaviors (variety of strategies to understand, being critical when reading, working with others to learn, writing to communicate, becoming a problem solver, success) (mheducation.com, 2021).

Reading Wonders, which utilizes research-based interactive theory to ground instruction, consists of a six-volume teacher's guide, which represents each of the six units of study covered (Dorsey, 2015; Jaeger, 2019). Moreover, Reading Wonders provides weekly assessments based on targeted reading comprehension and language skills and a unit test after six weeks of instruction (Jaeger, 2019). The program can be accessed with hands-on materials or digitally (mheducation.com, 2021). Students have access to an anthology and a writer's workshop via hard copy and electronically. Students are provided with a personalized electronic platform where they can access materials and complete assignments. (mheducation.com, 2021). Audiotapes are provided for each story in the anthology. All texts in the anthology, the leveled readers, and the writer's workshop are accompanied by audio through the online platform (Jaeger, 2019). Jaeger stated that the texts are multicultural so that students can see themselves with the text and they teach lessons that are relevant to the characters' culture. The Reading

Wonders was found to be widely adopted by school districts with low socioeconomic status and diverse populations (Jaeger, 2019).

Teachers are provided with professional development throughout the life of textbook adoption (mheducation.com, 2021). The program provides teachers with the flexibility to design, rearrange, and differentiate learning based on students' needs through their access to a dashboard ((mheducation.com, 2021). Also, teachers can assign electronic copies of materials to students, plan lessons, give feedback, assess student progress, and assign flexible groups (mheducation.com, 2021).

Dorsey's (2015) mixed-methods study found students' reading improved with the use of Reading Wonders on North Carolina's end-of-year Reading 3D Assessment. The number of students that fell below the benchmark decreased while there was a slight increase in the number of students (13% to 26%) by the end of the school year (Dorsey, 2015). Students had, also, mastered more College and Career standards than in previous years (Dorsey, 2015). The Campaign County schools saw positive gains on their state assessments, as well (mheducation.com, 2021). Moreover, Ed Reports (2017) conducted research regarding the alignment and usability of Reading Wonders. The finding from the study showed Reading Wonders is closely aligned with the standards and text quality needed for instruction in kindergarten through fifth grade, but partially meets expectations in terms of building the knowledge of students (edreports.org, 2017).

Lexia Core 5

Another blended reading intervention program is Lexia Core 5. Lexia Core 5 was founded in 1984 by Cambium Learning Group, in an urban school district (Wilkes et. al, 2020). It is blended learning in that it provides technology-based instruction along with explicit

instruction from the teacher (Wilkes, Macaruso, Franzen, & Schechter, 2019). Lexia Core 5 can be accessed beyond the brick-and-mortar walls of a school building (i.e., homes, libraries, after-school programs, and community centers) (WWC, 2009). It is designed to be integrated into the ELA curriculum and can be adapted to station or lab rotation (Kazakoff, Macaruso, & Hook, 2018). Six areas of reading instruction (phonological awareness, phonics, structural analysis, fluency, vocabulary, and comprehension) are targeted by the program (Wilkes, Macaruso, Franzen, & Schechter, 2019). The program was designed to be aligned with the Common Core Standards (lexialearning.com, 2020). It was designed for grades K-5 (lexialearning.com, 2020). This blended learning program contains 18 levels based on grade levels (preschool at level one, levels two through five are kindergarten, first grade includes levels six through nine, second grade are levels ten through twelve, levels thirteen through fourteen are third grade, levels fifteen through sixteen are fourth grade, and fifth grade are levels seventeen through eighteen) (Wilkes, Macaruso, Franzen, & Schechter, 2019). Within these levels 89 activities and 1,243 units (Kazakoff, Macaruso, & Hook, 2018). This is designed for each unit to be completed in four to eight minutes (Kazakoff, Macaruso, & Hook, 2018). Lexia Core 5 recommends students spend 20-80 minutes per week interacting on the computer-assisted component of the program, which varies based on the needs of the individual student (lexialearning.com, 2020). Students' recommended time per week on lessons may change monthly according to their risk levels and progress (Wilkes et. al, 2020).

Lexia Core 5 was developed based on the Simple View of Reading Framework, which claims that students who master reading comprehension must be proficient in sight word recognition and language comprehension (Wilkes et. al, 2020). The program operates as a systematic path for reading instruction based on a beginning of the year placement assessment

(Kazakoff, Macaruso, & Hook, 2018). This placement tool is automatic and places students within a personalized learning path (Wilkes, Macaruso, Franzen, & Schechter, 2019). The assessment starts a student on their current grade level and adapts its final diagnosis of reading based on the student's correct or incorrect response to questions (Wilkes et. al, 2020). A second placement test is administered midway through the school year (Macaruso & Barnes, 2017). Predictor scores are generated by the system monthly, which gives a teacher an idea of how students are progressing in reading their end-of-the year benchmark, or target (Macaruso & Barnes, 2017).

Lexia Core 5 provides scaffolded lessons through a three-step process (lexialearning.com, 2020). Students begin their work at the “*standard step*” that requires students to answer a series of questions to move to the next level (Kazakoff et. al, 2018). If a student does not pass this step, they are moved to the “practice step,” where targeted instruction is given (Kazakoff, Bundschuh, Orkin, Schechter, 2018). The “instruction step” explicit provides explicit instruction (Kazakoff et. al, 2018). Students must pass each lesson with a score of 90% or higher to advance to the next lesson or level (Wilkes et. al, 2020). Paper and pencil skill builders are available for teachers to use for differentiated instruction, which allows students to gain an understanding that cannot be achieved through online lessons alone (Kazakoff, Macaruso, & Hook, 2018). Oral and written language skills are included in the skills builders to enhance students' listening, reading, speaking, and writing abilities (Kazakoff, Macaruso, & Hook, 2018).

Lexia Learning (2020) highly recommends professional development for teachers that are implementing Lexia Core 5 within their classrooms. Teachers attend two 90-180 training sessions (Kazakoff, Macaruso, & Hook, 2018). The initial training occurs prior to the program becoming available for use by the students and a second training that is scheduled on a date

preferred by the school district (Kazakoff, Macaruso, & Hook, 2018). Teachers have access to a dashboard to track student performance and provide reports at the individual, class, school, or district level (WWC, 2009).

Wilkes et. al (2020) conducted a quasi-experimental study that found that students scored significantly higher than the control group who did not use Lexia Core 5 on their Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment. These schools had similar ELA curriculum, instructional usage times, grouping of students, and instructional resources (Wilkes et. al, 2020). What Works Clearinghouse (2009) noted that while the program has positive effects on phonological awareness and phonics, there are small effects on fluency and reading achievement.

Interferences to Reading

Although it is necessary for skillful readers to comprehend text, skill does not fully account for variances in how students are engaged in reading (Davis, Tonks, Hock, Wang, & Rodriguez, 2018). The lack of strategies to comprehend text creates interferences to reading in students (Rakestraw, 2013). Research has shown that there is a positive correlation between students' reading achievement and having a sense of self-efficacy, and improvement in fluency, comprehension, and literacy achievement (WWC, 2016; HMH 2017). Read 180 Universal provides reading intervention to address problems that students have in the system of meaning, system of language, system of print, and motivation (hnhco.com, 2021).

System of Meaning

Despite years of research on reading programs and how to ensure that all children are proficient readers, the rate of reading failure within the United States remains high (Cutting, 2017). Skillful reading requires the effective use of the system of meaning, the system of

language, and the system of print (Sentance, 2016). Read 180 asserts that their reading intervention program targets these areas where students demonstrate deficits in reading (hnhco.com, 2021). The system of meaning is embedded in conceptual knowledge and is developed first in children (Sentance, 2016). Wren (2000) concluded that the goal of language is to convey meaning. This system of knowledge can be referred to as background knowledge, prior knowledge, or schema (Sentance, 2016). Research has shown that teachers should use pre-reading activities to develop or activate students' schemata, or system of meaning to improve their reading comprehension performance (Ebuta & Obiekezie, 2016). Schema influences what is understood from reading text and establishes logic when reading by incorporating a reader's existing background knowledge with new information from the text (Foltz, 1996; Srivastava &, 2012). Readers with poor background knowledge demonstrate problems with reading comprehension (Srivastava & Gray, 2012). According to Houghton Mifflin Harcourt, Read 180 Universal develops world knowledge and literacy skills by exposing students to different texts that are related to different mediums (hnhco.com, 2021). Furthermore, students view a video at the beginning of the Reading Zone to build background knowledge about information covered with the text to be read in a unit (hnhco.com, 2021).

System of Language

Moreover, a system of language is needed to express meaning (Sentance, 2016). The development of language is a key component in a child's early years and can affect language, cognitive and socioemotional development (Salmon, K., O'Kearney, Reese, E., & Fortune, C., 2016). Phonology, vocabulary, syntax, and communication development within the first several years of life (Salmon et. al, 2016). One must be able to hear and distinguish sounds (Wren,

2000). Problems with language development may affect phonemic awareness (Pittman-Windham, 2015).

Another factor that interferes with the system of language is poor syntax (Sentance, 2016). Merriam-Webster defines syntax as “the ways in which linguistic elements (such as words) are put together to form constituents (such as phrases or clauses)” (Merriam-Webster, 2021). Syntax prevents sentences from being ambiguous and provides meaning to words (Wren, 2000). Mokhtari and Niederhauser (2013) found that students with weaknesses in vocabulary and syntax performed poorly around reading comprehension.

Read 180, supports the language development of English learners by translating and bridging a gap between English and several other languages (Spanish, Cantonese, Haitian Creole, Hmong, and Vietnamese) (hnhco.com, 2021). Research has proven that increased language abilities and vocabulary acquisition plays a role in increasing reading comprehension (Adolf, Baron, Scoggins, Kapelner, McKeown, Perfertti, Miller, Soterwood, & Pescher, 2019). The program presents new vocabulary for each passage and introduces over 50 new vocabulary words in each of its units of study (hnhco.com, 2021). Additionally, a routine is provided to teach new vocabulary through instructor modeling either in-person or digitally (hnhco.com, 2021). Teacher read alouds provide invaluable vocabulary instruction, which integrates intentional explicit vocabulary and comprehension instruction that benefit all children in small group and whole group instruction (Fein, Santoro, Baker, Park, Chard, Williams, & Haria, 2011). Read 180, provides reading time built into the daily curriculum in both digital and print resources (hnhco.com, 2021). Wren (2000) states that children develop language skills by hearing and distinguishing sounds.

System of Print

Reading fluency is a key component to reading comprehension (Rupley, Nichol, Rasinski, & Paige, 2020). Fluency is defined as the ability to read a text easily with accuracy, speed, expression, and comprehension (Elish-Piper, 2010). Students need to read with accuracy and automaticity to gain understanding of the text (Rasinski, 2012). When readers have barriers to the system of print, they lack accuracy, automaticity, and have problems with fluency (Sentance, 2016). Within the system of print, a poor reader has problems with changing spoken language into writing and printed symbols into reading (Sentance, 2016). Characteristics of a student with deficits in reading are slow and labored word recognition (Stevens, Walker, & Vaughn, 2017). Readers are required to decode words as they read the texts and to construct meaning from those words, which is automaticity at work (Rupley et. al, 2020). When students have interference with reading in the area of fluency, more of the student's cognitive energy is used to decode words within the text (Rasinski, 2012; Sentance, 2016; Rupley et. al, 2020). therefore, there is little energy left for reading comprehension (Rasinski, 2012).

Read 180 Universal provides students with opportunity to improve fluency through leveled passages (hnhco.com, 2021). Furthermore, students can assess their own performance and have the opportunity to perform better with repeated attempts (hnhco.com, 2021). Repeated reading with a model provided by a teacher, computer, or audio recording have been proven to be more effective for fluency instruction (Stevens et. al, 2017). Also, the Word Zone, Spelling Challenge, and the Speed Challenge provides practice activities with word recognition, sight word fluency, and accuracy (hnhco.com, 2021). Research has proven that deep, or repeated, reading improves word recognition, accuracy, automaticity, motivation, and comprehension (Rasinski, 2012; Stevens et. al, 2017; Rupley et al, 2020). Students can view their fluency data,

which holds them accountable for their performance (hnhco.com, 2021). Steven et. al (2017) identified guided oral repeated readings which include feedback is an effective method for increasing fluency and comprehension. The Read Zone and the Success Zone for Read 180 Universal provides students with an opportunity to record themselves reading, analyze the recording, and self-evaluate their progress (hnhco.com, 2021). While fluency has long been taught to be a skill taught in the early elementary school years, students in fourth grade and beyond have been found to need fluency instruction beyond the primary years (Raisinski, 2012).

Read 180 Universal provides fluency instruction for students in grades 4-12 to decrease this reading deficit in students (hnhco.com, 2021). Moreover, positive effects for fluency instruction from Read 180 Universal was found in small group instruction (WWC, 2016). An increase in oral reading fluency was noted on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment in a study conducted by Fitzgerald and Hartry (2008). Kim et.al (2010) found a significantly positive effect for increasing fluency for students that used Read 180 Universal. The goal of increased fluency instruction allows students to shift their focus from trying to decode and determine the meaning of words to more time considering the overall meaning of the text (Hart, 2021).

Motivation

A student's academic motivation has often been tied to their beliefs, values, and self-efficacy to achieve their goals (Wingfield, Gladstone, & Truce, 2016). Reading motivation is a critical component of reading comprehension because of its ability to influence its development (Davis, Tonks, Hock, Wang, Rodrigues, 2018). Moreover, Guthrie and Wingfield (2000) identified motivation in terms of reading as the reader's attitude and feelings toward reading and their willingness to approach or avoid the process of reading. Students are more likely to engage

in achievement activities when they have intrinsic motivation (Ryan and Deci, 2009). While a student who disengages from reading may not initially have reading difficulty, eventually there may be detrimental effects on their reading ability due to a lack of motivation (Davis et. al, 2018). Unfortunately, reading motivation has been found to decline as students matriculate into higher grades (Rakestraw, K.; 2013; Vannin-Nusbaum, Nuevo, Brande, & Gambrell, 2018). This could be attributed to the student's inability to evaluate their reading performance, changes in classroom environments, and transitions into middle and high school (Vannin-Nusbaum et. al, 2018).

In addition to Read 180's claims to decrease deficits in the domains of reading, it uses a growth mindset model to develop academic motivation through its Mindset Matters unit (hnhco.com, 2021). The Mindset Matters unit focuses on developing a growth mindset in struggling students and is embedded at the beginning of each unit (hnhco.com, 2021).

Characteristics of a growth mindset is a curiosity to continue learning, belief that intelligence and skill can be developed over time, and the assessment of weakness to foster improvement (Schechter, R. & McKeown, J., 2020). The Mindset Matters segments prepares students to move on to more challenging activities within the unit (Houghton Mifflin Harcourt, 2018). Knowing how to foster a growth mindset affects student outcomes (Schechter, R. & McKeown, J., 2020). In the same way that reading materials are leveled for struggling students, the materials in this section of the program are leveled at the lower end of the Lexile band in which the student is working (Houghton Mifflin Harcourt, 2018). A study conducted by HMH in 2017 found that the students who worked on Read 180 exhibited a positive change in growth mindset than students who did not utilize the program (Houghton Mifflin Harcourt, 2017). A small correlation was found between academic achievement and having a growth mindset (Houghton Mifflin Harcourt,

2017). Also, the Read 180 program fosters motivation with its use of technology, which promotes independence while providing targeted instruction (Rakestraw, 2013).

Read 180

Read 180, a product of Houghton Mifflin Harcourt (HMH), was developed at Vanderbilt University by Ted Hasselbring in 1985 (Houghton Mifflin Harcourt, 2020). The program is marketed as having the ability to improve the reading levels of students by 2-5 years (Kim, Capotosto, Hartry, & Fitzgerald, 2011). The focus of the program is to provide intense reading intervention to students in grades 4 through 12 in an effort to bring their reading skills to their appropriate grade level and increase their reading comprehension (Sprague, Zaller, Kite, & Hussae, 2011; Windhan-Pittman, 2015). Reading interventions are an approach to determining what skills need to receive targeted instruction for a struggling reader (Verser, 2020). Moreover, they are designed to identify and resolve the reading deficits of struggling readers through a scaffolded, instructional method (Vogul, 2013). Whether performed in a group or individually, targeted reading interventions were found to have a positive effect over the course of treatment (Scammacca, Roberts, Cho, Williams, Roberts, Vaughn, & Carroll, 2016). Read 180 is designed to move students to be independent readers (Pittman-Windham, 2015).

The objectives of the Read 180 Universal reading intervention program fit these characteristics because it targets specific elements of phonics, fluency, vocabulary, comprehension, spelling, writing, and grammar, as well as promoting self-directed learning based on a diagnostic assessment (HMH, 2020). According to HMH, Read 180 professes to utilize whole brain-reading techniques in a blended learning environment (HMH, 2020). The authors further claim that the success of the program is attributed to using neuroscience to target areas of the brain that are critical to developing proficient reading skills (HMH, 2020). The

program is designed to target the 25th percentile of high-risk reading students (Kim, Capotosto, Hartry, Fitzgerald, 2011).

Assessment drives the Read 180 intervention program; therefore, students complete a diagnostic reading inventory that assesses students in the areas of phonological awareness, letter-word recognition, word attack skills, and reading comprehension (Nave, 2007). The maximum time allotted on the inventory is 60 minutes. Based on the results of the assessment, CAI software is used to create an individualized learning plan for each student (Sprague et. al, 2011).

The Read 180 program was developed for continuous assessment and feedback (Nave, 2007). Teachers receive reports on students' progress as they work on the CAI portion of the program. The program matches students to the correct leveled text for independent reading and skills to remediation (Nave, 2007). Reports included in the program are individualized based on the assessment and the student's work (HMH, 2020). Reports are generated to provide teachers with data-driven decisions about instruction such as instructional groupings (HMH, 2020). Additionally, the program then tracks a student's work in the areas of literature, specific reading skills, and adapts to their progress as they interact with Read 180 (WW Intervention Report, 2009).

Read 180 provides individualized reading instruction for students. This instruction is based on the four following instructional shifts: Whole-Group Teaching, Student Application, Small-Group Learning, and Independent Reading (HMH, 2020). Students are presented with exemplary informational and literary text on multiple Lexile levels during whole-group learning (HMH, 2020). Text is presented not only via a computer-assisted program but also through audiotapes and leveled readers from a variety of topics and genres (Gober, 2014). Read 180 provides support to educators by providing strategies for knowledge building, deepening

vocabulary, and language” (HMH, 2020). Educators receive data in real-time as students practice reading.

The instructional block starts with 20 minutes of whole group instruction where students receive teacher-led instruction (Sprague, Zaller, Kite, & Hussat, 2011). During this time, the teacher focuses on vocabulary acquisition, word analysis, and comprehension. (Sprague et. al 2011). Whole group instruction also provides time to build and activate prior knowledge, model fluent reading, give direct instruction for comprehension skills (Kim et. al, 2011). The whole group model ends with a 10-minute review of the direct instruction. Sixty of the remaining minutes are focused on personalized intervention and instruction for students through small group instruction, CAI instruction based on the student’s performance on the diagnostic reading inventory, and independent reading (Sprague et. al 2011). Close attention to complex text, monitoring of student progress, sharing of knowledge, and understanding is provided through small group instruction and independent reading (HMH, 2020).

The program claims to improve a struggling student’s reading proficiency by 2-5 years; however, a mixed-methods study by Kim, Capotosto, Hartry, Fitzgerald (2011) found there was minimal to moderate effect on reading achievement. The researchers conducted a randomized controlled trial to evaluate the efficacy of Read 180 in a mid-sized urban school district in southeastern Massachusetts (Kim et. al, 2011). There were three goals of this study. They were to measure the reading outcomes of the participants, to assess the impact of Read 180 in different grade bands, and to estimate the impact on a treatment group for the number of days they attended the after-school program where Read 180 was utilized (Kim et. al, 2011). The participants in this study were 312 students in grades 4 to 6 who scored below proficiency on the Massachusetts Comprehensive Assessment System (MCAS) (Kim et. al, 2011). The study was

conducted for 23 weeks from October 2006 to April 2007 (Kim et. al, 2011). The results showed that the students who participated in the Read 180 program outperformed the students in the control group in vocabulary and comprehension (Kim et. al, 2011). The students in the control group used a 60-minute block of time and did not include the whole group reading lesson (Kim et. al, 2011).

Although research has found Read 180 to have a positive effect on comprehension and literacy achievement for students, little research has shown the effectiveness of the program on students with disabilities (Lang et. al, 2009; as cited in Windham-Pittman, 2015). Kim et. al (2011) conducted a mixed-methods study that found Read 180 Universal had no significant impact on spelling or oral reading fluency. Also, Gober (2014) did not find a significant gain for ELL students enrolled in Read 180 Universal in seventh and with grades.

Teaching during a Pandemic

The educational system has long been criticized for acting timely or often too conservative when there are shifts in society (Hansdotter, 2020). In January 2020, the world was during a health emergency, and by March 2020 the World Health Organization (WHO) reported that COVID-19 was a global pandemic (WHO, 2020). A pandemic occurs when a new disease is widespread (WHO, 2010). The COVID-19 pandemic created widespread disruption to K-12 schools with the closing of schools around the globe (Kaden, 2020). The United Nations Educational, Scientific and Cultural Organization (UNESCO) reported that millions of students around the world did not have access to education when schools closed in the spring due to the Coronavirus pandemic (Affouneh, Salha, & Khlaidf, 2020). Dayal and Tiko (2020) stated that there were 1.5 million students out of school.

In times of such crisis, Emergency Remote Teaching (ERT) happens abruptly and without prior planning (Affouneh, Salha, & Khlaïdf, 2020). In the 1950s, President Truman provided education to refugee students in addition to humanitarian assistance given during the Korean War (Burde, Kapit, Wahl, Guven, & Skarpeteig, 2017). Burde et al (2017) examined access to education during times of conflict. They examined other research that focused on the relationships between states of emergencies and education (Burde et al,2017). The researchers' data revealed that equitable access to education positively affects students' social-emotional needs by providing structure and meaningful activities during times of crisis (Burde et al, 2017). Also, Dhawan (2020) found that people experience psychological trauma during times of natural disasters. Dhawan (2020) found that this is especially true for children when there is a disaster coupled with a disruption of education where social-emotional needs are met.

The Interagency Network on Education in Emergencies' (INEE) Minimum Standards for Education in Emergencies in 2004 and the Global Education Cluster in 2006 put into place measures to ensure education continues in the wake of emergencies to continue a sense of normalcy (Price, 2011). The INEE was created to provide educational support during times of conflict and emergencies (Affouneh et. al, 2020). The belief behind the organization's inception was that education provides a safe place and promotes core academic skills even in times of crisis (Price, 2011). In addition, Price (2011) went on to say that allowing students to go uneducated even during a time of crisis can contribute to instability. The disastrous events of 911 on United States soil heightened the attention of providing education in terms of intervention and distance learning to maintain national security (Affouneh et. al, 2020). A shift in educational support to include strategies for packaging instruction occurred in 2000 through the United Nations and International Rescue Committee (Affouneh et. al, 2020).

Understanding the shift to online teaching and the teachers' work experience during the COVID-19 pandemic is integral to the effectiveness of suspending in-person learning without suspending teaching and learning (Song, Wu, & Zhi, 2020). A new set of challenges and insights have been brought out in the wake of the COVID pandemic in that this new crisis emphasized the importance of school, and equity issues (Kaden, 2020). Online learning was in place in some form in many school districts and schools before the mandate to close brick and mortar schools due to the 2020 pandemic; however, the swift shift to virtual learning created a land of confusion (Schaefer, Abrams, Kurpis, 2020).

The initial shift to online learning during a state of emergency was to create and maintain online platforms for continuous learning rather than quality learning (Dhawan, 2020). Iivari, Sharma, and Venta-Olkkonen (2020) termed issues of education during the COVID-19 pandemic as the "digital divide" (i.e., those who had access to technology versus those who did not, wi-fi challenges, and the ability to integrate technology into meaningful learning activities). The move to remote, or distance, learning on any platform was forced to provide basic education to children and charge some teachers with educating with few technology skills (Iivari et. al, 2020). The findings of a grounded study conducted in March of 2020 found that students from low socio-economic backgrounds suffered from the move to total online learning due to the lack of access to resources to perform assignments (Reich, Butterimer, Fang, Hilaire, Hirsch, Larke, Littenberg-Tobias, Moussapour, Napier, Thompson, & Salama, 2020). These students would benefit more from the traditional in-person instruction (Midcalf, L. & Boatwright, P., 2020). "Curriculum development that meets the needs and interests of a classroom of students is difficult during normal school operations.

Along with school closures, the transition to online learning required teachers to adapt to restructure instruction with little to no preparation or resources (Birch & Lewis 2020). Research has shown that teachers need training and support in using e-learning materials, help with troubleshooting technical issues, and helping students develop independent learning skills (Borup, West, Graham, & Davies, 2014). More importantly, new research has shown that considering the new educational models will require ongoing and intensive training that calls for teachers to experience, observe, and refine their practices to carry on online learning (Bickmore, Hayhoe, Manion, Mundy, & Read, 2017, p. 64). Many educators have an increased need for adequate training and support in using online learning platforms and educational technology tools to assure effective implementation during the COVID-19 pandemic (Birch & Lewis, 2020).

Moreover, research has found that providing teacher training in information technology could reduce the negative impact due to the increased demands due to the COVID-19 pandemic (Pozo-Rico, Gilar-Carbi, Izquierdo, & Castejon, 2020). Studies have found challenges with distance learning in the areas of technology and pedagogy (Ferri, Grifoni, & Guzzo, 2020). Moreover, Figg et. al (2020) interviewed K-6 teachers who reported challenges such as low student engagement, lack of accountability, lower quality of student work, and a lack of support by administrators. Technology challenges include lack of infrastructure in terms of internet and devices, and teachers' lack of skills using technology, while pedagogical challenges are the need for interactive multimedia learning materials and a lack of an evaluation system (Ferri et al., 2020)

Many education leaders are developing a rigorous curriculum for digital and non-digital learning while encouraging teachers to forge ground in their planning during the COVID-19

pandemic (Reich et. al, 2020). Basilaia and Kvandaze's (2020) case study used Google Suites, which is the main outline platform used by the distinct of this study. In terms of teaching and learning, the curriculum should integrate technology as a part of an online educational process and consider the pedagogical possibilities associated with online tools (Carillo & Flores, 2020). Other research has found that time on task for student engagement, flexibility in learning modes (synchronous or asynchronous), and virtual learning in keeping with state standards are important to consider during this pandemic (Basilaia & Kvandaze, 2020). These elements have been found to be beneficial because students can learn at their own pace and the learning environment is flexible (Midcalf, L. & Boatwright, P., 2020). Additionally, a four-year study in a school district in Memphis, Tennessee found a small impact on reading achievements during the first three years of implementation of the program (Schenck, Feighan, Coffey, & Rui, 2011).

Professional Development in Education

Darling-Hammond, Hyler, and Garner (2017) defined effective professional development as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes. Initiatives for teacher professional development was born during the mid-1980s (Hooks, 2015). Educators need high-impact training to sharpen their skills and maintain their personal efficacy as teachers (Shaha & Ellsworth, 2013). Moreover, professional development requires teachers to update their knowledge and skills on curricula, psychology, and pedagogy are necessities of the educator role (Ayvaz-Tuncel & Cobanoglu, 2018). The evolution of the teacher as a professional change throughout the course of their career due to influences of the school, political and social reforms, the teacher's personal commitment to the profession, the availability to learn, teacher beliefs about their own learning, knowledge on the subjects they teach, how they teach, and the teacher's past experiences (Marcelo, 2009).

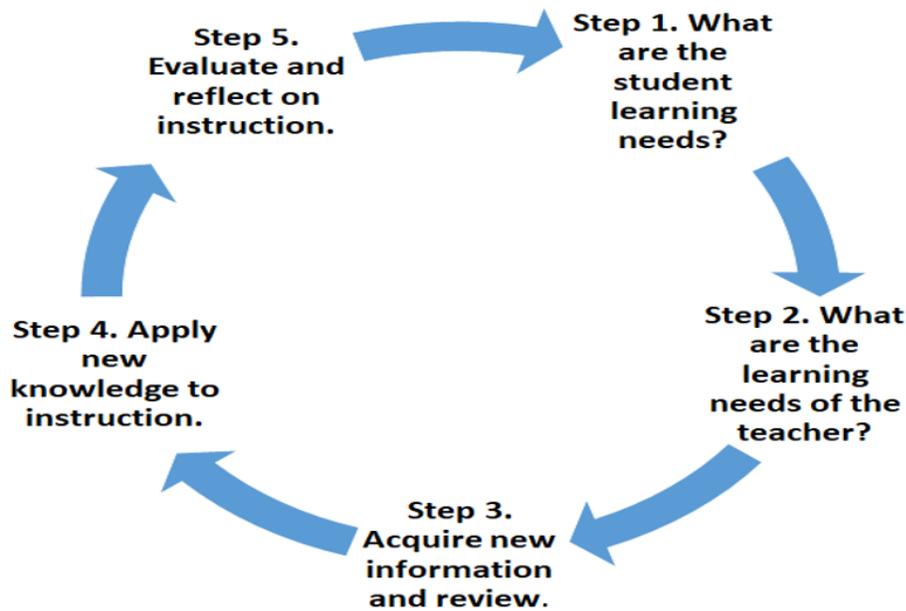
Traditionally, professional development consisted of district or school level workshops where teachers received information through lectures (NCES, 2021). Traditionally, this type of *sit and get* learning proved to be ineffective to prepare teachers for new demands placed on the profession (NCES, 2021). Research has shown that teachers must actively participate in professional development that offers more than traditional passive learning (Darling-Hammond et. al, 2017)

The professional development of teachers goes beyond merely acquiring new knowledge, but it implies that the teacher adapts their views, attitudes, and teaching and learning activities to improve the outcomes of their students (Marcelo, 2009). Successful professional development allows educators to develop the knowledge and skills they need to address the needs of their students (Mizell, 2010). Accordingly, Learning Forward (2021) stated that there are four prerequisites for professional learning. Educators must demonstrate commitment to student success by actively participating in professional development, educators must come to professional development ready to learn, educators must be open to collaboration, and the professional development must be mindful that educators learn differently (Learning Forward, 2021). The consideration of the teachers' beliefs, experiences, and instructional practices have proven to have a positive impact on influencing change (Robinson & Smith, 2020).

Professional development of teachers is not a one-time occurrence, it is most effective as a cycle of continuous improvement (Stewart, 2014). While time is an important aspect of training, the process of the training is of greater importance (Stewart, 2014). **Figure 2** shows the cycle of continuous professional development.

Figure 2

Cycle of Professional Development



Mizell (2010) stated that the cycle ensures that educators are continually working to improve their practice and meet the needs of their students. Also, training that focuses on continuous improvement may reduce dissatisfaction with professional development sessions (Bereiter, 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001; as cited in Elliot, 2017). Steps 1 and 2 of the cycle relate to Darling-Hammond et. Al (2017) found that professional development should be content focused and include specific curriculum supports for teaching and learning. Active learning occurs on the cycle for Steps 4 and 5 where teachers have opportunities for hands-on experience designing and practicing new strategies (Darling-Hammond et. Al, 2017). Step 5 requires collaboration so that the teachers serve as both the learners and practitioners in the sharing of ideas in the context of their job (Darling-Hammond et. Al, 2017).

In addition, Darling-Hammond et. Al (2017) stresses the need for modeling by professional development leaders and coaching, which can occur in distinct phases of the learning process. Moreover, research found that teachers retain more from professional development when they receive follow-up coaching cycles (Phillips, 2014). Phillip's (2014) study also found coaching positively affected reading scores for teachers who participated in both professional development and coaching sessions as compared to teachers who experienced professional development with no follow up coaching sessions.

Online Professional Development in Education

Online learning is commonly accepted in education today (Stenbom, Cleveland-Innes, & Hrastinski, 2017). Online professional development eliminates the need for the trainer and the teacher to be in the same place at the same time and facilitates learning over a distance (Snell, Hindman, & Wasik, 2019). Furthermore, online professional development has the potential to provide teachers with readily accessible learning opportunities (Shaha & Ellsworth, 2013; Amador, Callard, Choppin, Carson, & Gillespie, 2019). Research suggests that online professional development facilitates collaboration and inquiry, which is effective in improving student achievement and instructional practices (McConnell, Parker, Eberhardt, Koehler, & Lundeberg, 2013). To that end, online training has evolved from the traditional face-to-face coaching over the last ten years (Amador et. Al, 2019).

There is a misconception that face-to-face teaching requires the same competencies of online teaching (Roy & Boboc, 2016). Teachers must understand online pedagogy, online tools, online learning psychology, technological pedagogical content knowledge, and the facilitation of skills and technology issues (Roy & Boboc, 2016). Online professional development must consider what the teacher understands regarding online teaching, engage the teacher so that they

are proactive in the learning process, and design the training in a way to empower and support the teacher (Roy & Boboc, 2016).

Professional Development for Reading

An emphasis has been placed on professional development programs for teachers that might improve their reading instructional practices in light of poor reading achievement in elementary schools (Vernon-Feagans, Kainz, Hedrick, Ginsburg & Amendum, 2019). While past professional development of reading instruction focused on the content knowledge of the teacher, the focus of professional development for reading instruction in recent years has been increasing teachers' knowledge and instructional capacity about the foundations of reading. (Carlise, Cortina, & Katz, 2011). Professional development centered around reading instruction should include an expansion of theoretical understanding and research-based practices designed for increased improvement in terms of instruction and student achievement (Porche, Pallante, & Snow, 2012).

Online Professional Development for Reading

There is growing support for the use of technology for professional development in early childhood language and literacy instruction (Snell, Hindman, & Wasik, 2019). Parsons, Richy, Parsons, & Dodman (2013) conducted a case study of two teachers' experiences implementing an online literacy training initiative. Their study found teachers needed targeted, sustained professional development to support effective classroom literacy instruction (Parsons et al., 2013).

Because schools are increasing their digital learning context, there has been an increase in online professional development (Amador et al., 2019). Furthermore, language teachers should have professional development that does not simply transfer their understanding of a tool, but

instead adopt new knowledge acquired to their practices (Paesani, 2020). An additional case study found that teachers did implement strategies from online literacy professional development despite feeling a lack of self-efficacy with the skills taught (Smith & Robinson, 2020). Many of the teachers' perceptions were influenced by a perception of forced compliance, a feeling that the training lacked focus, and no time to practice and reflect (Smith & Robinson, 2020). In contrast, online professional development should include the following: practice with online tools, connecting technology to pedagogy and content knowledge, drawing on teachers' previous experiences, reflection on online teaching practices, and the provision for ongoing support (Paesani, 2020). Moreover, teachers who received support from a literacy coach are more likely to make efforts to integrate new knowledge into their instructional practices (Carlise et. Al, 2011).

Summary

The present study examined teachers in grades 3-5 perceptions of implementing the Read 180 Universal reading intervention program during the COVID-19 pandemic. This study addresses the gaps in literature where there is a lack of research in terms of implementing Read 180 during a pandemic. The COVID-19 pandemic is a new phenomenon in history and research is yet to unfold regarding using educational technology during this pandemic when schools have closed their physical classrooms.

This qualitative case study will be conducted in a southwest Georgia school district. Teachers that are in the implementation phase of the Read 180 Universal reading intervention program will be interviewed. These teachers will be general education ELA teachers.

Houghton Harcourt Mifflin from Scholastic acquired the Read 180 Universal reading intervention program. It provides remediation through a scaffolded approach in the areas of

reading in a blended learning environment (hnhco.com, 2021). Additionally, Read 180 Universal targets phonics, fluency, vocabulary, comprehension, spelling, writing, and grammar (Gober, 2014). This program has similar components of programs such as I-Ready Reading, Open Court Reading, Reading Wonders, and Lexia Core 5.

The ability for schools to shift immediately to an online format was made possible due to the advances in educational technology. The Read 180 Universal reading program's implementation in this southwest Georgia school district is made possible with online platforms and the blended learning format. Because a learning path is created because of data from a diagnostic assessment, adaptive technology makes it possible to differentiate needed interventions for students who struggle with reading at locations other than a traditional classroom.

Studies have been conducted in terms of the effectiveness of reading interventions and the use of technology to deliver remediation to students. Research has proven this program to be moderately effective in closing the achievement gaps in reading. A study by Kim et. Al (2011) found that the Read 180 program was successful in helping students close the gaps in achievement for reading. Other researchers found that using a blended learning program for reading instruction and intervention has had a positive effect on student achievement. Other studies used for this literature review revealed that while these programs had a minimum effect, the effect size was minimal in some cases. However, there has been research that the program engages students more in activities rather than reading practice (Whitford, 2011). Also, it was found to have limited effectiveness in some areas of reading (Skwara, 2016).

Teacher professional development is important to help teachers learn and refine instructional practices over the course of their career (Darling-Hammond et. Al, 2017). Effective

professional development engages teachers to focus on the needs of their students, allows collaboration with fellow professionals, and is focused on the needs of the teacher (Mizell, 2010). Professional development targeted to reading instruction should focus on balance of skills, meaningful instructional practices, and scaffolding (Porche, Pallante, & Snow, 2012). Online professional development is a viable option for training because of its ability to merge social, teaching, and cognitive presence in a synchronous and asynchronous learning environment (Elliott, 2017).

The literature revealed a need for immediate attention to reading deficits in students in the way of identification and remediation. Overwhelmingly, all studies and literature used for this study provided evidence for the effectiveness of implementing digital literacy instruction during a time of global and national states of emergencies.

CHAPTER III: METHODOLOGY

The purpose of this case study will be to describe teacher perceptions about the effectiveness of the implementation of the Read 180 Universal reading intervention program for students, grades 3-5, in Georgia elementary schools during the COVID-19 pandemic. Teachers were required to receive training and to implement the program virtually in order to respond to conditions created by the pandemic. Although there was literature addressing teaching during a pandemic, and the Read 180 program there is no literature specifically addressing Read 180 in a pandemic with respect to teachers' perceptions of the Read 180 program. The current study adds to the body of knowledge in that it addressed gaps in the literature in regards teachers' perceptions of implementing a new reading intervention program, Read 180, as an effective alternative form of reading intervention during the current pandemic when schools are closed, and students cannot benefit from in-person instruction. This study has the potential to inspire policy changes regarding online programs implementation during times such as the COVID-19 pandemic. The participants' thoughts and insights of their experiences regarding the effectiveness of the implementation of the Read 180 reading intervention program, to teacher training, and the reading instruction provided by the program were elicited to give perspective to implementing a new blended learning program during the COVID-19 pandemic. Chapter 3 outlines the methodology used to determine the emergent themes related to teachers' perceptions of the effectiveness of the implementation of the Read 180 reading intervention program for elementary students in a 3-5 Georgia elementary school during the COVID-19 pandemic.

Research Questions

Research questions add to the development of a study and provide an action plan for the development and identification of the research instruments (Gay et al., 2012). The following research questions provided guidance for the study:

1. What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students?
2. What are grades 3-5 elementary teachers' perceptions of using Read 180 program with their students?
3. What are grades 3-5 teachers' perceptions of student gains in reading from using the Read 180 program for reading intervention?

Research Design

The researcher employed a case study design because the objective of this study was to explore grades 3-5 elementary teachers' perceptions of the effectiveness of the implementation of the Read 180 Universal reading intervention program during the COVID-19 pandemic. Yin (2018) defined case studies as a detailed intensive analysis of a phenomenon in a bounded context. Moreover, a bounded case study is the instance of some single process, issue, or concern around which there are boundaries (Merriam, 2009). Furthermore, the researcher intended to utilize data interviews and document analyses, which are both qualitative data collection sources (Faryadi, 2019). Interviews allowed the researcher to capture teachers' experiences with open-ended inquiry and offered participants an opportunity to describe their experiences, underlying emotions, and motivations in their own words (Creswell, 2009; Gay et al, 2012; Johnson & Christensen, 2014).

The research design for this study was a bounded case study. More specifically, this study fit the qualities of a case study because the research had no control over the actual implementation of Read 180 during the COVID-19 pandemic or the teachers' perceptions of the effectiveness of the implementation and training that stemmed from the actual implementation (Yin, 2018). Additionally, the data from the interviews provided an understanding of the feelings, thoughts, beliefs, and values of the participants' experiences and understanding through direct accounts collected by individual interviews (Gay & Airasian, 2003). The literature mentions that case studies address a real-world context. The phenomenon being investigated was the implementation Read 180 within a real-world context, the COVID-19 pandemic, qualifies this research as a case study, as well (Merriam & Tisdell, 2016).

Moreover, this study is considered "bounded" in that it took place within a single school district and will use only elementary grades 3-5 ELA teachers as participants. Also, the teachers' perceptions only addressed effectiveness of the first year of implementation, which is the 2020-2021 school year. The time period for this study along with the current COVID-19 pandemic were contemporary events that fit into the characteristics of a bounded case study (Yin, 2018). The boundaries of this study consisted of the following parameters: elementary schools in a southwest Georgia school district and a sample of grades 3-5 ELA teachers who are implementing Read 180. The teachers selected as participants in this study agreed to the continuous use of Read 180 through the 2020-2021 school year, which was the first year of the program's implementation. It was the goal of the researcher to determine teachers' perceptions as they moved through the first academic year of the implementation process.

Setting

The setting for this study was in a school district in southwest Georgia. According to the U.S. Census Bureau (2019), the population of this county is 87,956. Of this population, 27.2%, which is 22,894 of the residents of this county are considered below the poverty level in terms of socioeconomic status. The median annual household income for this county is \$39, 854. The racial demographics are the following: 89.6% African American; 5.3 % Caucasian; 5% Other. Also, 10% of the students are classified as disabled and 81% of the student population is considered economically disadvantaged (docoschools.org, 2021). There are 21 schools that receive Title 1 funding (gadoe.org, 2020). More specifically, all 14 elementary schools are Title I schools (gadoe.org, 2020). The entire district receives free breakfast and lunch through a grant because of the county's socioeconomic status. Since the onset of the COVID-19 pandemic, these free meals are delivered via school buses to students' neighborhoods.

The suburban school district used in this study has 14,479 students enrolled in schools from grades kindergarten through twelfth grade. There are a total of 28 schools. The breakdown of the schools is the following: 14 elementary schools, 4 middle schools, 3 high schools, 1 college and career academy, 1 Pre-K center, 1 alternative school, 1 gifted education center, 1 psychoeducational center, and 1 college and career performance center. Additionally, there are 14,619 students enrolled in grades kindergarten through twelfth grades. Of this number, there are about 10, 271 students in grades kindergarten through fifth grade. This study only included elementary schools. The 2020 graduation rate was 86%, which has steadily increased over the past five years (DOCO Schools, 2021). Fifty percent of high school graduates are considered college and career ready (Georgia School Grades, 2019). The district was given an overall letter

grade of D as a rating by the Governor's Office of Student Achievement (gosa.georgia.gov, 2020).

Sample

The participants for this study were from grades 3-5 elementary school regular education teachers whose instruction focused on ELA during the 2020-2021 school year. For this study, regular education teachers are defined as teachers who are to provide differentiated instruction to all students who may perform at varying levels during the 2020-2021 (School Psychology Files, 2021). The participants for this study performed their duties within an elementary school. These teachers have shared experiences with implementation of reading programs in the past and collaboration in professional learning communities that were focused on ELA instruction. Participants in this study received professional development on the Read 180 program during the 2020-2021 school year. The teachers received the same amount of training sessions in the setting, which was via virtual meetings. The teachers received training from the same HMH Instructional Coach.

Purposeful sampling was appropriate for case study because this type of sampling is aimed at gaining the insights regarding the teachers' perceptions on the implementation and effectiveness of the training for implementation (Patton, 2002). The criteria for choosing the teachers for the sample was because the researcher is aware of their knowledge and experience (Gay, et. al 2012). Moreover, purposeful sampling was used in qualitative research to provide information from individuals and cases to address the purpose of the study (Johnson & Christensen, 2014; Patton, 2002). A purposeful sampling of grades 3-5 elementary school regular education teachers whose instruction focuses on ELA was used in this study. The research questions require sampling to develop the distinct perceptions from these teachers, because they

have direct knowledge and experience with the professional development and implementation procedures of Read 180 (Creswell, 2009). The teachers for this study teach within elementary schools in the same district. The teachers were exposed to the same training sessions, information, and are provided with the same training documents and resources. Purposeful sampling, also, fit this case study because the forms of data collected will be interviews and documents (Creswell, 2009). The qualities shared by the teachers in this study eliminated variations associated with one or more sociodemographic factors, and prevented issues associated with other sociodemographic factors to the overall findings of this study (Borstein, Jager, Putnik, 2013).

Patton (2002) states there are no rules regarding the number in the sample. The size of the sample is dependent on the data needed to maximize the information. A sample of teachers in grades 3, 4, and 5 was used in this case study to obtain data saturation (Gay et. al, 2012; Johnson & Christensen, 2014). A sample size of four teachers from each grade 3, 4, and 5 was used for this study. These teachers were chosen from three different elementary schools within the district in which the study takes place. Data saturation is the point of qualitative research when data collection is very unlikely to produce additional data or added information (Creswell & Poth, 2018; Merriam & Tisdell, 2016). Ensuring that the perceptions of a teacher at each grade level would fit the requirements for the sample size, a teacher from grade levels 3, 4, and 5 served as a participant in this study.

Instrumentation

Interviews

Case studies as a method of inquiry require an in-depth investigation into the human experiences surrounding a phenomenon (Creswell, 2009). For that reason, data was collected

using more than one source (Creswell & Poth, 2016). Conducting interviews is one form of data collection for qualitative studies. Qualitative interviews allow the researcher to enter the participants' attitudes, feelings, concerns, and values (Patton, 2002). There are three types of interviews, which are structured, unstructured, and semi-structured (Merriam, 2016). The order of questions is predetermined, wording of questions is predetermined, and demographic data is provided by the participants in structured interviews. However, unstructured interviews consist of open-ended questions and are conducted like a conversation and are flexible in nature. Unstructured, semi-structured and partially structured interviews all allow for the researcher to ask follow up questions that provide depth of understanding. Semi-structured interviews were chosen for this study. Gay et al. (2012) state interviews are purposeful interactions in which one individual obtains information for another. Although qualitative interviews may be structured, semi-structured, partially structured, or unstructured, semi-structured interviews were a source of data collection for this study (Merriam & Tisdell, 2016).

The researcher developed a protocol and questions prior to the interviews (Creswell, 2009). An interview guide was used to ensure the open-ended questions answer the research questions of the study and to keep the interview on track (Johnson & Christensen, 2014). Interview questions were created by the researcher. These questions focused on grades 3-5 teachers' perceptions of the effectiveness of the implementation of Read 180 and their perceptions of the effectiveness of the professional development they received to implement the program. Additionally, questions were included to describe their experiences when using Read 180 to provide reading interventions to their students and grades 3-5 teachers' perceptions of student gains in reading from using the Read 180 Universal program. The interview protocol and guide were found in the Appendix of the study.

The degree of formality and structure determines the type of interview used for a study (Gay et. al, 2012). For the purpose of this study, one-on-one interviews was conducted. Due to safety precautions surrounding the COVID-19 virus, interviews were conducted via Google Meet for Windows 10/8.1/8/7 64-bit. A strength of conducting online interviews is that interviews are not confined to any one geographical location (Merriam & Tisdell, 2016). Meet, Lobe, Morgan, and Hoffman (2020) stated several protocols for conducting interviews for research online should be considered such as making sure that both the interviewer and the interviewee are knowledgeable regarding using the videoconferencing platform, ensuring that the environment is quiet and protects the confidentiality of the interviewee, and setting up protocols for both interviewer and interviewee. Merriam and Tisdell (2016) share the following: two weaknesses to online interviews are breakdowns with technology and a potential breach in participant's anonymity. Specific steps for the use of videoconferencing interviews are discussed in the Procedures section of the Methodology chapter. The semi-structured interview lasted approximately 45-60 minutes. Interviews were recorded using a handheld device. The interviews were conducted and transcribed by the researcher.

Document Analysis

Bowmen (2009) defines document analysis as a systematic procedure for reviewing and evaluating printed and electronic documents for the purpose of gaining an understanding and to develop knowledge. Records, documents, and artifacts can provide a rich source of information that cannot be otherwise observed (Patton, 2002). A second type of instrumentation was document analysis. Training documents and resources from the professional development provided by the HMH Instructional Coaches are considered official documents because they are written, photographed, or recorded by a private organization (Johnson & Christensen, 2014).

These documents served as a secondary source of data collection. Patton (2002) noted one challenge of completing document analysis is linking documents to interviews. The documents to be analyzed in this study were related to professional development and served to answer the research question regarding teachers' perceptions of the effectiveness of professional development to prepare them to implement Read 180 in their classrooms.

Methodological Assumptions and Limitations

Methodological Assumptions

Assumptions are assertions which are perceived to be true but are not verified as such (Gay, et. al, 2012). Philosophical assumptions can take a stance toward the nature of reality (ontological), prior knowledge of the researcher (epistemology), the role of values (axiology), the methods used in the process (methodology), and the language of the research (rhetoric) (Creswell, 2007). This research was positioned around a constructivist theoretical framework, which holds an assumption that the participants are seeking to understand subjective meanings of their experiences in the world (Creswell, 2009). An assumption in this study was the participants would provide honest accounts of their experiences and perceptions throughout the interview process. Participants were assured their identities would remain confidential and that pseudonyms would be assigned to protect their confidentiality.

The trustworthiness of the researcher was considered an assumption for this study, as well. The researcher is a lead ELA teacher, member of the leadership team, and a mentor for other ELA teachers within the school, which lends to a certain amount of subjectivity. These assumptions are both ontological and epistemological in nature.

Moreover, the role of values in research is seen as an axiological assumption (Creswell & Poth, 2016). Johnson and Christensen (2014) state that the researcher is the data collection

instrument because of their role in making decisions regarding data collection, analysis, and interpretation of the data. Prior experience with reading instruction and as an elementary ELA teacher will be a guiding force during the research process. However, any biases and judgements regarding the quality of the Read 180 program and reading interventions will have to be omitted from the study. Member checking was used to verify the accuracy of the participants' responses and to remove any influence of the researcher's perceptions (Merriam, 2009).

Limitations

Limitations are defined as any aspect of a study in which the researcher has no control and may negatively affect the result or generalizability of the results (Gay et. al, 2012; Simon & Goes, 2013). Qualitative interviews attempt to understand the world from interviewees' point of view and to discover the meaning of their experiences (Creswell & Poth, 2018). The use of teachers' perceptions to examine Read 180 Universal Program was a limitation to this study. The teachers' responses to interview questions may not reflect their honest viewpoints regarding the implementation and training associated with the program due to bias, negative emotions, or fear of the lack of confidentiality (Creswell, 2007, Patton 2002). It was assumed the answers from the interviews were factual; however, perceptions cannot be verified (Airasian & Gay, 2000). In addition, interview responses could be self-serving due to the reactivity of the participants interviewed (Patton, 2002). The researcher's presence could have biased responses because the researcher serves as a mentor for reading instruction and serves on the administrative team at an elementary school within the district (Creswell, 2007). Online interviews further limit the study in that they may not occur in the researcher's or participants' natural environment (Creswell, 2007; Creswell & Poth, 2018). Because the interviewer serves as the primary data collection instrument, the study was limited to the researcher's own instincts and abilities (Merriam, 2009).

The manner in which the teachers training was conducted by Read 180 personnel and how teachers implemented the training are other limitations to the study.

Furthermore, document analysis presents its own set of limitations. The HMH training documents would be considered official documents because they were created by an organization (Christensen & Johnson, 2014). Creswell (2009) stated that documents are one aspect of qualitative research that are purposefully selected. The HMH training documents were purposefully selected to help the researcher better understand the research question and problem (Creswell, 2009). Moreover, the analysis of these documents required data to be examined and interpreted to generate meaning and develop empirical knowledge of the phenomenon under study (Bowmen, 2009). The training and program documents provided by the HMH may be biased in that they were created by the company. Documents that claim to be objective may contain some form of built-in bias of which the researcher is unaware (Merriam & Tisdell, 2016).

Ethical Considerations and Negotiating Access

Ethical Considerations

Christensen and Johnson (2014) define ethics as the principles and guidelines that uphold our values. Ethical issues revolve around the following three topics: respect of person, concern for welfare, and justice (Creswell & Poth, 2018). All researchers must protect participants of the study (Merriam, 2009). To ensure the study is ethically sound, an application will be submitted to the Institutional Review Board (IRB) at Columbus State University (Gay et. al, 2012). Prior to the start of the study, the researcher sent a letter to the school district board in which the study took place requesting approval to conduct the study. The Board of Education for the district under study serves as the gatekeeper for access to the teachers willing to participate in the study

and the training documents necessary to conduct the study (Creswell, 2009). A copy of the letter to the school district and the IRB application to Columbus State University is included in the Appendix.

Additionally, participants entered the research on their own free will and with the understanding of the nature of the study and any dangers that are possible with participation (Gay et. al, 2012). This was made possible through informed consent, which participants sign to acknowledge that their rights are being protected during data collection (Creswell, 2009). The researcher provided an informed consent to each participant. The consent contained the purpose of the study, research procedures, and future use of the data collected and findings (Nnebue, 2010). In addition, the consent provided information about confidentiality, privacy, and anonymity (Nnebue, 2010). The researcher reviewed the consent with each participant prior to signing. Participants were informed of their ability to withdraw from the study at any time, as well (Creswell, 2009; Creswell & Poth, 2018).

Maintaining confidentiality allowed participants to retain ownership of their voices (Creswell, 2009). Participants' names, school locations, and any other identifying information were not included on data collection instruments, data analysis, findings, or publication of the research (Patton, 2002). The coding of documents and use of pseudonyms for interview transcriptions occurred to maintain confidentiality, as well (Merriam & Tisdell, 2016). Recordings of interviews, handwritten notes from interviews, transcripts, coding notes, and interview guides were kept in a secure location in the researcher's home in a locked file cabinet.

Beneficence is the act of doing good to others and not causing harm as an ethical practice of qualitative research (Orb, Eisenhauer, & Wynaden, 2004). Beneficence was practiced in this study by conducting interviews in a setting that are private to the researcher and the participants

individually. The interviews were conducted on an online video conferencing platform in which the platform was closed to only the participant and the researcher. Each participant was interviewed separately in a secure web link. No weblink was duplicated or shared with other participants. All participants were notified that the interviews would be conducted via an online video conferencing platform and the steps to ensure confidentiality and anonymity prior to signing an informed consent.

Negotiating Access

Entry into the field of data collection involves negotiating with the gatekeepers about the nature of data to be collected for the study (Patton, 2002). Approval was sought from the district governing board to conduct the study. In addition, an application for IRB approval was submitted to Columbus State University. Permission was obtained from the district to use any training or implementation documents for this study. The purpose of gaining approval is to ensure that the study respects and protects the welfare for all persons involved (Creswell & Poth, 2018). The researcher sent correspondence which outlined the purpose and significance of the study, the participants, the setting, instrumentation, and tentative timeframe for the study to the school district. Once approval was obtained from Columbus State's IRB Committee and the school district in which the study will take place, letters were sent to the participants requesting their participation and outlining the same information given to the district. The participant letters were give information regarding the informed consent process and the necessity to have one signed by each teacher that participates.

Role of the Researcher

Methodology refers to the theoretical analysis of the research through a systematic order and measurement of findings (Faryadi, 2019). Although the amount of time varies, qualitative

researchers must carry out an in-depth examination of the phenomenon they are studying over an uninterrupted period of time (Gay & Ariasan, 2000). Because the researcher is a lead teacher and mentor for reading teachers within the school district where the study was conducted, there was direct access to the participants that participated in the study. The participants were not teachers at the researcher's school but do teach in the same grade band and school district as the researcher. Therefore, the researcher could easily access the participants for virtual interviews. Also, the researcher was a part of the implementation process of Read 180 and has access to documents needed for analysis.

Merriam and Tisdell (2016) states there are shortcomings and biases that can impact qualitative research. Biases, personal values, and assumptions must be identified in qualitative research (Creswell, 2009). The role of the researcher in qualitative research is to accurately access the thoughts and feelings of the participants in a study (Sutton & Austin, 2015). Noble and Smith (2015) advised respondent validation is one way to remove researcher bias. The researcher had participants comment on their interview transcript and final themes to assure that they accurately reflected the phenomena being studied (Noble & Smith, 2015).

Researcher as Instrument

The researcher has been an educator for 15 years. Fourteen of those years have been served in the school district in which the study takes place. The researcher is an African American female with a Bachelor of Science degree in Healthcare Management from Florida Agricultural and Mechanical University and a Master of Science in Management from Troy University. Furthermore, the researcher holds an Educational Specialist degree in Administration and Supervision from Albany State University. The researcher currently serves as the Early Intervention Reading Specialist for grades kindergarten through fifth grade in an elementary

school within the district of the study. The researcher also, serves on the leadership team, administrative support team, and as the lead ELA teacher for the school in which she serves. She serves on the Elementary Scope and Sequence Team for the district, as well.

The qualitative researcher serves as the primary instrument for data collection and analysis (Merriam & Tisdell, 2016). The researcher is considered an insider within the context of this study. A researcher is considered an insider when they belong to a particular group in which they are studying (Unluer, 2012). The researcher's primary role is as a lead teacher in the district under study. The researcher has shared experiences with training and implementation of Read 180 with the teachers that will participate in this study that provide commonality. The researcher is privy to organizational information regarding training and implementation procedures. Moreover, the researcher's role allows the researcher to experience a sense of collegiality with the participants that made it possible for inquiry regarding teachers' perceptions.

The role of the researcher can change back and forth from insider to outsider in qualitative research (Creswell & Poth, 2018; Gair, 2012). The researcher can, also, assume the role of an outsider, which means they are not a part of the group under study (Unluer, 2012). The researcher serves in a leadership position within her school; however, she may be unaware of perceptions of the participants as it relates to their schools. The researcher attends Read 180 training sessions for instructional coaches and administrators. These additional trainings provided her with information that teachers do not receive. She is a part of the school testing team, as well. This provides the researcher with access to schoolwide data.

Trustworthiness

Validity is the ultimate goal of a research study and is based on trustworthiness and external views (Creswell & Poth, 2018). Trustworthiness is defined as any consistent effort by

the researcher to address and avoid issues with validity (Gay et. al, 2012). Triangulation, or the use of multiple sources of data, creates a level of validity of the data collected for this study (Lincoln & Guba, 1985). This study used data from interviews and documents to capture multiple perceptions rather than a single truth (Patton, 2002). The use of multiple sources of data created greater credibility of the findings (Bowden, 2009). Furthermore, triangulation reduced threats such as reactivity, researcher bias, and respondent bias. Lincoln and Guba (1985) created four criteria for establishing trustworthiness in qualitative research which are the following: credibility, transferability, dependability, and confirmability. These four criteria were addressed in this study through the following means:

Credibility

Credibility is a term used to indicate that a topic was accurately identified and described (Gay et al, 2012). Furthermore, it is a term used interchangeably with internal validity (Lincoln & Guba, 1985). The research design, data collection, and data analysis added to the credibility of a study. The researcher attended all HMH training and provides instruction to students using Read 180, which demonstrates prolonged time in the field and adds to the credibility of this study (Creswell & Poth, 2018). Also, this study employed member checking of the data, interpretations, and findings (Creswell & Poth, 2018; Lincoln & Guba, 1985). Member checking clears up any miscommunications (Christensen & Johnson, 2014).

Transferability

Transferability refers to the extent of the findings of one study being able to be applied to other situations (Merriam 2009). To facilitate transferability, the researcher needed to collect descriptive data that helps other readers and researchers understand the context of the study (Christensen & Johnson, 2014). This study provided thick, rich descriptions of the setting,

participants, data collection, and data analysis (Lincoln & Guba, 1985; Merriam, 2009). The purpose of this study, was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for elementary students in a grades 3-5 Georgia elementary school during the COVID-19 pandemic, has implications for application for other educators and school districts beyond this research setting who are implementing Read 180 during the COVID-19 pandemic or other similar crisis which may call for program implementation during school closures.

Dependability

Lincoln and Guba (1985) stated the term dependability is synonymous with the term reliability. Dependability refers to the ability to replicate the study (Lincoln & Guba, 1985). Moreover, dependability answers the question of if the results of the study are consistent with the data collected (Merriam & Tisdell, 2016). The results of qualitative data cannot be discredited simply because human behavior is not static; however, there can be several interpretations of the same data collected (Merriam & Tisdell, 2016). Therefore, the expectation of reliability in qualitative research is whether the results are consistent with the data collected (Lincoln & Guba 1985; Merriam, 2009, Merriam & Tisdell, 2016). Dependability was established in this study through the form of an audit trail. An audit trail is defined as a written description of each process and may include access to documents (Gay et al., 2012). This study described the process of research in explicit detail to answer the research questions.

Confirmability

Confirmability refers to the examination of the data, findings, interpretations, and recommendations to attest if it is supported by data and coherent (Lincoln & Guba, 1985). Triangulation is a method which can be used to authenticate the confirmability of a study

(Creswell & Poth, 2018; Gay et al., 2012; Lincoln & Guba, 1985). Triangulation is defined as using multiple data sources, researchers, theoretical concepts, or methods (Creswell & Poth, 2018; Merriam & Tisdell, 2016). For this study, data collection was in the form of semi-structured interviews and documents. Qualitative research is strengthened with two or more sources (Gay et. al, 2012).

Data Collection

The purpose of this qualitative case study was used to describe teacher perceptions about the effectiveness of the implementation of the Read 180 Universal reading intervention program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 pandemic. Qualitative research was chosen for this study because it was interested in understanding how grades 3-5 teachers interpret their experiences, how they constructed new learning through professional development, and what meaning they attribute to their experiences with training and implementation of the Read 180 reading intervention program (Patton, 2002). A case study methodology was used because this study will examine a phenomenon that occurred over a specific period, which is the 2020-2021 school year (Merriam & Tisdell, 2016). Furthermore, a case study research design fit this study because it was appropriate for describing the context and extent to which a program has been implemented (Gay et. al, 2012).

A purposeful sample of grades 3-5 regular education elementary teachers from a southwest Georgia school district was used for this study. Purposeful sampling was used to select participants because the researcher selected individuals and sites for study that can purposefully inform an understanding of the research problem and central phenomenon in this study (Creswell & Poth, 2018). All teachers who participated in this study all teach ELA, received the same implementation, and received the same HMH training documents. Also, these teachers all

provided ELA instruction and intervention to struggling students during the 2020-2021 school year.

Interviews and document analysis occurred simultaneously after approvals have been received from the school district in which the study will be conducted and the IRB committee at Columbus State University. Participants were chosen to participate in the study were scheduled for interviews until after they signed an informed consent. The informed consent was sent electronically using DocuSign. Separate interviews were scheduled. The times for the interviews were scheduled after the teachers' regular work hours. The interviews were conducted via Google Meet for Windows 10/8.1/8/7 64-bit, a web-based video conferencing platform. While the interviews occurred on Google Meets, participants were asked to participate in the interview process away from their school campus to preserve confidentiality. Although the participants signed an informed consent prior to the interview, the document was reviewed with each participant.

After each interview, the recorded responses from the participant were transcribed by the researcher. Transcription involved taking the recorded interview data into typed text (Christensen & Johnson, 2014). The date, subject discussed, and the pseudonym for the participant were recorded on the transcript (Gay et. al, 2012). The transcribed data will be kept in a locked file in the researcher's home. The transcripts were copied and returned to the participant via email for member checking for accuracy and to add a layer of validity to the data (Creswell & Poth, 2018).

The researcher already had access to the documents that were analyzed due to their role within the school. Document analysis did occur until all approvals have been obtained. The researcher chose which training documents were viable to answer research questions regarding teachers' perceptions of the effectiveness of training to prepare them for implementation of Read

180. The use of training documents created triangulation and reduced bias using a secondary data collection method (Triad 3, 2016).

Table 1 outlines the data sources aligned to each research question.

Table 1

Data Sources for Research Questions

Data Sources for Research Questions	Research Question	Data Sources
1.	What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students?	Interviews, Document Analysis
2.	What are grades 3-5 elementary teachers' perceptions of using Read 180 program with their students?	Interviews
3.	What are grades 3-5 teachers' perceptions of student gains in reading from using the Read 180 program for reading intervention?	Interviews

Data Analysis

Data analysis is the process of summarizing data and leads to the presentation of the study's findings (Gay et. al., 2012). During qualitative research, data analysis of interview data and document analysis occurred concurrently in this study (Christensen & Johnson, 2014). The analysis of data for this study was inductive because categories, common categories, and themes were developed as the researcher worked between the data from the interviews and documents (Creswell, 2009). Twelve teachers were interviewed for this study. Four teachers each from grades 3, 4, and 5 were included in the sample. The data collected from interviews were moved from transcribed responses to thematic analysis, which is the identification of themes in data (Christensen & Johnson, 2014). Thematic analysis was initially developed by Virginia Braun and

Victoria Clark for use in psychology research (Caulfield, 2020). Thematic analysis can be used in research when the purpose of the study is to find out something about people's perceptions, knowledge, and experiences from a set of qualitative data. The researcher conducted a thematic analysis of the interview transcripts and training documents to discover patterns and emerging themes (Bowen, 2009). Data from the interviews and the documents was used for triangulation. There are six steps in thematic analysis. They are the following: familiarization, generating initial codes, searching for themes, review of initial themes, defining and naming themes, and producing a report (Braun & Clark, 2012; Caulfield, 2020; Maguire & Delahunt, 2017).

Familiarization is the process of getting to know the data collected (Caulfield, 2020). The researcher will record interviews to ensure accuracy during transcription. The researcher read the transcripts and reviewed them against the recorded interview sessions (Braun & Clark, 2012; Maguire & Delahunt, 2017). Member checking occurred to validate the accuracy of the transcription. The researcher had the participants sign and date to verify review of the document. Familiarization is not a formal process, so the researcher annotated the transcripts with notes of words and statements that stick out from the reading (Braun & Clark, 2012).

Braun and Clark (2012) stated that codes are the building blocks of data analysis. Coding is the process of making notations on forms of data that strikes the researcher as potentially relevant to answering the study's research questions (Merriam & Tisdell, 2016). Saldana (2009) states that coding is heuristic, which means that it is exploratory with no specific formula to follow. Important words and phrases related to the research questions of this study were highlighted in assorted colors during this phase of coding (Christensen & Johnson, 2014; Saldana, 2009). The aim of coding the interview and documents was to organize the data in a

meaningful and systematic way so that congruent themes can be identified (Maguire & Delahunt, 2017).

The qualitative researcher constructed meaning by identifying patterns and themes that emerge during the third step in thematic analysis (Gay et. al, 2012). Themes are broader than codes, so the researcher will combine related codes to create overarching themes (Caulfield, 2020). Themes are conceptual elements that cover many individual codes (Merriam, 2009). Braun and Clark (2012) state there is no magic formula to create themes; however, the researcher will reread the coded data to develop emerging themes. The themes were reviewed for usefulness and accurate representations of the data (Caulfield, 2020). To check the quality of the themes, the researcher asked the following questions: (1) Is this a theme or a code; (2) Does the theme provide useful information regarding the data; (3) Is there enough meaningful data to support the theme; (4) Does the data lack coherence (Braun & Clark, 2012). Themes may be revised, deleted, or added based on the findings of the review.

After confirming the list of appropriate themes, the themes need to be defined (Braun & Clark, 2012; Caulfield, 2020). In this step of thematic analysis, the researcher clearly stated what is unique about each theme (Braun & Clark, 2012). The researcher used the following questions to define the themes: (1) What is the theme saying, (2) Are there any sub themes that can be developed; (3) How do the themes interact with each other (Maguire & Delahunt, 2017). A secondary goal for defining themes for the researcher was to find any overarching themes (Maguire & Delahunt, 2017).

Reporting Data

The purpose of this qualitative case study was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for elementary

students in a grades 3-5 Georgia elementary school during the COVID-19 pandemic. The last step in thematic analysis was to report the findings of the data (Caulfield, 2020; Creswell, 2009). The findings for this study were organized by each research question. The themes as they relate to the questions were addressed (Caulfield, 2020). Direct quotations were included in the findings to support the validity of the themes (Creswell, 2009; Patton, 2002). The researcher reported on the number of occurrences for the codes under each theme using a frequency table. A count can verify that all codes are given equal emphasis (Creswell & Poth, 2018). Pseudonyms will be used to replace the actual names of participants on all forms of data to protect the teachers from any negative consequences of information that may be revealed through their responses in the interviews (Gay et. al, 2012).

Summary

A purposeful sample of regular elementary education teachers in grades 3-5 will participate in this study. More specifically, four teachers from grades 3, 4, and 5 will participate in this study. The data for this study will be collected from semi-structured interviews and document analysis. The interviews will be conducted on an online video-conferencing platform and be recorded to increase the accuracy of transcription. HMH training documents will be analyzed to further support the teachers' perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 pandemic. The data collected will be analyzed using thematic analysis. The research questions provided guidance during the thematic analysis process. The findings from this study will be communicated in Chapter IV of the study.

CHAPTER IV: FINDINGS

The purpose of this study was to describe teachers' perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for students, grades 3-5, in Georgia elementary schools during the COVID-19 pandemic. Teachers were required to receive training and to implement the program virtually in order to respond to conditions created by the pandemic. Chapter I introduced data regarding the state of reading achievement in the United States, the statement of the problem, the research questions, the theoretical frameworks for the study, the significance of the study, an overview of the methodology, limitations, and delimitations. Chapter II discussed the history of reading instruction. Chapter II also reviewed past studies that focused on educational technology, other reading programs, Read 180, interferences to reading, teaching through a pandemic, and professional development. Although there is literature addressing teaching during a pandemic and the Read 180 program, there is no literature addressing teacher perceptions of implementing Read 180 during the COVID-19 pandemic. Chapter III addressed the methodology for the study and explored the research design, instrumentation, the setting, the participants, data collection and analysis, negotiation of access, the researcher's role, methodological assumptions, trustworthiness, ethical considerations, and procedures for the study.

A gap in research exists because there have been no other studies that have looked at teacher perceptions of the Read 180 program implementation during the time of the pandemic. To address the gap, a bounded case study was conducted by the researcher. Elementary teachers, grades 3-5, in a single Georgia school district provided their perceptions of training; this allowed the researcher to provide a rich description of their perceptions of the training and implementation of Read 180. The study sought to use purposeful sampling to identify 12 teachers (4 third grade teachers, 4 fourth grade teachers, and 4 fifth grade teachers) from five

schools. Participation in the study was based on the teachers being general English Language Arts (ELA) teachers in grades 3-5 who engaged in the implementation and training of Read 180 during the COVID-19 pandemic. Data was collected from semi-structured interviews and documents provided for implementation of Read 180. Thematic analysis was used to examine the data. The themes that emerged from data analysis will be discussed in Chapter IV.

Research Questions

The following research questions guided this study:

1. What are grades 3-5 elementary teachers' perceptions of the effectiveness of the Read 180 Universal Program for Reading Intervention implementation process to prepare them for its use with students?
2. What are grades 3-5 elementary teachers' perceptions of using Read 180 Universal Program with their students?
3. What are grades 3-5 elementary teachers' perceptions of student gains in reading from using the Read 180 program for reading intervention?

Research Design

The researcher utilized a qualitative case study research design to describe teacher perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for students, grades 3-5, in Georgia elementary schools during the COVID-19 pandemic. A bounded case study design (Yin, 2018) allowed the researcher to analyze the phenomenon of implementing a new blended learning program for reading intervention during the COVID-19 pandemic for grades 3-5 in a Georgia elementary school. A bounded case study is the instance of some single process, issue, or concern around, which there are boundaries (Merriam, 2009). The case is also considered bounded because it takes place in one school

district in suburban southwest Georgia during a specific time period, that being the 2020-2021 school year.

The researcher sought approval via email from the Superintendent of Schools (Appendix A) for the district under study. Once approval was obtained from the school district, approval to conduct the study was sought from Columbus State's IRB Committee (Appendix B). After obtaining permission from the superintendent and the local board of education and being approved by the Columbus State University's IRB Committee September 25, 2021, an email was sent to all elementary school principals in grades 3-5 schools (Appendix C) requesting permission to interview ELA teachers in grades 3-5 participated in the training and implementation of Read 180 during the 2020-2021 school year. The letter of approval from the district was affixed to the email to the principals (Appendix A).

Participants were then recruited by email (Appendix C) from the 14 elementary schools within the district under study. An email was sent by the researcher to all currently employed in the school district on a full-time basis for the 2020-2021 school year explaining the purpose of the study and informed consent document for the ones who wished to participate in the study to complete and submit to the researcher. Participants joined the study by submitting a Google Form indicating their willingness to participate in the study. The Google Form included the informed consent, which was electronically signed by potential participants. The informed consent notified participants of the following: the nature of the study and that the study would be recorded; the identity of the school district, school leaders, and teachers would be kept confidential; the consent stated that no gifts, tokens, or rewards would be provided to the participants and that they could withdraw from the study at any time with no penalty. Twelve participants were selected to participate in the study.

After a participant completed the Google Form as an agreement to participate in the study, the researcher arranged a time and date during a normal school day or afterwards to complete a semi-structured interview with individual participants. All interviews were arranged to take place after 5:00 p.m. to ensure that teachers would be available outside of their regular working hours. Interviews were conducted via Google Meet. A separate Google Meet link for interviews was provided for each participant. To ensure confidentiality, no two participants were assigned the same meeting link. Some interviews were conducted on the weekend via Google Meet, as well.

Data was collected in the form of semi-structured interviews and training documents. The training documents consisted of the teacher simulation manual, the student simulation manual, and the Read 180 implementation manual. Semi-structured interviews allowed for interpretation and provided a rich description of an experience, while document analysis lends to substantiating findings (Merriam, 2009). All participants were asked the same open-ended questions, which is a characteristic of a semi-structured interview. They were asked the questions in the same order, also. Data from these interviews revealed themes centered on teachers' perceptions of training, andragogy needs of the teachers, implementation, resources, and time management through the process of thematic analysis. The interviews were recorded on the Google Meet platform in addition to a handheld audio recorder. Each of the participants who successfully completed the semi-structured interview process was allowed to review or check their transcription, member checking (reference) once it was transcribed by the researcher. Transcription occurred after each interview and member checking was completed after each interview was transcribed.

Each piece of data collected was coded and analyzed using thematic coding. Initially, the researcher familiarized herself with each individual transcript by rereading them several times.

Braun and Clark (2017) stated thematic analysis can be used to identify patterns across data in relation to participants' lived experience, views and perspectives, and behavior and practices to understand what participants' perceptions. The rereads allowed the researcher to determine initial codes. As more interviews and transcripts were completed, they were compared to determine commonalities. The interviews provided data that could be merged into categories of perceptions of training and implementation of Read 180.

The researcher conceptualized themes based on the participants actually stated in interviews (Braun & Clark, 2017). Coding was done by hand. The researcher coded the transcripts by highlighting significant participant quotes that stood out to the researcher (Salanda, 2009). The documents were color coded by hand using highlighters. Each theme was assigned a color. Training documents were coded for common themes and matched to the themes of the interviews. These categories were then merged into common categories and from those categories emerged themes according to the thematic analysis process.

Initial themes were assigned to reflect participants' responses to interview questions. The categories were defined and redefined after all interviews were transcribed and compared to each other. Final themes were derived from the categories. Subthemes were developed under major themes to denote differences in responses under the same major theme. All coded transcripts and documents were aligned to the research questions to determine the findings of this study.

Participants

General education ELA teachers in grades 3-5 were recruited using an email request. The first 12 teachers to respond and submit consent forms were included in the study. Teachers were given the option prior to interview sessions to withdraw from the study. Pseudonyms were given to each participant for the purpose of anonymity. Participants were interviewed in a secure

Google Meet link. Separate meeting links were provided for each participant, and the links did not disclose the actual names of the participants. All interviews were conducted at separate times. Table 2 displays the participants’ demographics.

Table 2

Participant Demographics

Pseudonym	Gender	Highest education	Race	Years Teaching	Grade level taught
Ada	Female	Ed. S.	Black	12	3
Donna	Female	B.S.	Black	4	3
Rhonda	Female	B.S.	Black	2	3
Cassie	Female	B.S.	Black	2	3
Mindy	Female	Ed. S.	Black	19	4
Joshua	Male	B.S.	Black	13	4
Linda	Female	Ed. S.	White	8	4
Edith	Female	Ed. S.	Black	8	4
Barbara	Female	Ed. S.	Black	15	5
Cynthia	Female	Ed. D.	Black	16	5
Annie	Female	M.Ed..	Black	13	5
Tabitha	Female	Ed.S.	Black	17	5

The criteria for inclusion involved serving as a general education ELA teacher in either grade 3, 4, or 5 during the 2020-2021 school year. These teachers have shared experiences with implementation of reading programs in the past and collaboration in professional learning communities that were focused on ELA instruction. All participants in this study received professional development on the Read 180 program during the 2020-2021 school year, which was the implementation year of the program. The teachers received virtual training. Training was provided starting in August of 2020. The initial training was conducted virtually by the HMH coach with all elementary schools. Subsequent training sessions were conducted by the HMH coach online via Google Meet for individual schools. The HMH coach met with each school at least on a monthly basis and quarterly during district professional learning sessions. The district professional learning sessions were conducted via Google Meet with teachers from various

schools. Participants included 11 females and 1 male. Of the 12 participants, one had a doctoral degree, six had specialist degrees, one had a master's degree, and four had bachelor's degrees. The average years of experience represented within the sample was 10.71 years. Five teachers had less than a decade of experience. Each of the participants was assigned a pseudonym by the researcher for the purpose of ensuring their privacy rights or confidentiality rights.

Early Intervention and Exceptional Students' teachers were not eligible for the study. These teachers were not included because they use the Read 180 for interventions to reflect a student's accommodations or modifications for instruction. Participant demographics were restricted to the same school district, but not the same elementary school. The participants were selected from five of the fourteen elementary schools.

Participants' Profiles

The participants shared the following information in an email after the semi-structured interviews were completed.

Ada

Ada is a general education teacher. She has 12 years of experience and holds a Specialist degree in Elementary Education. Ada serves on the Positive Behavioral and Intervention Support Team for her school. She holds a gifted and reading endorsement. Ada began teaching in the district under study after graduating from a local university but is a native of a small nearby county. In addition, she has been employed with three other elementary schools with the school district under study. Working as a lead teacher for HeadStart began her career in education. She is the mother of two.

Donna

Donna holds a bachelor's degree in Elementary Education. She has been in education for four years. Donna entered the field of education from retail sales. She is a native to the school district under study. Additionally, Donna started pursuing her teacher education as a student at the local technical college. She has previously taught social studies and science on the elementary level.

Cassie

Cassie holds a Bachelor of Science degree in Elementary Education and has been serving as an educator for 2 years. She is currently working on her Masters of Fine Arts. Cassie previously worked in the service industry. Cassie is a freelance writer in her spare time. She is, also, a local visual design artist within the district under study. Cassie participates in many community service project as a member of her sorority. She works with the cheer and dance squad at the school in which she is employed.

Rhonda

Rhonda holds a Bachelor of Science degree in Elementary Education and has been serving as an educator for 2 years. Rhonda has only taught at one elementary school during her 2 years in education. She, also, serves on the Local School Governance Team for her school. Rhonda received her kindergarten through twelfth grade education in the district in which the study was conducted. Rhonda is the mother of one.

Mindy

Mindy holds a gifted endorsement along with being certified in elementary education. Her highest level of education is a Specialist degree in Education. Mindy has served as a teacher

for 19 years. Mindy is a Teacher of the Year finalist for the district. Mindy is a native of the school district in which this study was conducted.

Joshua

Joshua has served as an educator for 13 years. He is a Teacher of the Year winner for his school. Also, he has an extensive background in teaching science and special education. Joshua holds a Bachelor of Science degree in Education. He holds several endorsements related to special education. He serves as head coach for a local recreational swim team and holds a weekly podcast centered around education topics.

Linda

Linda has an eight-year tenure as a certified elementary education teacher. She holds a Specialist degree in education. She has been selected as a Teacher of the Year finalist for the district in the past. Linda was very instrumental in creating remediation labs for students. She also has a background in special education. Linda was educated in a neighboring school district. Linda is a part of a local organization aimed at getting people physically fit.

Edith

Edith is a Teacher of the Year winner for her school. She holds a Specialist degree in Education and has 8 years of teaching experience. She holds a gifted endorsement. Edith is also a small business owner within the community. Edith is a mother of one. Additionally, Edith serves as a cheer coach for her school. She entered the teaching field after a career in finance. Edith is a mother of one.

Barbara

Barbara has been a teacher in the school district for 15 years. She is a veteran of the U.S. military. She has taught in grades 3, 4, and 5. Barbara has a Specialist degree in Elementary

Education. She currently works at the only international baccalaureate (IB) charter school in the district. Barbara is the mother of two. Barbara has taught all subjects in the past and all elementary grade levels.

Cynthia

Cynthia is a 16-year veteran of the school district. She has a doctorate degree in Education. Cynthia holds an endorsement in Gifted Education, Multi-Tier Systems Support, and Coaching. She is the founder of an educational consultant firm. Cynthia is very involved in her community through her sorority's service projects. Cynthia is a Teacher of the Year finalist for her school.

Annie

Annie served as a paraprofessional before obtaining her certification in Elementary Education. She has 13 years of experience as a teacher. She holds endorsements in special education adaptive curriculum, language arts, math, reading, science, and social science. Annie is a native of Florida. Her relationship to the school district under study began after attending a university located in the same city. Additionally, Annie is the mother of two children that attend school in the same school district under study.

Tabitha

Tabitha has 17 years of experience in education. She has a Specialist in Education and endorsements in middle grades language, reading, and social science. She holds teacher leadership and gifted endorsements, as well. She was a district winner for Teacher of the Year. Tabitha has experience teaching foreign language to elementary students.

Findings

The purpose of this study was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 pandemic. A gap in research exists because there have been no other studies examining teacher perceptions of the Read 180 program implementation during the time of the pandemic. Twelve participants were included in the study. Data were triangulated using semi-structured interviews and document analysis.

The study was guided by three research questions:

1. What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students?
2. What are grades 3-5 elementary teachers' perceptions of using Read 180 program with their students?
3. What are grades 3-5 teachers' perceptions of student gains in reading from using the Read 180 program for reading intervention?

The researcher conducted semi-structured interviews to gain insights of the teachers' perceptions of the effectiveness of the training and implementation for Read 180. Each interview question was aligned to the research questions for this study. The interviews consisted of 10 open-ended questions. Table 3 shows this alignment.

Table 3

Alignment of Interview Questions to Research Questions

Research Questions	Interview Questions
1. What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reaching Intervention implementation process to prepare them for its use with students?	1, 2, 4, 6, 7, 8
2. How do grades 3-5 elementary teachers describe their perceptions with using the Read 180 program with their students?	1, 3, 4, 5, 9, 10a, 10b
3. What are grades 3-5 teachers' perceptions of student gains in reading from using Read 180 program for Reading Intervention?	1, 9, 11, 12, 13

The interview recordings were downloaded from a handheld voice recorder to the researcher's personal computer for review. More specifically, the researcher used a Evister digital voice recorder to record the audio from the interviews. The microphone was built into the device. The audio files were downloaded to the researcher's personal computer and stored on Google Drive. The audio files were transcribed by the researcher. Transcribed interviews were returned to the participants in separate emails for member checking. This process was necessary to ensure that each research question was addressed and provided a rich description of teachers' perceptions.

The data underwent manual coding. The themes were defined from an initial review of the transcribed interviews and documents. The themes were later redefined after a second review of the data. The data and themes were organized by research questions. As the researcher reviewed the transcribed data and documents recurring themes began to emerge. Table 4 displays the categories, common categories, and themes derived from the data.

Table 4*Data Analysis Categories and Themes*

Categories	Common Categories	Themes	
1. Too many components	Difficulty of Implementation	1. Teachers' perceptions about training and implementation	
2. How components fit together	Difficulty of Implementation		
3. Hard to train students	Difficulty of Implementation		
4. Desire of modeled instruction	Modeling		
5. Teacher simulator insufficient	Hands-on		
6. Student simulator insufficient	Hands-on		
7. Lack of in-person training due to COVID-19 pandemic	COVID-19 Pandemic		
8. Sit and get virtual training	Virtual Training	2. Teachers' perceptions of the implementation experience	
9. Lack of time in literacy block	Time Management		
10. Other Tier I instruction	Time Management		
11. Engaging students virtually	Virtual Instruction		
12. Lack of printed teacher manuals/materials	Teacher Materials		
13. Lack of printed student workbooks	Student Materials		
14. Lack of printed student resources	Student Materials		
15. Increase Lexile levels	Perceived Benefits		3. Teachers' perceptions about benefits of Read 180
16. Improved critical thinking	Perceived Benefits		
17. Influence of teacher instruction	Benefits not tied to Read 180		
18. Read 180 not properly implemented	Benefits not tied to Read 180		

The frequency of common responses to interview questions helped to define themes.

Three main themes and 12 sub themes emerged from the review of data. Common responses to interview questions were coded in separate colors. Table 4 outlines the alignment of the themes to the research questions.

Table 5*Thematic Analysis Table*

Research Questions	Major Theme
1. What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reaching Intervention implementation process to prepare them for its use with students?	Theme 1: Teachers' perceptions about training and implementation
2. How do grades 3-5 elementary teachers describe their perceptions with using the Read 180 program with their students?	Theme 2: Teachers' perceptions of the implementation experience
3. What are grades 3-5 teachers' perceptions of student gains in reading from using Read 180 program for Reading Intervention?	Theme 3: Teachers' perceptions about benefits of Read 180

The sub themes contribute to the understanding and description of the three overarching themes of the study, which helped with answering the research questions. Table 5 displays the number of times in which each term was referenced in the participants' responses during the interviews.

Table 6*Frequencies of subthemes related to teachers' perceptions of the training and implementation of the Read 180 program*

Subthemes	Frequency
Time management	97
Student materials	62
COVID-19 Pandemic	47
Virtual instruction	39
Virtual training	33
Difficulty of use	26
Modeling	22
Perceived benefits	19
Hands-on	14
Teacher materials/edition	11

Research Question 1 and Theme 1

What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for reading intervention implementation process to prepare them for its use with students? The participants were asked to describe their experience with the training and implementation of Read 180 during the 2020-2021 implementation year. The researcher requested participants share perceptions concerning their beliefs about being equipped with the materials necessary for proper implementation of Read 180 for teacher and student usage. One question specifically solicited participants to discuss if they felt equipped or prepared to implement Read 180. Furthermore, the teachers were asked to describe their professional development and whether they felt the need for additional training. The researcher asked that participants share the setting and frequency of professional development. This theme and subthemes emerged from the interview responses to questions 1, 2, 4, 6, 7, and 8. Six subthemes emerged from Theme 1: Teachers' perceptions about training and implementation. Categories that emerged from the data for Research Question 1 are shown in Table 6.

Table 7

Categories and subthemes related to Research Question 1 and Theme 1: Teachers' Perceptions about Training and Implementation

Theme	Subthemes
Teacher's perceptions about training and implementation	<ul style="list-style-type: none">• Difficulty of implementation• Modeling• Hands-on• Virtual training• COVID-19 pandemic

Several related subthemes emerged from the overarching theme. At the beginning of the interview, participants were asked at the beginning of the interview to describe their experiences with the implementation of Read 180. When responding to this question, all participants

indicated that implementation of Read 180 was difficult in many aspects. Edith (September, 2021) stated, “It was difficult, especially since I had to do it virtually.” More references were made by participants to validate their perceptions regarding the difficulty of implementation. Linda said, “As you know for students, it’s hard for students to learn virtually, but also, you know, having all the training on a Google Meet can be difficult for us as educators” (September, 2021). More specifically, 16 responses made mention of the difficulty with implementation on a whole, as statements included information about navigating the online component and managing instruction. Mindy’s response addressed these navigational and instructional management difficulties: “Starting off trying to implement a new program where we’ve had little or no training on students that were one-hundred-percent virtual was very difficult in my opinion. It was hard for me to even navigate through the digital platform (September, 2021).

However, there was only one participant who felt that implementation went well. Joshua responded that implementation was going well for him (September, 2021). His only negative comments included criticism of resources and the inconsistency of student interaction on the online platform by stating, “There was no consistency with getting students to sign into class or sign into the program. It was like that for the virtual students more than in person (September, 2021).

Modeling by professional development leaders is a component of professional development (Darling-Hammond et al., 2017). When asked about their perceived adequacy of professional development, all twelve participants referenced the need for the modeling of lessons. The need for modeling from the HMH trainer of teacher lessons was communicated frequently as a barrier to training that impacted the implementation of Read 180 within the participants’ classrooms. Barbara mentioned, “It would have been more of a benefit if our

trainers actually came into the building and worked with us instead of just sitting in a Google Meet and then trying to go back and implement without a good model” (September, 2021). In like manner, Donna described her difficulties with receiving training virtually:

By them going through it and modeling it, everything was based on a Google Meet presentation. So, I feel like that was a problem as well. We were used to having things hands on. I had a lot of Google Meet training, so it seems like a lot of presentations and going through showing you how to do it at the expense of training that we were used to.

Ada and Joshua were the only participants who did not feel a need for modeled lessons. Joshua stated, “I don’t think there is anything else that I would need as far as professional development. I am just trying to navigate through the platform. (September, 2021). Ada stated that she did receive some modeling during online training, but felt the district decided to implement the Read 180 at the wrong time (September, 2021). Barbara also mentioned training and implementation was presented at the wrong time period (September, 2021). Barbara expressed the following:

The district should make sure the program should be implemented inside of the classroom. Maybe someone coming in actually demonstrating what should be done rather than just sitting down and talking about it and talking about some suggestions to do.

Furthermore, when asked to describe their professional development, participants frequently used the term “hands-on” in terms of their desired training for the implementation of Read 180. Eleven participants felt that they needed trainers to physically come into the building and provide hands-on training. Edith mentioned she was a hands-on learner and would have benefited from getting in and practicing in the program before use (September, 2021).

When asked about the difficulty of use by the teacher, 11 of the 12 participants felt like they needed additional training to navigate the teacher platform and modeling on how to implement the lessons. Mindy stated, “I would say I still need to be shown how to actually use the program. Like they have given us the training, but no one has come in and modeled for me in my real-world classroom to show me how it actually works” (September, 2021). Modeled lessons are the additional professional development the 11 participants believe they need to better implement Read 180 in their classrooms. Joshua was the only participant with a different perspective. He felt he had adequate training:

We had plenty of training, so I feel pretty equipped to implement it. I don't think there's anything else that I would need as far as professional development. Because we are just trying to navigate to all of the resources of the teacher's component, just navigating through all the resources knowing where everything is observation.

In addition to answering questions regarding instruction, participants were asked about their perceptions of how the COVID-19 pandemic affected their training and implementation of Read 180. The responses to this sub theme related directly to the other subthemes under teacher perceptions of the implementation experience. Eleven participants spoke of the negative impact that the COVID-19 pandemic had on their training and implementation experience with Read 180. Cassie answered, “I think it impacted it tremendously. I feel like implementation and training was a little rushed” (September, 2021). Furthermore, Ada mentioned the following:

We were not able to effectively implement it because we were not able to sit down with the kids. Because of the pandemic, we had six feet of distance. So we were not able to walk them through it and be hands on. I think it would have been better if we did not have to push it out with stipulations like being six feet away or trying to be safe.

Rhonda gave the only positive insight regarding implementing Read 180 during the COVID-19 pandemic by stating the following: “It actually affected it in a positive way due to the fact they had the app to work in. They had a reading library they could use” (September, 2021). However, the remaining eleven participants spoke to how the COVID-19 pandemic made implementation of Read 180 difficult. Several common quotations were coded to describe the eleven participants’ negative connotation toward how the pandemic affected Read 180’s implementation. Ada stated,

So as far as the training, there was no problem with the training. However, it was kind of rolled out, you know, at the wrong time or in the middle of a pandemic. So, the kids were in and out of the building. We were not able to effectively implement it because we were not able to sit down with the kids. Because of the pandemic, we had the, you know, the six feet distance. So we were not able to walk them through it and be hands on. That affected it really, really, really badly. I think it could be better if we were able to push it out like in the past without stipulations like being six feet and just trying to be safe.

Research Question 2 and Theme 2

How do grades 3-5 elementary teachers describe their perceptions with using the Read 180 program for reading intervention with their students? The literature review revealed teachers’ beliefs, experiences, and instructional practices have shown to have a positive impact on influencing change (Robinson & Smith, 2020). Research question two sought to explain teachers’ perceptions of the implementation experience. In addition to the participants being asked questions regarding implementation and training for themselves, they were asked to describe their experiences with using the program with their students. Table 3 shows the themes and subthemes that emerged from the interview responses to questions 1, 3, 4, 5, 9, 10a, and 10b.

Six subthemes were identified from the data as it relates to research question 2. They are time management issues, virtual instruction, teacher materials, student materials, and the COVID-19 pandemic. The frequency of these subthemes was displayed in Table 5. Quotations from the transcribed interviews were used to support the themes and subthemes related to research question two. These supporting quotations can be found in Table 7.

Table 8

Categories and Subthemes Related to Research Question 2 and Theme 2: Teachers' perceptions of the implementation experience

Theme	Subthemes
Teacher's perceptions of the implementation experience	<ul style="list-style-type: none"> • Time management • Virtual instruction • Teacher materials • Student materials

When participants were asked to describe their experiences with the implementation of Read 180 in question 1, issues with managing the time needed to implement Read 180, difficulties with virtual instruction, and the lack of teacher and student materials were all shared.

Participants discussed their problems with implementing Read 180 in terms of the classroom time needed daily for the program. Issues with managing the needs of the program and the time needed were frequently referenced. Their responses revealed that most found that there was not enough time to implement Read 180 as an intervention program alongside another Tier I program. The following response from Mindy was similar to most participants:

Read 180 is not a 10-minute program with the teacher. It is an entire lesson within itself. So, with that being an entire lesson within itself, Read 180 is not aligned with the way our standards are taught from the units of study. So you're trying to figure out or I'm trying to figure out how to successfully merge the two.

Most participants related their issue with fitting Read 180 into their schedule with the lack of modeling or training. Donna made the following observation regarding training and implementation: “I don’t feel like we had extensive training that we should have as far as previous programs in the past. We didn’t have the extensive training that we needed in order for it to be implemented as expected” (September, 2021).

Virtual instruction was a phrase that was referred to frequently in regards to implementation of Read 180 describing their experience with implementing Read 180. When assessing teachers’ perceptions of the implementation experience, they described their experience with implementing Read 180 to students virtually. For example, Cassie stated:

It was difficult to monitor virtual students as they worked through the online component of the program. I’m not sure how effective it was because I wasn’t able to really monitor it last year. I don’t feel that it worked that well, but I believe it’s because we were virtual.

Many participants mentioned virtual learning as a deterrent to the ease of implementation of Read 180. This was especially true of small group work that had to take place virtually.

Cynthia explained,

We started off virtual and then we came back, and then we went back hybrid. It was difficult with the transition of trying to implement some of the steps of these tier-2 and tier-3 programs in a virtual setting. The whole group was easy to implement. It was the breaking off into the small grouping using breakout rooms on Google Meet that made the implementation of the program a little difficult.

Difficulty with managing virtual instruction was related to time management issues.

Barbara stated, “Last year at the beginning I struggled because I had a part of my class online. I had like three or four in class. So trying to balance time for, you know, everybody was a little

difficult” (September, 2021).

Moreover, participants were asked to give insight regarding the availability of resources, which sought to determine their perceptions regarding teacher materials. The participants mostly agreed that they did not have enough teacher manuals in their building because several teachers used the same materials in the same building. Annie (September, 2021) stated, “We didn’t get a teacher manual. Teachers had to be creative in acquiring resources.” The following quote from Barbara added another insight to the way teachers had to secure materials: “I actually bought my own teacher manual. We were probably over halfway through the program before we received the teacher’s manuals, and the professional development book. And those things I had to purchase on my own” (September, 2021).

There were two participants, Joshua and Edith, who had differing opinions about the availability of teacher resources. These participants felt like they had been provided with adequate resources; however, they were not confident in using the resources or did not know how to use the resources. Joshua noted, “We had enough resources, but we got them very late in the year, but we weren’t able to get everything I would have liked to have gotten out of the program” (September, 2021). Edith added the following:

Um, yeah. There were a lot of resources, however, how it was just working out on the platform. It was difficult to find this piece and that piece that I needed for a particular lesson, but they did have a plethora of resources that I could use.

The frequency in terms of teacher materials was the same as responses for student materials and is reflected in Table 6. Eight of the participants expressed that they did not have physical student materials or that they received student materials late. Joshua, Edith, Linda, and Cassie expressed they had adequate resources for their students. Linda stated the following:

I do feel like I was given enough resources, since we were virtual last year. For independent reading, we had an online library filled with a lot of books that students could choose from based on different Lexile levels. I was obviously all my students who were in Read 180, had access to the platform where they were lessons that the Read 180. Furthermore, participants expressed students had difficulty accessing their student materials. For example, Barbara stated,

In the beginning, we did not have enough hard copies. Our IB Coordinator took the workbooks and recreated the online version to look like a Google form so that you could fill it out and things like that. So, we didn't have enough books. And even at the end of the program, we still didn't have enough books for every student. We had to download a PDF that she created for the training.

Research Question 3 and Theme 3

What are grade 3-5 teachers' perceptions of student gains in reading comprehension from using the Read 180 program? Research question three was designed to describe teachers' perceptions about the benefits of implementing Read 180. Chapter II outlines the facets of the Read 180 program. Moreover, Chapter II gives information from previous studies on the effects on reading achievement of students from using the Read 180 program.

Table 9

Categories and Sub Themes Related to Research Question 3 and Theme 3: Teachers' perceptions about the benefits of Read 180

Theme	Subthemes
Teachers' perceptions about the perceived benefits of Read 180	<ul style="list-style-type: none"> • There were perceived benefits • Benefits could not be tied to Read 180

Perceived Benefits

The objectives of the Read 180 Universal reading intervention program are to identify and target specific elements of phonics, fluency, vocabulary, comprehension, spelling, writing, and grammar, as well as promoting self-directed learning based on a diagnostic assessment on the individual student level (HMH, 2020). Participants were asked if they perceived any benefits in terms of their students with the implementation of Read 180. Eight participants responded in the interview that they felt that using the Read 180 program was beneficial to their students despite their difficulties with implementation. Joshua stated, “I love the vocabulary component of it, and I love the reading zones because students get practice in each element. I like those components of it.” Additionally, Ada stated that she did see an increase in her students' Lexile levels (September, 2021).

One interview question asked if teachers would choose Read 180 as a reading intervention if they had the opportunity to choose a program for their classroom. These eight participants further validated their approval of the program itself with their affirmative responses. This was an example from Cassie:

I like Read 180 because I do think that it can be a good program. I just feel that I need to continue to educate myself on the program so I can use it more effectively and my students can benefit from it as best they can. Go into the handbook and read it, continue to educate yourself so you know what to do and the rotations can run smoothly.

Moreover, Barbara stated,

I probably would, I believe that it is a good program. It's just that we implemented it at the wrong time. I want the whole group, the platform and all the integrations in it. I think

it would be a really good program for our school if it's implemented with fidelity. I just think that we chose the wrong time to try and implement it.

Chapter II, revealed the inclusion of technology in education can benefit student achievement by increasing student engagement, increasing student motivation to learn, reducing cognitive load, promoting retention of learning, and increasing the flexibility of instruction (Jamshidifarsani, Garbaya, Lim, & Blazevic, 2018). Linda described what she observed as perceived benefits in terms of student engagement by stating the following:

They never seem to be bored or upset when I told them to get on. And it was only for 15- or 20-minute increments, but there were lots of visual aids pictures. I really think it helped with students' vocabulary just because there was a lot of focus on vocabulary, as well as spelling, which I feel like we forget a lot of educators about vocabulary or spelling. So those were some of them, I didn't feel that that improved my students.

Benefits Not Tied to Read 180.

Although eight of the participants felt that there were some perceived benefits of implementing Read 180, five of the participants had negative feelings regarding benefits of the program's implementation. There were two participants that felt that other programs that were used for reading intervention in the past were more effective.

The literature review revealed that Read 180 is structured into a 90-minute block, devoted to the four instructional shifts (HMH, 2020). There was a negative response to perceived benefits for participants in relation to the difficulty of use or feeling unprepared to implement Read 180 as HMH may have intended or trained participants. Mindy responded, "I'm saying no. I wouldn't because I don't even know how to use it. So, it hasn't been beneficial for my students."

Barbara, Tabitha, and Donna expressed similar views that any data from the program was not a true indicator of growth seen in students. Barbara stated,

I don't think it was really a good true picture. Students were online taking the test. You didn't know if it was the parent taking the test. The students were doing it wrong, of course, in person when they came, or they would stay home. So, I don't think last year gave a good perception of how well the program would do.

Document Analysis Findings

The purpose for document analysis in this study serves to answer the research question regarding teachers' perceptions of the effectiveness of professional development to prepare them to implement Read 180 in their classrooms. The analysis of training documents allowed the researcher to describe the participants' understanding of resources provided for training that directly impacted implementation of Read 180. Moreover, the purpose of the use of these particular documents was to identify components provided in training and how Read 180 was to be implemented. The documents were coded and linked to the themes from the interview.

Research Question 1 and Theme 1

What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students? Based on the data from the interviews, the majority of the participants responded that they had a difficult time maneuvering the platform or all of the components of Read 180. None of the participants responded with detailed steps that they took to understand the online platform in and of itself. The participants responded overwhelmingly to that they needed and used the teacher manual to navigate lessons. When analyzing the teacher and student simulator documents, they do provide an insight as to what components are included in both online platforms. A demo

website with a generic username and password are provided so that a teacher could experience both online platforms.

For the teacher simulator, participants can interact with the following sections of the teacher's dashboard: Class Management, Data Dashboard, Bookshelf, and Resources.

Participants can, also, view the Teacher Tools. In addition, the participants all had access to the student simulator document, which provides similar access to view online program components similar to the teacher simulator document. The student simulator document provides an overview of the online student application to teachers. It provides an overview of the one workshop area and its components, the online student workbook, the independent library, and the location of the assessments. The simulators do not provide the support that the participants felt were lacking in terms of modeling of the lesson or how facets of the program fit together for a daily lesson. However, both the teacher and student simulators' document explain how to find lessons and materials needed to navigate the program.

Research Question 2 and Theme 2

How do grades 3-5 elementary teachers describe their perceptions with using the Read 180 Program for reading intervention with their students? A consideration for educators is time, place, the students' learning path, and pacing (Saker & Horn, 2012). The subthemes were identified from the data as it relates to research question 2 are time management issues, virtual instruction, teacher materials, student materials, and the COVID-19 pandemic. Interview responses spoke to the difficulty of managing students online and the time that is needed to implement Read 180 alongside other Tier 1 curriculum for the district. Furthermore, the responses reflected that the majority of the participants lacked the necessary teacher and student materials to implement Read 180. All participants were provided with a Google Folder

containing training materials. One folder contained instructional routines for small groups, whole groups, vocabulary, writing, close reading, and fluency for Read 180. The instructional routines are scripted to provide the teacher with a research-based format to present instruction (HMH, 2020). While the instructional routine provides a how to conduct a lesson, according to the participants they do not address their anagogical needs for modeling, hands-on, or face-to-face training. The literature review revealed that any professional development should allow time to practice and reflect prior to implementation (Smith & Robinson, 2020).

Major Findings

Research question one asked participants to describe their experience with the training and implementation of Read 180 during the 2020-2021 implementation year. This question elicited participant responses regarding feeling equipped, or prepared, to implement Read 180. Furthermore, the teachers were asked to describe their professional development in terms of the quality and frequency, and if they felt the need for additional training. The findings revealed the majority of the teachers felt unprepared to implement Read 180 despite the training they received. All participants felt that the COVID-19 pandemic had negative effects on implementation and training. The frequency of professional development ranged from weekly to monthly. All participants felt that modeling and hands-on training would have provided a better understanding of how to navigate the Read 180 lessons. Additionally, all participants desired additional training on how to effectively use and manage the program.

Research question two required participants to describe their experience of the Read 180 implementation. Also, they were asked to describe their experiences with using the program with their students. The interview questions aligned to this research question asked teachers to reflect on the materials provided to teachers and students as part of the implementation process. There

was difficulty in balancing Read 180 with the tier I curriculum. The overall consensus of the participants had problems with implementation of the program for lack of teacher and student materials, which made virtual instruction difficult to manage. Only two participants felt they were properly trained and had all the resources they needed; however, they joined the other participants in regards to the inconsistency of being able to provide instruction to their students. There was varying opinion regarding the availability of teacher and student materials to implement the program.

The third research question was designed to describe teachers' perceptions about the benefits of implementing Read 180. Moreover, there were nearly equal perceptions of the perceived benefits of the program. Although there were difficulties with implementation and training, there were participants who felt as though Read 180 could be beneficial to their students with proper training. The perceived benefits of implementing the Read 180 could not be pinpointed to any one cause (time management, lack of materials, not implementing the program as designed, etc.). Two of the participants did not attribute any growth based on their students solely on the use of Read 180. Three teachers preferred other programs used in the past, which created bias in terms of the implementation and use of the program. All participants agreed that the COVID-19 pandemic negatively impacted the training and implementation of Read 180.

The document analysis finding provided evidence that there were components to training and implementation provided that could provide a guide to the program. However, the documents analyzed could not address the learning needs of the teachers.

Summary

The purpose of this chapter was to describe teachers' perceptions about the effectiveness of the implementation of the Read 180 reading intervention program for students, grades 3-5, in

Georgia elementary schools during the COVID-19 pandemic. For this study, perceptions were described from data collected through semi-structured interviews and document analysis.

Transcribed interviews and documents were analyzed using thematic analysis. Emerging themes and subthemes were then separated and validated with quotations from the interviews to provide a rich description for this study.

CHAPTER V: CONCLUSIONS

The purpose of this qualitative case study was to examine teachers' perceptions of the implementation of the Read 180 program during the COVID-19 pandemic. Schools were forced to close, and the creation of instructional delivery models were important for equity for all students. In August 2020, the COVID-19 pandemic created a challenge of how to continue an equitable education for students who had deficits in reading. Chapter I provided background information regarding the implementation of a reading intervention program, Read 180, during the 2020-2021 school year to be used in a virtual learning environment for students in grades 3 through 5 in a Georgia elementary school.

The district chose to implement Read 180 to continue to work with students reading below level in an effort to close the achievement gap of students who are reading below grade level and improve students' motivation to read (Vogel, 2013). The Read 180 Universal Program is a blended reading intervention program, which integrates student-directed learning on an online platform that includes a teacher-led offline component (Macaruso, 2017). Implementation began with teacher training with a HMH coach in the summer of 2020 virtually and continued throughout the 2020-2021 school year using Google Meet.

Chapter II outlined the history of reading. A timeline of reading instruction from the alphabet method to Whole Word Reading. Mezirow's (1978) transformative learning theory and Piaget's (1970) constructivist learning theory were the theoretical frameworks grounded in the current study. Furthermore, literature related to areas of educational technology such as online instruction, computerized reading instruction, adaptive personalized instruction, and blended learning provided a background for the use of technology for instruction and its use during a global pandemic. In addition, Chapter II outlined the other blended learning reading intervention programs such as I-Ready Reading, Open Court Reading, Reading Wonders, and Lexia Core 5 to

provide a context for Read 180 and its components. Moreover, the chapter included the interferences to reading, Read 180, and teaching during a pandemic. Finally, Chapter II outlines professional development in terms of the professional development cycle, professional development for reading instruction, and online professional development. The literature review provided a framework for the methodology for this study, which was outlined in Chapter III.

Chapter III presented the research design, instrumentation, methodological assumptions, limitations, ethical considerations, role of the researcher, trustworthiness, and data collection. The chapter outlined the process for a bounded case study. A purposeful sample of 12 general ELA teachers in grades 3-5 were used as participants in the study. Semi-structured interviews explored the feelings, thoughts, beliefs, and values of the participants. Training documents served as the instrument for document analysis. The constructivist theoretical framework and trustworthiness were the basis for methodological assumptions. Limitations were outlined in the chapter, as well.

The research questions provided the structure for Chapter IV. Data from the semi-structured interviews and documents were hand coded. Thematic analysis was performed on both the transcripts and documents. The findings were based on three major themes. Theme 1: teachers' perceptions about training and implementation was derived from Research Question 1, "What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 Universal Program for Reading Intervention implementation process to prepare them for its use with students?". Research Question 2, "How do grades 3-5 elementary teachers describe their lived experiences with using the Read 180 Universal Program for Reading Intervention with their students?" produced Theme 2: teachers' perceptions of the implementation experience. Theme 3: Teachers' perceptions about the benefits of Read 180 was derived from Research Question 3,

“What are grades 3-5 teachers’ perceptions of student gains in reading from using the Read 180 Universal Program for Reading Intervention?”. These themes were determined to be most important to describing teachers’ perceptions as set out by the research questions.

Analysis and Discussion of Research Findings

Data analysis included triangulation from two sources of data, responses from semi-structured interviews and document analysis. The responses from the semi-structured interviews were from the 12 participants who met the inclusion criteria for the study. Each teacher was a general ELA teacher in grades 3-5 having implemented Read 180 during the 2020-2021 school year. The responses from the semi-structured interviews were transcribed by hand. Furthermore, the transcripts and documents were analyzed using thematic analysis. Three major themes were identified and were reflective of participants’ perceptions regarding the implementation of Read 180 during the COVID-19 pandemic.

Theme 1: Teachers’ perceptions about training and implementation

RQ 1: What are grades 3-5 teachers’ perceptions of the effectiveness of the Read 180 program for Reading Intervention implementation process to prepare them for its use with students? When participants were asked to describe their experience with the implementation of Read 180, many of the teachers described the implementation in a negative light.

The theme of teachers’ perceptions about training and implementation provided insight on the teachers' perceptions of the difficulty of using the Read 180 for the students and themselves. This question is aligned to Mezirow’s (1997) transformative learning theory in that it asks the participants to critically reflect on what they have learned. The literature revealed teachers’ need for support in using e-learning materials, help with troubleshooting technical issues, and helping students develop independent learning skills (Borup, West, Graham, &

Davies, 2014). In addition, the literature suggests successful PD is greatly affected when the learning is designed with the needs of the trainee and keeping their experiences in mind (Ruey, 2010). The needs to implement Read 180 were not met for the majority of the participants. The majority of the participants felt that modeling of lessons and receiving hands-on training would be of greater benefit to the implementation of Read 180. All participants agreed that the COVID-19 pandemic and having only virtual training further complicated the implementation process, which is characteristic of Mezirow's (1978) transformative learning theory. This is similar to Mezirow's (1978) transformative learning theory ideology which suggests a meaningful perspective can no longer exist comfortably in a new situation, as a result a transformation occurs. Two participants articulated they felt they had enough training but agreed to the difficulty of using Read 180's online platform. The majority of the participants' responses regarding their perspectives on training and implementation align to Piaget's constructivist theory, which holds the belief that learning does not merely take place with information being repeated multiple times (Aldoobie, 2015).

The participants' responses are contradictory to the instrumental domain of Mezirow's (1997) transformative learning theory's goal to manipulate and control the environment or the people to improve self-efficacy and performance. According to the literature, *sit and get* learning have proven to be ineffective to prepare teachers for new demands placed on the profession (NCES, 2021). The participants' perceptions to new knowledge acquired through continuous virtual training by the HMH coach provides the control of the implementation of the program but did not improve the majority of the teachers' self-efficacy in terms of using the program for reading intervention instruction. The literature revealed a case study in which An additional case study found teachers did implement strategies from online literacy professional development

despite feeling a lack of self-efficacy with the skills taught (Smith & Robinson, 2020). Moreover, many of the teachers' perceptions were influenced by a perception of forced compliance, a feeling that the training lacked focus, and no time to practice and reflect (Smith & Robinson, 2020). Roy & Boboc's (2016) research found that teachers must understand online pedagogy, online tools, online learning psychology, technological pedagogical content knowledge, and the facilitation of skills and technology issues. Moreover, Roy & Boboc's (2016) study stated online professional development must consider what the teacher understands regarding online teaching, engage the teacher so that they are proactive in the learning process, and design the training in a way to empower and support the teacher.

Theme 2: Teachers' perceptions of the implementation experience

Research question 2: How do teachers describe their perceptions when using Read 180 to provide reading interventions to their students? Time and materials were the most frequent words or phrases communicated from the participants in their responses. These responses help to develop this theme. There were several respondents that mentioned not having enough time to implement Read 180 as a reading intervention program alongside an already existing tier I curriculum in the district. The current block of time allotted to literacy is 90 minutes. Read 180 requires a 40 to 60-minute block of time (HMH, 2020). Additionally, two teachers noted problems with implementing the program online with students. More specifically, these teachers mentioned not understanding how to implement whole and small groups with ease on Google Meet.

Participants were asked about the availability of resources and materials for themselves and their students. Reich et. Al (2020) found that students suffer with the move to total online learning due to the lack of access to resources to perform assignments. All participants

commented that they did not have printed materials at the beginning of implementation. Moreover, one participant purchased the needed teacher's manual with her own funds. Another participant stated that her IB Coordinator downloaded the manuals. Several teachers had to share a hard copy of the teacher's manual. Document analysis revealed that all manuals were provided through the teacher and student online platforms; however, the student manual could not be used to record work as it was a read-only document. Two teachers had to use another web-based tool to download the student workbook so that it could be typed on by the students. In contrast, HMH (2020) provides text digitally, through audiotapes, and leveled readers from a variety of topics and genres. This lends the researcher to conclude that this error in implementation was not due to an error on the part of HMH.

Although the researcher concluded that HMH was not in error in terms of providing required student and teacher materials for implementation, learning did not reflect a readiness to implement Read 180 (UCD, n.d.). As reflected in the literature review, participants will require ongoing and intensive training that calls for teachers to experience, observe, and refine their practices to carry on online learning for a period of time greater than the initial implementation year (Bickmore, Hayhoe, Manion, Mundy, & Read, 2017, p. 64).

Theme 3: Teachers' perceptions about the benefits of Read 180

Research question 3: What are grade 3-5 teachers' perceptions of student gains in reading comprehension from using the Read 180 program? HMH (2020) claimed Read 180 closes the gaps in struggling readers by targeting specific elements of phonics, fluency, vocabulary, comprehension, spelling, writing, and grammar, on the individual student level. When asked about their perceptions of benefits to students, the responses from the participants were mixed. Rose and Beck-Hill (2012) noted one-to-one interaction and personalization

possible with CAI had positive effects on reading instruction. Eight participants acknowledged they thought implementing Read 180 was beneficial to their students. Two participants mentioned increased Lexile levels for students. Additionally, another participant mentioned a noticeable improvement in critical thinking for students. These responses are aligned with the constructivist theory because the participants assessed the progress of their students using a personalized blended learning platform to analyze information and construct new knowledge (Cronje, 2020; Olusegun 2015). Prior research showed a positive correlation with use of Read 180 and improved comprehension (Kim et. al, 2011).

However, the remainder of the participants did not see any benefits that could be contributed solely to implementation of Read 180. The literature review revealed research which stated that educational technology did not have a significant impact on student learning under any condition because it is no more than mere vehicles that deliver instruction and has no influence on student achievement (Clark, 1983). One participant responded that it could not be determined whether growth in students were from instruction by the teacher or the implementation of the program. Furthermore, the other participants felt that the program did not reflect a true picture of growth either due to not fully understanding how to implement Read 180.

Limitations of the Study

This study was conducted in a school district in Georgia. The participants were selected using purposeful sampling. The sample included participants from elementary schools within this district who were general education ELA teachers in grades 3-5 who were a part of the implementation of Read 180 during the COVID-19 pandemic. More specifically, this bonded case study looked at implementing the program during the 2020-2021 school year. Professional development was conducted virtually by a coach provided by HMM. Virtual training was

conducted for individual schools within the district. The researcher perceived that all schools received the same frequency of professional development. However, participants' responses communicated the schools received varying frequencies of training based on the perceived needs of school administrators. Teachers' beliefs, experiences, and instructional practices have shown to have a positive impact on influencing change (Robinson & Smith, 2020). According to participant responses, these factors were not considered when choosing and implementing Read 180. The literature review found research showing the new educational models will require ongoing and intensive training and call for teachers to experience, observe, and refine their practices to carry on online learning (Bickmore, Hayhoe, Manion, Mundy, & Read, 2017, p. 64). Birch & Lewis (2020) found many educators have an increased need for adequate training and support in using online learning platforms and educational technology tools to assure effective implementation during the COVID-19 pandemic.

The researcher found it difficult to recruit participants. Recruitment emails were sent over multiple weeks. Reiterating that the interviews would be confidential and all identifying information would be removed over separate Google Meet links to recruit participants. The researcher initially sent emails from the Columbus State email address. Many of the participants initially did not recognize the email. The researcher had to resend emails with her district signature for participants to recognize the researcher's identity. The researcher felt that the sample of participants was not as diverse as desired because most participants came from five of the fourteen elementary schools. Additionally, 11 of the 12 participants were African American females, and there was only one male participant. He was African American.

Implications

Implications for Practice

Research has shown that gaps in reading can be closed when interventions are provided to students in the early elementary grades (What Works Clearinghouse [WWC], 2007; Zhu, Loadman, Lomax, & Moore, 2010). Evidence was provided in the literature review showing a need to provide alternate forms of reading instruction (Berkeley, Bender, Gregg Peaster, & Saunders, 2009; L. Fuchs & D. Fuchs, 2007; Smith 2012). A gap existed in the literature that reflected no past studies referring to teachers' perceptions of implementing Read 180 as an effective alternative form of reading intervention when schools are closed due to the COVID-19 pandemic. This study provided a description of general grades 3-5 elementary teachers' perceptions of the implementation of the Read 180 program during the COVID-19 pandemic.

Based on the findings, one implication for district leaders and school leaders would be the need to examine their training practices and preparation of the implementation of future instructional programs especially during times of emergency school closures. The interviews may provide insight to other Read 180 districts as to teachers' needs in regards to professional development and materials, as well. The responses from the interviews, studies provided in the literature review, and document analysis demonstrated the need for the implementation of online programs that are steeped in pedagogy, but meet the learning needs of the teachers who must use these programs with their students in a virtual classroom. Principles of the transformative learning and constructivist theories tied to professional development must be considered when implementing such a program during a global crisis such as the COVID-19 pandemic. It was assumed that the participants are seeking to understand their experiences in the world by

providing honest accounts throughout the interview process, which is a constructivist theoretical premise (Creswell, 2009).

Additionally, implications for district and school leaders include the need to consider how new programs fit in with other district initiatives and mandates on curriculum and instruction. Teachers' responses indicated they want clear expectations of the intended use of the program being implemented, how it fits into their instructional day, and how it will benefit their students. While every school has its own set of dynamics and unique student demographics, teachers are seeking answers to time management and effectiveness of new programs. Although the COVID-19 pandemic has caused most training to be held online, similar components of in person training for implementation of programs must be transferred as much as possible to the virtual setting.

Other implications for policy change on the state, district, and school level involve how online programs are implemented during times of uncertainty such as the COVID-19 pandemic. If new programs are to be effectively implemented, they must address teachers' beliefs about learning in addition to procedural knowledge. Findings reflected a need to address teachers' beliefs in respect to what they need in the classroom in terms of implementation time and resources. Implications exist for a comprehensive needs assessment from teachers prior to implementation of a program. Teachers' perceptions reflected the need for autonomy in regards to implementing interventions in their classrooms because of their personal knowledge of the students' needs.

Implications for Research

Future research on the implementation of Read 180 during the COVID-19 pandemic should include studies on the impact to reading achievement in the years after this bounded case

study. Future research may focus on how the limitation of virtual training and implementation could be enhanced such as teacher feedback and a comprehensive needs assessment. An increased sample size with teachers could provide a variety of descriptions of teacher perceptions. More specifically, a qualitative study that is not bound by a particular district or grade band could provide similar data.

Quantitative research on student gains when implementing this program during the COVID-19 pandemic may provide a more specific analysis of student gains using Read 180. Students could be interviewed as to their perceptions of their growth from using Read 180. In addition, student engagement could be explored in connection with their growth.

Additionally, future research should focus on specific domains of reading that Read 180 targets and how the program increased reading achievement in that domain for students. A longitudinal study can track students' progress over a period of time using data from the program to assess growth. While Read 180 is used primarily in grades 3-12 for reading comprehension, its use in terms of strengthening vocabulary, fluency, writing, and comprehension could be important in understanding how interventions are implemented for struggling readers.

Teacher responses in the present study noted Read 180 was difficult in terms of implementing the program with students virtually. More research may confirm the effectiveness of Read 180 when teachers implement the program virtually in terms of student motivation and engagement when Read 180 is used as a blended learning system in a virtual classroom. The goal of Read 180 is to close the achievement gap of students who are reading below grade level and improve students' motivation to read (HMH, 2020; Vogel, 2013). The literature states educational technology can increase student engagement and their motivation to learn (Jamshidifarsani, Garbaya, Lim, & Blazevic, 2018).

Recommendations

The following recommendations pertain to district leaders, school administrators, and teachers for grades 3-5:

1. Research and teacher perceptions have shown that teachers must actively participate in professional development that offers more than traditional passive learning, thus professional development that includes increased opportunities for hands-on and modeling.
2. This case study was bounded by criteria that allowed the researcher to provide a rich description within the context of general ELA teachers in grades 3-5 in one Georgia school district who participated in the implementation of Read 180 during the 2020-2021 school year. Given the ongoing COVID-19 pandemic, this study should be replicated in other school districts across the nation with a different demographic of educators such as ELA teachers in grades 4-12.
3. Although the participants in this study have implemented Read 180 in their classrooms. The responses from interview questions in this study reflected a need for a better understanding of how the components of the program come together for a daily lesson. A plan for ongoing professional development for in class, virtual or face-to-face, coaching is recommended for teachers.
4. The adoption of any program requires obtaining its accompanying resources and materials. Implementing Read 180 required the online platform for teachers and students, a technology device, a teacher's manual, a student workbook, and a classroom library. The recommendation is for district leaders to purchase all necessary components after

conducting a comprehensive needs assessment of teachers' needs. These materials should be available to teachers at the beginning of a school year.

5. The COVID-19 pandemic caused school closures around the country. Read 180 had to be implemented in a virtual environment; however, teachers reflected that they did not know how to make this work for their students. New models for instructional delivery for whole groups and small groups need to be created for virtual learning.

Dissemination

The purpose of this qualitative case study was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 Universal program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 outbreak. The researcher sought to give insight to district leaders on the participants' perceptions and to review and refine the policies and practices surrounding implementation of other programs such as Read 180. Also, this study sought to give voice to participants in a manner that would not otherwise be available while protecting their identities. The researcher intends to share the findings from this study with the Superintendent of the district under study, the Associate Superintendent of Curriculum and Instruction, and the ELA Curriculum Director. This study will also be available in the Columbus State University's library system. Attempts will be made to publish the results in peer reviewed journals, as well.

Conclusions

The purpose of this study was to describe teacher perceptions about the effectiveness of the implementation of the Read 180 Universal program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 pandemic. An examination of the literature review and data from the semi-structured interviews and document analysis allowed the

researcher to evaluate teachers' perceptions of the implementation of Read 180. The findings offered school district leaders and administrators insight into the importance of including teachers' perceptions into the implementation of new programs. Conducting the study in a single school district during the 2020-2021 school year allowed the researcher to provide a thorough examination of the implementation of Read 180 during the COVID-19 pandemic. Participants included in the sample shared the similar implementation procedures, which included virtual training sessions and initial implementation of Read 180 with students via Google Meet. Three research questions guided this study. Conclusions were formed after careful review of the literature in Chapter II and data from the semi-structured interviews and document analysis.

Three research questions guided this study. The first research question was: What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 Universal Program for Reading Intervention implementation process to prepare them for its use with students? In answering this question, the researcher concluded the process of implementation of Read 180 was rushed and not inclusive of the teachers' learning needs. The perception of the lack of modeling and hands-on training was not only needed based on the participants past learning experiences, but may have been absent due to safety precautions needed because of the COVID-19 pandemic. The researcher concluded that while training and training documents were present for implementation of Read 180, it was insufficient to give participants the training experience necessary to implement Read 180 seamlessly in a virtual environment.

The second research question was: How do teachers describe their experiences when using Read 180 to provide reading interventions to their students? The responses from the participants helped to determine a theme and four subthemes. Theme derived from research question two was teachers' perceptions of their implementation experience. The participants'

answers to questions regarding their experiences revealed issues with time management in terms of having the time to implement the program alongside another curriculum. Participants mentioned problems with implementing whole group and small group components of Read 180 in a virtual classroom. Participants also mentioned the lack of teacher and student materials as barriers to implementing Read 180. The researcher concluded that implementation policies and procedures did not account for the needs of teachers and students during a sudden shift to online learning due to the COVID-19 pandemic.

Conclusions were drawn after analyzing data for the third research question. The third research question was: What are grade 3-5 teachers' perceptions of student gains in reading comprehension from using the Read 180 program? Although teachers gave perceptions that they struggled with the implementation of Read 180, the majority of the participants responded that they did see benefits for students. Specific areas of reading where participants noted benefits were vocabulary, critical thinking, and Lexile scores. There were three participants who preferred another blended reading program used in the past and remarked that they did not see any benefits. Two of these three participants felt like any growth in students reading could not be wholly contributed to using Read 180. The researcher concluded that use of the program does offer some benefits in terms of growth in reading even though training and implementation procedures were determined to be insufficient.

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Appendices

Appendix A - Approval to Conduct the Study



DOUGHERTY COUNTY SCHOOL SYSTEM
P.O. Box 3170 / 200 Pine Avenue
Albany, Georgia 31706-3170
(229) 431-1285 FAX (229) 431-1276
kenneth.dyer@docoschools.org

KENNETH DYER
SUPERINTENDENT

August 23, 2021

Office of University Review Board
Columbus State University
4225 University Avenue
Columbus, GA 31907

To Whom It May Concern:

This letter acknowledges that I have received and reviewed a request from Monika Whitmire to conduct a study to determine teachers' perceptions of implementing the program Read 180 for reading intervention for their students.

The study will include interviews with various teachers within the Dougherty County School System that teach grades three thru five. (grades 3-5)

I grant permission for this study, and I look forward to reviewing the results. Do not hesitate to contact me at 229-431-1285 or kenneth.dyer@docoschools.org, if I can be of further assistance.

Sincerely,


Kenneth Dyer
Superintendent

Appendix B - Columbus State IRB Approval

Institutional Review Board
Columbus State University

Date: 08/25/2021

Protocol Number: 22-004

Protocol Title: Teachers' Perceptions on Implementing Read 180 During the COVID-19 Pandemic for Grade 3-5 Students in a Georgia Public School

Principal Investigator: Monica Whitmire

Co-Principal Investigator: Robert Waller

Dear Monica Whitmire

The Columbus State University Institutional Review Board or representative(s) has reviewed your research proposal identified above. It has been determined that the project is classified as exempt under 45 CFR 46.101(b) of the federal regulations and has been approved. You may begin your research project immediately.

Please note any changes to the protocol must be submitted in writing to the IRB before implementing the change(s). Any adverse events, unexpected problems, and/or incidents that involve risks to participants and/or others must be reported to the Institutional Review Board at irb@columbusstate.edu or (706) 507-8634.

If you have further questions, please feel free to contact the IRB.

Sincerely,

Andrew Dorbu, Graduate Assistant

Institutional Review Board
Columbus State University

*** Please note that the IRB is closed during holidays, breaks, or other times when the IRB faculty or staff are not available. Visit the **IRB Scheduled Meetings** page on the IRB website for a list of upcoming closures. ***

Appendix C - Recruitment Emails to Principals and Teachers



Monika Whitmire [Student] <whitmire_monika@columbusstate.edu>

REQUEST TO SCHOOL PRINCIPALS FOR CONSENT TO CONDUCT STUDY

1 message

Monika Whitmire [Student] <whitmire_monika@columbusstate.edu>

Wed, Aug 25, 2021 at 7:45 PM

Good afternoon,

My name is Monika Whitmire, and I am a doctoral student in the Department of Counseling, Foundations and Leadership at Columbus State University. My supervising faculty is Dr. Robert Waller. I am conducting a qualitative descriptive study about grades 3-5 teachers' perceptions of implementing Read 180 during the COVID-19 pandemic.

I will be conducting this study using the following research questions:

What are grades 3-5 teachers' perceptions of the effectiveness of the Read 180 Universal Program for Reading Intervention implementation process to prepare them for its use with students?

How do teachers describe their experiences when using Read 180 to provide reading interventions to their students?

What are grade 3-5 teachers' perceptions of student gains in reading comprehension from using the Read 180 program?

The Columbus State University Institutional Review Board insures that research projects involving human subjects follow federal regulations.

I am requesting permission to email general/regular grades 3-5 educators at your school and conduct semi-structured interviews with these teachers after school hours. Teachers selected to participate in the study should have knowledge and experience with training and implementation of the Read 180 program during the 202-2021 school year. A sample size of 12 teachers is desired. Teachers that meet the criteria will be recruited to participate via email. A mutually agreeable date, time, and location will be scheduled to conduct separate online interviews which will last between 45 minutes to an hour during the months of September and October 2021. Teachers will participate in participant/member checks by reviewing the transcripts of interviews for accuracy.

The researcher will ensure:

1. Participants will have access to the interview protocol and informed consent form prior to the interview, and be made aware of the right to withdraw permission to participate in the study at any time.
2. Identifying information in regards to the district will be kept confidential and personal information will be omitted from the dissertation.
3. Information will be used exclusively for the purpose of completing the dissertation in partial fulfillment of the requirements for the degree of Doctor of Education which is submitted to the faculty of Columbus State University
4. Students will not be used as participants in the current study.

4/16/22, 8:35 PM

Columbus State University Mail - REQUEST TO SCHOOL PRINCIPALS FOR CONSENT TO CONDUCT STUDY

If you are willing to allow me to conduct my study at your school, please reply to me via email. Please let me know if you have any questions regarding this study.

My telephone contact information is 229-854-5110 and my email is whitmire_monika@columbusstate.edu.

Thank you for your time and consideration.

Sincerely,
Monika Whitmire
Doctoral Student Columbus State University
EIP Reading Teacher
Dougherty County School System
Albany, Georgia 31701

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207K

4/16/22, 8:36 PM

Columbus State University Mail - Request for Participation in Doctoral Study



Monika Whitmire [Student] <whitmire_monika@columbusstate.edu>

Request for Participation in Doctoral Study

1 message

Monika Whitmire [Student] <whitmire_monika@columbusstate.edu>

Fri, Sep 10, 2021 at 12:11 PM

Dear Educator,

I am a doctoral candidate at Columbus State University. I am examining teacher perceptions about the training and implementation of the Read 180 program for elementary students in grades 3-5 Georgia elementary school during the COVID-19 pandemic.

To collect data for this research, individual interview sessions with participants will be conducted online by myself. These interviews will be conducted after school hours on a secure link not associated with the school network. Each interview session will last 45-60 minutes and will include questions to examine teachers' perceptions of their training to prepare them for implementing Read 180 and the implementation process.

Interviews will be recorded using a digital device. All participant responses will be kept confidential and coded, so no information is attributed to you. Participation is strictly voluntary.

The findings will offer the education field insights on the implementation of other blended learning programs during a pandemic or other global crisis. Additionally, policy changes regarding implementation and training are possible at the district level.

To join the study, please complete the attached informed consent form found in the link below. My deadline for conducting interviews is Friday, September 17, 2021. If you agree to participate, please let me know a date and time after work hours that is convenient for you, and I will make myself available.

If you have questions or concerns about this research study, please feel free to contact me at (229) 854-5110. Once the completed attachment is received, you will be contacted concerning data collection and scheduling.

Thank you in advance for your assistance with this important research study.

Sincerely,

Monika Whitmire

Doctoral Student, Columbus State University

EIP Teacher, DCSS

[Informed Consent](#)

Appendix D - Informed Consent



You are being asked to participate in a research project conducted by Monika Whitmire, a student in the Curriculum and Leadership Doctoral Program at Columbus State University. This research is being conducted under the supervision of Dr. Robert Waller.

I. Purpose:

The purpose of this project is to describe teacher perceptions about the training and implementation of the Read 180 program for elementary students in a grades 3-5 Georgia elementary school during the COVID-19 pandemic. The research design is a bounded case study which will examine teachers' perceptions of their training to prepare them for implementing Read 180 and the implementation process.

II. Procedures:

All grades 3-5 general ELA teachers in the school district in which the study will occur will be contacted about participating in the study via email. Once the researcher obtains a consent form from all participants who agree to participate, a sample of principals will be selected for the interview sessions. Participants will be given pseudonyms and will not be identified in any interview sessions. All responses will be kept confidential. The researcher will contact each participant concerning the date and time for the interview. The interview will last approximately 45-60 minutes. The participants will be asked questions about their thoughts and perceptions regarding the training to implement Read 180 and the implementation process itself. The research will conduct all interviews using a laptop device and a digital audio recorder. These sessions will be transcribed. The data collected will not be used in any further projects.

III. Possible Risks or Discomforts:

There are no possible risks or discomforts for participants in this study.

IV. Potential Benefits:

There are no potential benefits for the participants; however, there could be benefits to the district in which the study takes place and other school districts. There are implications for implementation of other blended learning programs during a pandemic or other global crisis. Additionally, policy changes regarding implementation and training are possible at the district level. This study may impact how decisions are made as to how funds might be allocated to implement similar programs in the future.

V. Costs and Compensation:

There is no cost or compensation associated with participants.

VI. Confidentiality:

The data collected will be indirectly coded and no participant identifiers will be included in the findings. All data will be password protected and responses will not be linked to the participants. All physical documents will be locked in a locked file cabinet for seven years. No one will have access to the data except the principal investigator. At the end of the seven years, the documents will be destroyed by shredding. All electronic files will be kept on a password secure device. At the end of the seven years, the electronic documents will be erased from all storage areas.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, Monika Whitmire, at (229) 854-5110 or whitmire_monika@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By signing this form, I agree to participate in this research project. [If participation is dependent upon the participant being 18 years of age or older, you must include a statement here confirming the age.]

Signature of Participant

Date

Appendix E - Interview Guide



Interview Protocol for Study

Script Prior to Interview:

I'd like to thank you once again for being willing to participate in the interview aspect of my study. As I have mentioned to you before, my study seeks to describe teacher perceptions about the effectiveness of the implementation of the Read 180 Universal reading intervention program for students, grades 3-5, in Georgia elementary schools during the COVID-19 pandemic. Our interview today will last approximately 45-60 minutes during which I will be asking you about your years in the teaching profession, your years working in the district under study, and your years teaching elementary ELA in either grade 3,4, or 5. upbring, I am now going to review aspects of the informed consent form you signed prior to the interview. You completed a consent form indicating that I have your permission (to audio record our conversation. Are you still ok with me recording (or not) our conversation today? ___Yes ___No If yes: Thank you! Please let me know if at any point you want me to turn off the recorder or keep something you said off the record. If no: Thank you for letting me know. I will only take notes of our conversation. Before we begin the interview, do you have any questions? [Discuss questions] If any questions (or other questions) arise at any point in this study, you can feel free to ask them at any time. I would be more than happy to answer your questions.

Interview Questions:

- (1) You began using an intensive reading intervention program, Read180 at the beginning of the 2020-2021 school year. How is the implementation going for you and your students?
- (2) How do you believe the COVID-19 pandemic affected implementation of the program and training to implement Read 180?
- (3) What are teachers' perceptions of the availability of resources that will allow them to adhere to the company's design for implementation (e.g., adherence and dosage)?
- (4) Did you feel that you were equipped with the materials necessary for proper implementation of Read 180? Explain.
- (5) Are supplementary materials needed to implement Read 180 classroom and if so, what is Missing?
- (6) What are your perceptions of your preparedness to properly implement Read 180 (e.g., quality of delivery)?

- (7) What professional development have you received and when did you receive it?
- (8) What additional professional development do you need and why?
- (9) Do you have any perceived benefits of the implementation of Read 180?
- (10) What suggestions or observations could you provide regarding the implementation of Read 180 in elementary classrooms in other districts?
- (a) If you had the opportunity to select a reading intervention program to use in your reading classroom, would you select Read 180? Why or why not?
 - (b) What advice would you give new Read 180 teachers? Be as specific as possible. Is there anything else regarding your participation in Read 180 you would like to share?
- (11) Do you have any other insights that would be helpful in understanding teacher perceptions about the effectiveness of the implementation of the Read 180 Universal reading intervention program for students, grades 3-5, in Georgia elementary schools during the COVID-19 pandemic?